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SPECIAL STUDY ON ECONOMIC CHANGE

VOLUME 9

THE INTERNATIONAL ECONOMY: U.S. ROLE  
IN A WORLD MARKET

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STUDIES

PREPARED FOR THE USE OF THE  
SPECIAL STUDY ON ECONOMIC CHANGE  
OF THE  
JOINT ECONOMIC COMMITTEE  
CONGRESS OF THE UNITED STATES



DECEMBER 17, 1980

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(II)



## LETTERS OF TRANSMITTAL

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DECEMBER 15, 1980.

*To the Members of the Joint Economic Committee:*

Transmitted herewith is a staff study, printed separately, and technical papers which together form Volume 9 of the Special Study on Economic Change (SSEC).

Volume 9 is entitled "The International Economy: U.S. Role in a World Market" and is one of 10 areas on different aspects of the economy published by the SSEC. The SSEC was initiated in 1978 under the direction of the former Chairman of the Joint Economic Committee, Representative Richard Bolling, then Vice Chairman Senator Hubert H. Humphrey, and the former Ranking Minority Member, Senator Jacob K. Javits. It is intended to identify major changes in the economy and to analyze their implications for policy-makers. The successful completion of this Study will, I believe, help provide an economic agenda for the United States for the decade of the 1980's.

The views expressed in the technical papers are exclusively those of the authors and do not necessarily represent the views of the Joint Economic Committee or of individual members. The staff study was approved by the Chairman's Special Study Review Committee formed by the Chairman, Representative Bolling, Ranking Minority Member Representative Clarence J. Brown, and Senator Javits.

Sincerely,

LLOYD BENTSEN,  
*Chairman, Joint Economic Committee.*

---

DECEMBER 12, 1980.

HON. LLOYD BENTSEN,  
*Chairman, Joint Economic Committee,  
Congress of the United States,  
Washington, D.C.*

DEAR MR. CHAIRMAN: Transmitted herewith is a staff study, printed separately, and technical papers entitled "The International Economy: U.S. Role in a World Market," which constitute Volume 9 of the Special Study on Economic Change (SSEC).

The SSEC was initiated under the leadership of former Chairman of the Joint Economic Committee, Representative Richard Bolling, Vice Chairman Senator Hubert H. Humphrey, and former Ranking Minority Member, Senator Jacob K. Javits. The Study is divided into 10 substantive areas, which together chart major changes in the economy and analyze their implications for policymakers. Volume 9 analyzes a wide range of international economic issues, including trade, exchange rate behavior, and international banking.

International developments are responsible for major changes in the U.S. economy during the past decade. They are characterized by a profound opening of the U.S. economy to international developments: International events such as exchange rate changes now have a more direct influence on domestic developments than at any time in the past. This study looks at these and other subjects, placing them in their historical context and pointing out the policy implications and recommendations for the conduct of U.S. international economic affairs.

It should be understood that the views expressed in the technical papers are exclusively those of the authors and do not necessarily represent the views of the Joint Economic Committee or of individual members. The staff study was approved by the Chairman's Special Study Review Committee formed by the Chairman, Representative Bolling, Ranking Minority Member Representative Clarence J. Brown, and Senator Javits.

Sincerely,

JOHN M. ALBERTINE,  
*Executive Director, Joint Economic Committee.*

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# THE INTERNATIONAL ECONOMIC POSTURE OF THE UNITED STATES

By Oscar Gass\*

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## SUMMARY

In the world economy, the people of the United States enjoys a foremost place, which imposes foremost responsibilities.

The income of the United States, per capita, still averages higher than that of any other advanced country, though not as distinctively higher as two or three decades ago.

In aggregate, the United States, with about one-twentieth of the world's people, has perhaps one-fifth of the world's income.

Despite relative continental self-sufficiency, the international exchanges of the United States make a distinctly larger total than those of any other country. In this year 1980, the United States will have exports and imports of all commodities and services in the range of \$310 billion, each way.

The "direct" investments of Americans abroad, which involve controlling responsibilities for the production of goods and services, now carry a minimizing "book" value in excess of \$200 billion. The 1980 year's American income from these direct investments will probably be in excess of \$40 billion. This \$40 billion is estimated to be larger than the income from their foreign direct investments accruing to the citizens of all other countries together.

To such an extent is American money and finance weighty in the world economy that some two-thirds of all international economic exchanges are estimated to be denominated in United States dollars.

*Distinctiveness*

Though several other large national communities, particularly in Western Europe, stand near to the United States in current level of income, none will have the same or quite similar problems in managing economic development in the next decades. To identify the American problem with theirs is not an act of considerate goodwill but one of thoughtless inconsequence.

These other advanced communities are dominantly countries of stable or declining populations, stable or declining labor forces, and hence stable or declining requirements of employment.

In the United States, whoever takes thought for the future must reckon with a minimal increase in the demand for employment of  $1\frac{1}{2}$  percent per annum in the 1980's. More uncertainly, he must reckon with a further increase of perhaps 1 percent per annum in the 1990's.

Uncertainties are compounded by the issues of immigration. The country may be receiving 1,000,000 immigrants—normal and refugee, legal and illegal—in the single year 1980. Responsible policy can not be made with the assurance that the United States will cease to be a country of large immigration.

More painfully, it can not be foreseen that the United States will be as other friendly nations, in the next decades, in all that concerns the burden of resources and talents that Americans will need to devote to the defense of free peoples. Responsibility demands provision.

### *Growth*

Setting income growth targets no higher but rather lower than those of most advanced economies, the United States would plan for a growth in real income, per person employed, of perhaps  $2\frac{1}{2}$  percent a year. At this improvement factor, income doubles in 28 years.

These magnitudes mean that a total United States labor force of 107 million at mid-1980 will be 124 million in 1990 and 137 million in 2000. They imply that, if we express the national income of the American people as 100 in 1980, this income will need to grow to 148 in 1990 and to 209 in the year 2000.

It is doubtful that lesser economic accomplishments will be compatible with either the maintenance of domestic socio-economic stabilities or the fulfillment of international obligations. High among American responsibilities, therefore, is the achievement of adequate economic growth.

### *Competitiveness*

There is an element of misleading shorthand in saying that the United States "has not been competitive" in international trade.

In the twenty years 1960–1979, United States' exports of goods and services were of sufficient value to pay for all imports and yield a surplus of \$106 billion. Some \$75 billion of this earned surplus was used for unilateral (public and private) transfers to foreigners. These transactions left the United States a 20-year Current Account surplus of \$31 billion.

During these same 20 years, however, the outflow of capital from the United States amounted to \$420 billion. Only \$31 billion of this outflow could be paid for by the Current Account surplus. A mere \$4 billion was paid for by use of American official monetary assets of gold and foreign exchange. The residual \$385 billion (\$420 billion minus \$35 billion) had to be financed by inflows of funds from abroad. Foreign private interests acquired a reported \$218 billion of capital assets in the United States—"direct" ownerships, securities, bank deposits, and other titles of ownership. Foreign Central Banks and

Treasuries enlarged their dollar holdings by some \$138 billion. A residual of some \$29 billion is somewhere lost in the accounting (through mistaken valuations and non-reporting).

The Current Account surplus of \$31 billion, in twenty years, is not a ground for complacency. In 1975-79 alone, after unilateral transfers of \$25-billion, there was actually a \$6.5 billion Current Account deficit. Had United States' sales abroad been in greater volume, the dollar would have been more demanded (or more "scarce" or more "strong") in the foreign exchange market. The exchange rate of the dollar would probably not have declined by the 13 percent we have traced for the six years June 1974-June 1980. The United States' domestic price level would not have been inflated by the impact of this 13 percent valuation decline. Foreigners—private and public—could equally have acquired capital assets in the United States; however, these these foreigners would have had to pay more, in their own currency values, for the same acquisitions. Americans would have been more easily in a position to make larger—public and private—unilateral transfers to the needy abroad.

Concern over United States international competitiveness is not factitious. The nation must earn more if it is to do more.

### *Trade*

As affecting the ability of the United States to earn more by selling more abroad, perhaps the weightiest body of barriers concerns American agriculture. These barriers to American employment of its comparative advantage in farm output call for fundamental challenge, in a style that does not reflect advance acceptance of defeat.

The Value Added Tax (VAT), as operated in Western Europe, constitutes a huge system of making export prices lower than domestic prices. The United States may bear with it. If not, there are better ways of reciprocally stimulating exports, without the domestic fiscal disadvantages of a VAT.

American trade with any Communist country needs to be under continuing government planning and control. There is no other balanced way of dealing with an economy that has a single buyer and seller.

Regrettably, the United States cannot afford to discontinue government export financing (subsidization), so long as other countries indulge in it.

Neither can the United States afford to be passive toward international "dumping." Regrettably again, the American economy is not sufficiently flexible in its resource utilization to afford such passivity—nor is it at all likely to become so flexible.

There is a strong presumption against United States participation in any scheme for raising international commodity prices (called "Commodity Stabilization"). This presumption holds even if such a scheme is strongly supported by some less-developed countries.

### *Aid and Investment*

The United States is a conspicuous laggard, among the free nations of the world, in developmental charity toward the poorest peoples. We call "poorest" those who live in "absolute poverty," in countries

where annual average income is now under \$400 per capita. It would be a meaningful discharge of one responsibility of the wealthy if the United States Government would give early consideration to increasing its contribution (now approximately 0.2% of the national product) for such developmental charity by a factor of two or three.

Developing countries of "middle income" may perhaps be defined in 1980 as those having annual incomes per capita above the \$400 of the poorest and up to \$4,000. The better things the people of the United States can do for these middle income countries are two. First: to hold open to them the large American import market. Second: to make available to them the business skills, technologies, and capital that are available, in the American economy, primarily through private, non-governmental channels.

There are special situations of burden or distress where the private capabilities available to a middle income developing country may need to be substantially supplemented by the American government. These are situations requiring political judgment. In all such cases, the Government of the United States should recognize clearly that it is engaged in a capital grant or capital subsidy. There appears no balance of reason why the United States should contribute capital subsidies to its enemies or to the enemies of human decencies or liberties.

It may be a gain of rationality for the United States now to begin to regard investing by Americans abroad more as a sacrifice to the benefit of other countries (and to the profit of the individual investors) and less a gain for the American community. In this context, any aggressive public "fostering" of private investment abroad would appear a dubious activity. Certainly no such American investment would be pushed on any foreign country that does not fully welcome it. Certainly also no such investment would receive any government guarantee or any special government testament of approval. In foreign business, done for private profit, the private entrepreneurs would bear their own risks and uncertainties. Then the quality of contribution by the private entrepreneur might be raised to its maximum.

### *The Dollar*

Since 1973, the United States has lived with the international monetary system of a dollar "floating," in foreign exchange value, through a great range of turbulences. There is a considerable likelihood that this is not the best system that might be contrived.

Ours is an economy of price asymmetry. Many prices and wages move up comparatively easily, then lodge themselves firmly on the upside. These prices move down only under great pressure, or not at all.

In such an economy, wide foreign exchange fluctuations also work asymmetrically. A substantial down-valuation of the dollar, which raises American import prices, operates effectively to inflate the United States domestic price level. However up-valuation of the dollar is not similarly effective in reducing American prices and wages.

Other countries of similar economies are caught, by the "floating" exchange system, in the same asymmetrical trap.

Reflecting on the course of foreign exchange floating in the years 1973-1980, we find a substantial contribution of the floating turbulence



toward increasing the distressing level of inflation that has prevailed during this period. Our finding is not original. The creators of the contained-float, adjustably-pegged European Monetary System obviously found similarly. And they moved to correct it (though only within their cooperating membership).

We do not find any correction, nor any idea deserving of support, in the proposal of the International Monetary Fund to mop up an imaginary "overhang" of dollars, now held in non-American official monetary reserves. This mopping-up is proposed to be induced by subsidizing the exchange of these dollars for IMF Special Drawing Rights. The subsidy is to be paid out of IMF gold and a United States "contribution." It is to be hoped that this proposal will die.

A dollar that was allowed only a contained and narrow short term float, and adjustable pegged with the basket of fifteen other major currencies that make up the value of the IMF's Special Drawing Right, would seem likely to constitute a substantially less inflationary foreign exchange medium than the present dollar. (Its one great disadvantage is that it would require capable and courageous administration.) Its peg should be adjustable. Its management guideline should include an equal disposition to raise the peg or lower it. Something would be added if the pegging policy were supplemented by a sustained determination to sell at least three-fourths of United States monetary gold holdings (perhaps during a period of ten years).

Along these lines, an improved international dollar medium might emerge to make a significant contribution to world economic stabilities.

### *Banking*

During 1972-79, when the non-Communist world expanded its production of goods and services by something like 40 percent, the banks of these quarters of the World City so enlarged their international business that their gross money claims *on foreigners* rose by about 467 percent. These foreign asset claims of banks stood at about \$1,400 billion at the close of 1979.

The participation of United States' institutions in world banking has expanded even more largely.

The major banks operating internationally—American and other—have relatively tiny capital resources (less than 4 percent of total assets for Americans and Germans, about 6 percent for the British). These banks have received the overwhelming share of their funds (their Liabilities) on conditions of short-term withdrawal. And they have loaned to foreign countries a substantial fraction of these funds (acquiring Assets) for repayment over a period of several years.

We suggest three general principles of the public regulation of American banks doing international business. First: all such regulation should address itself to a consolidated entity, including all its activities abroad equally with activities in the United States. Second: all business operations not allowed American banks in the United States should bear a negative presumption of admissibility also for operations abroad. Third: no American bank activity abroad should carry U.S. tax immunities if that operation could equally be conducted in the United States.

Together with these general principles, we join one particularized negative. In our view, there is no outlook for gain to the United States or to the World City from indulgence of establishment in the United States of what are called "international banking free zones."

The "recycling" intermediation of the international banking community consists of first receiving ten or more billions of "surplus" dollars, each month, from OPEC countries who do not now wish to spend them, and subsequently lending these dollars to international buyers of oils (and other things) who cannot now otherwise pay. It is not at all unlikely that, in these next years, the intrepidity of the private international banking community, in this venture of recycling, will distinctly abate. Then the underlying problems will fall more squarely in the laps of intergovernmental institutions (IMF, World Bank) and national governments. The impact will be not least on Government of the United States.

### *Energy*

Distinctive alike of the world economies of the decade just past and of the decades to come is the wrestling with the problem of energy supply.

Liquid fuels are its most constricting element. Their scarcity is not a problem of nature. At the opening of the 1980's, world production of petroleum liquids approached 64 million barrels per day. Were limitations restricted to the availability of production capacities and the cost of alternative fuels, world production of conventional and unconventional oils would probably be expanded to 90 million barrels per day by the early 1990's and perhaps to 100 or 110 million barrels per day by the year 2000. Now sober professional opinion doubts that world production of conventional oils will ever reach 70 million barrels per day.

The effective limitations are doubly political. First comes the successful extortion policy of OPEC and its collaborators, based now on years of experience in earning more by producing less. Second is the continuing incompatibility between many less developed countries—in and out of OPEC—and the petroleum enterprises which possess the most advanced technical and managerial capabilities. These two are the foundations of scarcity.

On the eve of the first Oil Price Revolution, the crude oil output of the OPEC group was approximately 32½ million barrels per day, and OPEC oil exports from that level of production might have yielded (f.a.s.) about \$35 billion. For the year 1980, OPEC production is estimated in the range of 27 to 29 million barrels per day, and—at the price level established for the second half of 1980—a year's oil exports from that level would yield over \$300 billion. To the United States alone, the delivered (c.i.f.) cost of imported oils was \$8.4 billion in 1973, some \$60.3 billion in 1979, and is likely to be near \$90 billion for 1980.

The energy problem is worldwide, but the solutions have not been international, and they are not likely to be. Each nation-State (Britain, Norway, Canada, Mexico—like others) cares for its own. A "North-American" energy supply is only a rhetorical figment.

Controlling an oil supply that is not, immediately or in several years, replaceable or dispensable, at *any* cost, the OPEC cartel and its collaborators have pushed the prices of various crude oils into the range of \$30 to \$40 per barrel. In that range of costs, the OPEC supply *is*, in much considered professional judgment, substantially replaceable, in these next decades, by fuels producible in the United States. Such fuel use is also, in part, dispensable through more fuel-efficient technologies and less fuel-consuming patterns of consumption.

Higher potential levels of domestic fuel supply are certain in nuclear power, certain in coal, certain in shales, possible in oils, possible in gas, certain—on a small scale—in other resources. If we do not put our hands to producing these things, the United States may not long continue to be a foremost world society, perhaps not even one of social stabilities, reflecting the earned confidence of American people.

### *Collaborations*

The economic posture of the United States, for the next decades, cannot reflect a willingness to conform its practices to the commonly-arrived judgment of a supra-national authority. The World City has no such authority.

Collaborations, beyond the national community, however, remain possible. And the will to convince. And the willingness to be convinced. And the desire to assist.

Many targets may be chosen. However, no reasonable society will look to other societies with expectation of universal agreement.

### I. THE FALTERING GIANT

At the beginning of the 1980's, the United States stood out as the becalmed giant of the world economy. In total size, first and without a close second. In per capita real income, also still quite distinctly first. Agitated by severe price inflation. Seemingly unable to increase its national output by significantly more than the current increase—less than one percent a year—in its national population.

As the 1980's opened, the population of the earth apparently numbered something like 4½ billion. The population of the 24 relatively advanced non-Communist nations included in the OECD was roughly 770 million, and of this the United States alone counted about 222 million. The United States had something like 5 percent of the people of the earth and 29 percent of the OECD.

In our estimation, the total national product of the United States was about 40 percent of the total product of the OECD group, in real purchasing power terms. The real average income of Americans was therefore roughly two-thirds higher than the average of all OECD people other than Americans.

In much more dubious conception, it is our judgment that the OECD economies together—perhaps 17 percent of the people of the earth—accounted for about one-half of the world's production. United

States total product was therefore something like one-fifth of world output. Americans had average real incomes which may be thought of—not entirely unmeaningfully—as something like six times the average of all the world's people other than Americans.

If we move cautiously, and do not attribute unattainable precision to our results, it is possible to achieve a meaningful comparison of the national outputs of the relatively advanced OECD countries. The Gross Domestic Product of the United States (hereinafter GDP) is now calculated at about \$2,492 billion annually, for the level reached in the first half of 1980. To this may be added, for some purposes, the amount that interests domiciled in the United States are estimated to have earned *net* from the rest of the world, calculated at an annual level above \$30 billion. This addition brings the total Gross National Product (hereinafter GNP) to a rounded value approaching \$2,525 billion.

However, to compare this GNP aggregate meaningfully with the real goods and services produced in many other countries, we must not resort to the easy device of weighing their GDP's or GNP's with prevailing currency exchange rates. We do better to employ what specialists have come to call "international prices," which strive laboriously to give equal values to equal goods and services—not, for instance, valuing a country's output the higher because its general domestic price level (but not its export prices!) has been inflated by a 15 percent Value Added Tax.

Accordingly, we reject the crude "official" OECD computations, which weight GDP's and GNP's on the basis of 1978 exchange rates.<sup>1</sup> These computations attribute to five large OECD members, taken together—Japan, Germany, France, Italy, and the United Kingdom—a combined 1978 output about 25.7 percent larger than that of the United States. A purchasing power evaluation, at international prices, indicates that the combined output of these five was larger than the GNP of the United States by about 3 percent. (See Table 1.) This "official" OECD evaluation attributes a weight of 35.8 percent to the U.S. in the total OECD economy, while our own calculations, on the basis of purchasing power parity, suggest a weight above 40 percent for 1978 and about 40 percent for 1979.

Far more uncertain—and beclouded in meaning—is the comparative estimate we have been able to assemble for the rest of the world. It is a thing of statistical shreds and tatters. And of dubious conceptions. How are the services of an elementary school teacher in Tokyo to be assessed in comparison with a teacher in Uganda? What value has a house in San Francisco in comparison with a house in Nablus? Having regard to the range of living conditions that confront the various peoples, we are reminded of a characteristic piece of wit and wisdom once expressed by J. M. Keynes. He said that comparisons of incomes at remote levels in time or economic condition seemed to him to have little more precision than the judgment, "Queen Elizabeth was happier than Queen Victoria, but Queen Victoria was more virtuous."

<sup>1</sup> OECD, *Economic Outlook*, Paris, December 1979, page 13 and elsewhere.

TABLE 1.—REAL GROSS DOMESTIC PRODUCT AND REAL GDP PER EMPLOYED PERSON AND PER CAPITA  
 [Output measured by weighted international prices]<sup>1</sup>

	Real GDP					
	Aggregate		Per person employed		Per capita of population	
	1950	1978	1950	1978	1950	1978
(1) United States.....	100.0	100.0	100.0	100.0	100.0	100.0
(2) Canada.....	7.0	10.0	84.4	96.1	77.2	93.1
(3) Japan.....	9.0	35.0	15.6	63.0	16.5	66.6
(4) Germany.....	12.9	22.0	39.8	85.1	41.6	78.6
(5) France.....	13.6	19.1	42.4	85.6	49.3	78.5
(6) Italy.....	8.7	12.0	27.8	57.3	28.1	46.4
(7) United Kingdom.....	19.9	14.9	53.6	58.4	60.0	58.5
(8) Netherlands.....	3.4	4.3	55.4	89.4	51.0	67.7
(9) Belgium.....	3.1	3.5	56.4	87.6	55.0	76.6
Sum of (2) through (9).....	77.6	120.8	-----	-----	-----	-----
Sum of (3) through (7).....	64.1	103.0	-----	-----	-----	-----

<sup>1</sup> The derivation of "international price" is best described in "International Comparison of Real Product \* \* \* " vol. I (1975) and vol. II (1978), published by the World Bank. A brief account, supplemented by further calculations, is "Comparative Real Gross Domestic Product \* \* \* 1950-1978", prepared by the Bureau of Labor Statistics of the U.S. Department of Labor, August 1979. All figures in the above table are drawn from the latter. Despite the high expertise of their compilers these figures should be understood as inherently capable of being only broadly indicative of the relationship involved.

### A. Urban Incomes

The foremost position of current American earnings, in real purchasing power, has been portrayed again, and persuasively, for 1979, in a careful study by the Union Bank of Switzerland. However, this study's direct coverage is limited to wage and salary earnings (up to \$46,700) and to some of the world's largest cities. (Details in Table 2).

In real purchasing power, American urban wages and salaries (though dragged down by New York!) come out roughly one-tenth higher than those of such major cities as Amsterdam, Zurich, Copenhagen, and Geneva. United States urban real earnings are suggested to be more than one quarter higher than those cited for Germany, about three-fifths higher than those for Japan, and nearly twice those for England. Nothing in this more limited calculation is greatly out of line with the more comprehensive comparisons of our Table 1.

For some countries, earnings stand relatively higher on a *gross* basis (before taxes and social security deductions) in our Table 2 because in these countries taxes are high and benefits are distributed generously otherwise than to primary earning. This distributionist impact has great weight in the Scandinavian countries, the Netherlands, Belgium, Germany, Italy—and Turkey! On the other hand, countries where taxes on earnings are low and social benefits meager stand relatively higher on a *net* basis. This nondistributionist elevation of relative net earnings is characteristic for urban Japan, Spain, and Greece, and it is to be noted also for France. These distinctions however do not qualify the preeminent real earnings of the employed urban Americans. (Exceptionally, the higher prices and heavier taxes of New Yorkers bring their net real earnings below those of the most prosperous foreign cities.)

TABLE 2.—COMPARATIVE PURCHASING POWER OF WAGES AND SALARIES PREVAILING IN CITIES OF NON-COMMUNIST (OECD) COUNTRIES IN JUNE-JULY, 1979

City <sup>1</sup>	Price level <sup>2</sup>	Wage and salary level (gross) <sup>3</sup>	Wage and salary level (net) <sup>4</sup>	Gross real earnings <sup>2</sup>	Net real earnings <sup>4</sup>
Chicago.....	79	89	87	112	110
San Francisco.....	77	86	80	111	103
Los Angeles.....	74	78	79	105	106
New York.....	84	84	76	99	90
Montreal.....	67	66	64	98	94
Toronto.....	68	66	68	96	98
Sydney.....	68	66	66	96	97
Amsterdam.....	79	81	68	102	86
Zurich.....	100	100	100	100	100
Luxemburg.....	83	78	78	94	94
Copenhagen.....	102	95	71	93	70
Geneva.....	103	95	92	91	88
Stockholm.....	89	77	64	87	71
Dusseldorf.....	96	83	76	86	78
Brussels.....	89	74	67	83	74
Vienna.....	78	63	59	81	75
Oslo.....	104	76	63	72	60
Helsinki.....	81	54	45	66	55
Tokyo.....	106	66	73	62	69
Dublin.....	67	42	42	62	62
Paris.....	95	58	61	61	64
Milan.....	65	40	36	60	55
London.....	81	46	44	56	55
Madrid.....	78	42	47	54	60
Athens.....	78	31	34	40	43
Istanbul.....	52	18	12	35	23

<sup>1</sup> Zurich taken as 100 for each comparison.

<sup>2</sup> Converted into dollars at Zurich June-July 1979 exchange rate.

<sup>3</sup> Gross means before taxes and social security contributions.

<sup>4</sup> Net means after taxes and social security contributions.

Source: All data drawn from the valuable little volume, "Prices and Earnings Around the Globe", issued by the Union Bank of Switzerland, December 1979.

### B. Improvement

Our Table 1, with its confrontation of 1978 and 1950, should make it clear that the present still foremost economic position of the United States is no ground for complacency. Aggregates of national production are the least significant comparative measures of economic progress: the United States has between two and four times the population of the other major advanced non-Communist countries. Yet it is not unimportant that eight other OECD countries, taken together, had in 1950 only a little over three-quarters of the GDP of the United States, and in 1978 the same eight had advanced to 1½ times the United States.

Most significant perhaps is the comparative productivity gain, per person employed. There Japan—the swiftest of all—has multiplied its productivity four times as rapidly as the United States; where Japanese output per person employed stood at 15.6 percent of the U.S. level in 1950, it had risen to 63 percent in 1978. Western Germany, France, and Italy each more than doubled the rate of productivity advance of the United States. The Netherlands and Belgium advanced about three-fifths faster. Even the United Kingdom, the poorest performer among West Europeans, gained on the United States. Canada reached approximate productivity equality.

There would be nothing to lament in these convergences if others had gained while the United States had advanced at a pace to satisfy the aspirations of its own people. A world of more equally prosperous nations is surely to be preferred over one of much remediable poverty. The loss is that other nations have gained in productivity while the United States, after long advancing moderately, has first slowed and then—most recently—absolutely retrogressed. The others have actually become less swift; the Giant is immobile.

## II. EMPLOYMENT, POPULATION, MIGRATION

Prominent in the counsel which reputedly sage West Europeans now offer to the United States, for the guidance of the American economy in the next decades, is the advice to be "moderate" or even "modest" in the nation's targets for economic growth. Here "moderate" or "modest" is commonly interpreted to mean a targeted average yearly growth of something between  $1\frac{1}{2}$  percent and  $2\frac{1}{2}$  percent in American GNP.

Of this counsel, perhaps the kindest thing that can be said is that it misconceives the profound difference, between the United States and Western Europe, in the structure of population and the demand for employment, at present and in the next decades. For western Europe, with a labor force already stationary or declining in numbers, a growth of  $1\frac{1}{2}$  percent to  $2\frac{1}{2}$  percent in GNP now already means a corresponding growth per person: it means that a reasonably candid European statesman might say, "We are planning to double real personal incomes in a generation."

For the United States—even if in effect acceptant of the level of unemployment prevailing at the opening of the 1980's—a GNP growth of  $1\frac{1}{2}$  percent to  $2\frac{1}{2}$  percent per year means a growth, in income per person employed, from nothing to perhaps 1 percent a year. Consistent with such "moderate" or "modest" targets, a passably candid American statesman should say, "We are planning in 1980 that, by the year 2000, the representative American, in full employment, will earn—in real terms—something between approximately what he earns now and perhaps one-fourth more." There were, no doubt, generations of men who would have received such a communication calmly and even gratefully.

In 1950, the population of six leading West European countries—Germany, France, Italy, Netherlands, Belgium, and the United Kingdom—was about 35 percent larger than that of the United States; by 1978, the six had a population less than 15 percent larger. (See Table 3.) More strikingly, and more to the heart of the matter, in 1950 these six European countries had nearly 45 percent greater employment than the United States; by 1978, they had less than 4 percent more employment.

The divergence in present and near future employment needs is made even sharper if, departing from the wide sweep of 1950–1978, we focus on the years 1968–78. (See Table 4.) In this ten-year period, American population increased by 17.84 million and employment by 17.03 million—with employment actually rising more than population in the second five years! Meanwhile, for the whole decade, the six advanced countries of Western Europe had a population increase of

TABLE 3.—GROWTH OF POPULATION AND OF EMPLOYMENT IN THE UNITED STATES COMPARED WITH 8 OTHER OECD COUNTRIES, 1950-78<sup>1</sup>

	Total population		Total employment	
	1950	1978	1950	1978
(1) United States.....	100.00	100.00	100.00	100.00
(2) Canada.....	9.04	10.75	8.27	10.42
(3) Japan.....	54.65	52.57	57.97	55.55
(4) Germany.....	30.92	28.05	32.34	25.89
(5) France.....	27.58	24.38	32.08	22.33
(6) Italy.....	30.83	25.94	31.17	21.03
(7) United Kingdom.....	33.22	25.54	37.15	25.59
(8) Netherlands.....	6.67	6.38	6.14	4.83
(9) Belgium.....	5.70	4.50	5.55	3.94
Sum of non-United States (2) through (9).....	198.61	178.11	210.67	169.58
Sum of European (4) through (9).....	134.92	114.79	144.43	103.61

<sup>1</sup> U.S. Department of Labor, Bureau of Labor Statistics, as cited in table 1.

11.1 million and an employment increase of just under 1.0 million. And, for the second five years alone (1973-78), while the population of the six countries still increased 2.79 million, their combined total employment decreased by about 790,000.

From 1969 to 1979, the population of the United States rose by 17.9 million; the total labor force (civilian and military) by 20.8 million; civilian employment by 19.0 million. Population increased by a modest 0.8 percent per year, while both the total labor force and civilian employment experienced huge increases—each averaging over 2.2 percent per year and cumulating to nearly 25 percent in the decade.

TABLE 4.—GROWTH IN POPULATION AND IN EMPLOYMENT IN THE UNITED STATES AND IN 8 OTHER OECD COUNTRIES, 1968-73 AND 1973-78<sup>1</sup>

	[In millions]			
	Population increase 1968-73	Employment increase 1968-73	Population increase 1973-78	Employment increase 1973-78
United States.....	9.70	7.28	8.14	9.78
Canada.....	1.34	1.19	1.43	1.17
Japan.....	7.55	2.83	6.20	1.45
Six major European:				
Germany.....	2.48	.76	-.67	-1.67
France.....	2.21	1.07	1.16	.06
Italy.....	1.92	-.41	1.79	.82
United Kingdom.....	.86	.04	-.09	.06
Netherlands.....	.72	.12	.50	-.02
Belgium.....	.12	.20	.10	-.04
Sum of European.....	8.31	1.78	2.79	-.79

<sup>1</sup> Same as table 3.

The huge surge reflected maturities from the "baby boom" of 1945-1969. Its consequences will still be felt throughout the 1980's and in the early 1990's. Beneficially, the productive age group 22 through 64, which constituted just over 52 percent of the American population in 1978, will be 56 percent in 1990 and 57 percent in 2000. However, by 1972 the baby boom had collapsed to a level below the population replacement level, and the birth-rate has recently held on a plateau about one-seventh below replacement. Consequently, the age group of dependent youth (up through age 17), which constituted 29 percent of the population in 1978, is now moving down toward 25.5 percent of the population in 1990 and 24.9 percent in 2000.



We are troubled by the long record of American expertise in greatly underestimating the growth in the United States labor force. This underestimation has two sources. First, underestimating the increase in labor force participation by women (though this rise is slightly offset by the decrease among men). Second, underestimating immigration, through assuming that it will remain at a limit of 400,000 per year. In our own thinking, we have been guided by the conclusion that the United States labor force, having expanded at an annual rate of 2¼ percent in the 1970's, is most likely to grow at a reduced rate averaging perhaps 1½ percent in the 1980's and, more uncertainly, falling toward 1 percent in the 1990's. However, we make the clear reservation that, in our judgment, for the 1980's the suggested 1½ percent growth is more likely to be too low than too high: 2 percent is not at all excluded. And any 1990's projection is highly fallible.

In the four economic recovery years 1975-79, American labor force participation of persons over age 16 increased from 61.8 percent to 64.2 percent. The rate is 64.3 percent for the first quarter of 1980, though the category of "discouraged workers" (*not* counted in the labor force) has risen to over 0.9 percent. We believe that, in an economy that fails in affording employment no more than did the 1970's, United States labor force participation will continue to rise.

Moreover, our vision of the future must not be blacked out by the 400,000 assumption for legal immigration. Already in 1978, legally authorized immigration passed 600,000. In 1980 it may well pass 700,000. And it is not improbable that there has been an average illegal supplement of 300,000 in each recent year.

For these reasons, we do not exclude the possibility that the 1980's may experience only a modest decline in the rate of growth of the American labor force below the 2¼ percent average per annum of the 1970's. And we do not pretend to assurance for the 1990's.

With these assumptions regarding labor force growth, only a growth in the American economy averaging perhaps above 4 percent per annum in the 1980's, though somewhat lower in the 1990's, is likely to be compatible with a growth in output and income rising by something like 2½ percent a year per person in search of employment. Acceptance of economic growth targets which may be appropriate for some European countries (with labor forces already stationary or declining), would certainly be defeatism for the United States. In a Nation where the labor force is expected to grow at the rate we anticipate for the United States, the reception of an average annual GNP growth rate of 1½ percent to 2½ percent—as being "moderate" or even "modest"—would signify the dominance of resignation or despair.

#### A. *World Population*

Still, the anticipated population growth of the United States, and its related employment requirements, shrink to the dimensions of a quite "manageable" problem when examined against the larger background of world population growth. While such world growth is certainly not manageable by the United States, and perhaps largely escapes determining influence by all authorities now established among men, this present multiplication of the world's people is a force—a tragic burden—that commands weighty consideration in

any reasoned examination of the Nation's responsibilities among mankind in the next decades.

In 1978, the U.S. Bureau of the Census issued a "medium" estimate of world population growth in 1980 to 2000. In significant division, the following was the Bureau's image:

WORLD POPULATION, MEDIUM ESTIMATE, 1980-2000

[In millions]

	1980	1990	2000	Increase 1980-2000 (percent)
More developed regions.....	1, 179	1, 268	1, 345	14
Less developed regions.....	3, 321	4, 097	5, 008	50
Total.....	4, 500	5, 365	6, 353	

In this perspective, the "developed" regions, including those of the Communist countries, taken together, emerge as having no serious population problem. Total employment in the developed countries is now in the range of 500 million persons, and—short of their becoming recipients of immigration on a scale without precedent in recent decades—their added demand for employment will certainly not come up to an average of 5 million persons per year in the next 20 years. The "less developed" nations will carry the tragic—seemingly unavoidable—burden. Abundant in children, they may now be employing (including under-employing) something like 1,100 million persons, and (with some aging of their populations) they may easily be called upon to increase their total employment by two thirds—adding some 30 to 40 million persons to employment each year—during the next decades. Four-fifths of their candidates for additional employment are already born.

Sober opinion has tended to regard this tragedy as subject only to marginal alleviation. The poorest, including those in abject poverty, now have the highest birth rates. Modern health care has reached them sufficiently to curtail death rates. But, for the attainment of a higher level of personal income, there seems to be a vicious circle. Only peoples who have already achieved a higher standard of living seem usually inclined to limit their births—to preserve that standard (though we do, of course, have historic records of relatively poor peoples who have stabilized the circle of poverty, even by killing infants and exposing the aged to starvation). It is indeed reported that almost all less-developed countries now have family planning programs and that these are now dominantly overt in their aim to reduce population numbers. However, the achievements of these programs have hitherto been regarded as slight. Until August 1979, no poorer nation had reported a decrease of fertility remotely comparable to what took place in the United States after the "baby boom"—where fertility was cut in half from 1955-59 to 1975-78.

However, in August 1979, the Chinese authorities proclaimed an achievement that—if truly reported—is quite without parallel. They stated that China had succeeded in reducing its annual natural increase from 2.3 percent in 1971 to 1.2 percent in 1978. They proposed to go further—indeed to persuade married couples to limit their

families to one child, so that the country might achieve an 0.5 percent rate of natural increase by 1985 and zero population growth by the year 2000. (The one-child family goal must, however, hardly be chosen for a long period; it would lead, in time, to a tiny group of workers supporting a huge group of old people.) The Chinese achievement, if confirmed, does raise the image of what is possible even among the poorest. This Chinese news even led one American population expert to forecast: "Barring a nuclear holocaust, the children of the [American] baby boom . . . should live to see the end of the population explosion."<sup>2</sup> This outcome—though perhaps prematurely forecast—would indeed be a tidings of joy, for all of humankind.<sup>3</sup>

Meanwhile—and it will be, at best, a meanwhile of several decades—the service the people of the United States can render to the cause of world population control calls for great sensitivity and even reticence. Much is best left to subsidized voluntary organizations and individuals. Insofar as governments are involved, the binational approach should surely be minimal. In such matters, multinational institutions are less repellent instruments. This is a context of national self-interest but also one of charity, and charity is best given through channels where the recipient does not come face to face with the giver.

In population policy, appreciation of the limits of early achievement should not be allowed to dampen immediate concern. Something like 40 percent or 50 percent of the people of the less-developed countries, already born, are under age 15. No current action is likely to hold the growth of world population from the 1980 level of about 4½ billion to a year 2000 level greatly below 6 billion. However it is still within the reach of policy and initiative to help achieve a later stabilization of world population numbers perhaps near 8 billion, rather than the 10 or 12 billion variously now anticipated. No general objective of world concern deserves greater United States involvement. In our judgment, this involvement is likely to be most productive when joined in a quite un-national community of understanding and commitment.

### B. Immigration

With respect to immigration, it is impossible for the Government of the United States to avoid direct confrontation. Immigration has always been important in American life; it may become even more important in the next decades. Yet on few subjects is there so little American public consensus. On one side, there are thoughtful Americans who hold that the United States would best admit *no* immigrants—except possibly political refugees plus perhaps a few individuals of the highest technical, scientific, or cultural distinction. On the other side, there is equally thoughtful opinion that sees substantial immigration—from all continents and of all skill levels—as an economic gain and moral responsibility, for a Nation of slowing population growth, living in a world of exploding population numbers which include millions of people of diverse talents and average human rectitudes. We acknowledge that, as between these two alternatives,

<sup>2</sup> See essay by R. E. Miles, "The Age of Discontinuity," in *Population Bulletin*, Washington, D.C., December 1979, page 46.

<sup>3</sup> In a later public statement, Vice Premier Deng Xiaoping said that China's population would grow from a billion "now" to one billion and two hundred million in 2000. Highly qualified American expertise puts the 1980 "now" substantially higher and the 1978 annual growth rate at 1.4% to 1.7%. See "International Population Dynamics," Washington, D.C., Bureau of the Census, May 1980, pages 89ff.

we bear toward the second; however, we make no claim of enjoying support from a public consensus.

For a century and a half (1820-1970), recorded United States immigration averaged just over 300,000 persons a year. In the 1970's (1971-77), legal immigration has averaged over 414,000 per year. This legal 1970's immigration amounted to an annual average of about 1.9 persons per thousand of the officially (Census Bureau) estimated United States population, while total American population (inclusive of legal immigrants) grew by about 8.0 persons per thousand residents in the average year. Legal immigration has therefore recently provided a little less than one quarter of American population increase. Moreover, on the two lower and more realistic Census Bureau estimates of the future population of the United States (taking the two estimates averaged together), even an immigration held to 400,000 net per year would provide about 30 percent of the total population increase of the United States in the 1990's. Will the people of the United States welcome a larger share?

Some have argued that the United States should refrain, by Federal law, from accepting a "brain drain" of the skilled from the less developed countries. Here, however, as so often in the immigration problem, we encounter a conflict of shared multiple moralities. On the one hand, it can be understood that a parent country may wish to receive some return for the investment it has made in training its skilled people. Such understanding implicates that the United States can hardly interpose a principled objection to any country's policy that may require sole education "pay-back" prior to emigration. On the other hand, the Government of the United States—out of respect for individual freedoms—can hardly make itself an agent for enforcing another country's repayment policies, by refusing entry to America differentially to the trained emigrating foreigner. This is a true dilemma, not a hypocrisy.

Even more painful choices arise where the unskilled are concerned. These issues have been side-stepped by American indulgence of illegal immigration, temporary and permanent. Accepting the labor of the illegals but rejecting their access to the community, the United States has accumulated resident illegals to a number variously guessed to be between three and twelve million persons (where the lower figure seems nearer reality). Does the United States really wish to make an end of indulged illegality? In the future, will the country do without illegal "guest workers," perhaps by adopting a limited, licensed importation, made effective by severe penalties against employers?

And even more to the core, is the United States prepared to accept the fact that its immigrants of modest skills—if accorded entry in some recognition of the volume of applicants—will come increasingly from Latin America and Asia? Even among legal immigrants alone, in the 1970's, Latin Americans were already 41% and Asians 32%. For the next decades, are people of modest skills—from Mexico, the West Indies, the Philippines, Korea, and other less developed countries—to become the dominant element in American immigration? And within what total number—for skilled and unskilled together? Is it to be the same 400,000 *legal* immigrants per year, which would be a major reduction in *actual* immigration? Or 500,000? Or some greater number?

These are among the most difficult questions one encounters in any sincere effort to define an American international posture for the next decades. We do not profess to have offered answers to these questions.

### III. INTERNATIONAL ENERGY DEPENDENCE

Easily the most novel international economic development of the 1970's was the success of a handful of petroleum exporting States in clamping an iron ring through the noses of most of the other peoples of the earth. Through the firmness of the clamp, these petroleum exporters have been able to raise the price of a representative crude oil from under \$2.00 per barrel in 1972 to export prices ranging from \$28.00 to over \$37.00 (for various crude specifications) in the early summer of 1980. In 1972 the total value of OPEC oil output, at export prices, was in the range of \$20 to \$25 billion. Having produced and exported a lesser volume of oil in 1979 than they did in 1972 or 1973, the original organizing inner circle (OPEC) of these exporting States may alone reasonably expect to have a crude oil output internationally priced, this year, in the general range of \$350 billion.<sup>4</sup> With the continuance of achieved collaborations—and no increase in output, but perhaps a managed decrease—the attainment of a \$400 billion year's value is only a short time away.

We deprive ourselves of such wisdom as can be gained from the experience of the Oil Price Revolution if we fail to recollect how widely and authoritatively its *possibility* was denied. Western finance ministers, central bankers, and Nobel prize holders—together a much respected assemblage—vied with one another in proclaiming that such a price extortion *could not* succeed. Every cartel had failed; this one too would fail. Some exigent seller would try to sell more, and he would bring the whole house down. Besides—said particularly the finance ministers and central bankers—so much money could not be paid: the international monetary system would break to pieces.

On the contrary; it was quickly demonstrated—to all but the most stubbornly blind—that a mere jostling, uneven collaboration of four or five major petroleum exporters could make the Oil Price Revolution quite effective—and enable it to win the Second Great Movement of 1979–80 more easily even than it did the First Great Movement of 1973–74. Today, the uneven collaboration of five great exporters—Saudi Arabia, Iraq, Kuwait, Nigeria, and Libya—is more than enough even for an early Third Round (excluding only military counteraction). Others collaborate without joining. For OPEC price policy, Great Britain and Norway effect swift collaborations. So does Mexico. So, with its small output, does China. So, with no net exports, does Canada. So does also the USSR. The game is easily won.

#### A. Oil Supply

The ease of winning has no foundation in worldwide shortage of petroleum resources. Decisive rather are the locations of these resources and the political controls over their production.

On the eve of the 1980's, world production of crude oils reached a total just under 63½ million barrels per day. This is an annual rate of

<sup>4</sup> Of this total, about \$300 billion will be exported.

roughly 3½ billion metric tons (hereafter tonnes) per year. In 1978, the World Energy Conference found that expert opinion converged around 300 billion tonnes for the size of the earth's remaining resources of conventional oils. (This excludes oils from shales, tar sands, etc.) There is no informed dissent from the judgment that, were limitations restricted to the cost of alternative fuels and the availability of technical and managerial capacity, the world supply of conventional oils could be expanded to 90 million barrels per day (say 4½ billion tonnes per year) by the early 1990's. More uncertain, but still highly probable, is the feasibility of further expanding the combined production of conventional and unconventional hydrocarbon liquid supplies to a range of 100 to 110 million barrels per day around the year 2000.

The controlling limitations—which together make an expansion toward 100 to 110 million barrels per day a development not to be counted upon—are doubly political. First, there is the effective extortion policy of OPEC and its collaborators, based on experienced success in earning more by producing less. Second, there is the continuing incompatibility between many less-developed countries and the petroleum enterprises of the most advanced nations. These less-developed countries frequently are not trusted to observe long-term contractual arrangements of a kind that would elicit large-scale participation by the experienced oil companies in whom the necessary technical and managerial capacities are largely concentrated. These specific OPEC policies and these general LDC incompatibilities constitute the fundamental grounds for the duality of natural oil resource abundance and continuing Western economic oil scarcity. It must now be presumed that, for the next decades, these foundations are likely to endure.

A recent expert outline of the extent of world crude oil resources (one with a minimalist leaning), and especially the portrayal of how these resources are distributed, provides a picture of the basis on which abundant world oil resources and continued Western oil dependence are made to coexist. (See Table 5.) The table indicates, perhaps pessimistically, that nearly half of the original conventional crude oil resources of the United States had already been produced by the end of 1975. In the four years 1976-79, another 1½ billion tonnes have been produced. If it were possible for the United States to find and produce all the Table 5 indicated crude oil, at the same rate as it has been produced in 1976-79, these resources would be totally exhausted by 2020.

TABLE 5.—WORLD RESOURCES OF CONVENTIONAL CRUDE PETROLEUM

[In billions of tonnes]

	Cumulative production through 1975	Reserves			
		Proven and prospective	Undiscovered	Total	Percent of total
United States.....	16	7	11	18	7.0
Other Americas.....	8	12	25	37	14.5
Communist Countries.....	8	14	50	64	25.0
Middle East.....	12	68	14	87	34.0
Other Eastern Hemisphere.....	4	14	36	50	19.5
<b>Total.....</b>	<b>48</b>	<b>115</b>	<b>141</b>	<b>256</b>	<b>100.0</b>

Source: Paper by M. T. Halbouty and J. D. Moody, World Petroleum Congress, 1979.

Of all the world's firmly proven plus near prospective crude oils, totaling 115 billion tonnes, some 68 billion are attributed to the Middle East and 14 billion to the Communist countries. The latter may have decreasing or vanishing surpluses for export. Their net exports may have already peaked (at 1.1 million barrels per day) in 1978 and 1979. In any case, the OPEC group, though now consuming about 3½ million barrels per day of their own liquids production, exported more than 25 times as great a volume of oils as the net exports of the Communist bloc even in 1978 and 1979. However—and here is the nub of the world price squeeze—the OPEC group produced less crude oil in 1979 and in every year 1974–79 than it was producing, at an annual rate, in the third quarter of 1973, immediately before the Oil Price Revolution. Total proven and near prospective crude oil reserves of the OPEC group are being tapped at a rate of little over 2 percent per year. And the stronger of OPEC suppliers are in no hurry to “prove-up” additional reserves.

The following is the course of OPEC production since 1973, in the context of world output. (See Table 6.) As the table indicates, in the six years 1974–79, OPEC crude oil production was held to an average volume more than 9 percent lower than the volume produced on the eve of the 1973 Oil Price Revolution. In 1979 this OPEC production was still 5.6 percent lower than at the 1973 peak quarter. And in 1980 this OPEC production looks to be held to a level about 14 percent below 1973, in support of the price level fixed in the second Oil Price Revolution of 1979–80.

TABLE 6.—WORLD PRODUCTION OF CRUDE OIL AND NATURAL GAS LIQUIDS, 1973–79

[In billions of barrels and indices of volume]

	OPEC		Other non-Communist countries		World total	
	Barrels	Index	Barrels	Index	Barrels	Index
Annual rate of 3d quarter 1973.....	11.87	100.0	6.09	100.0	21.69	100.0
Year:						
1973.....	11.30	95.2	6.19	101.7	21.19	97.7
1974.....	11.20	94.3	6.01	98.8	21.23	97.9
1975.....	9.93	83.7	5.91	97.0	20.17	93.0
1976.....	11.24	94.4	5.97	97.8	21.83	100.4
1977.....	11.47	96.6	6.33	104.0	22.67	104.5
1978.....	10.91	91.9	6.82	112.1	22.89	105.5
1979.....	11.20	94.4	7.20	118.3	23.65	109.0

Source: "Petroleum Economist," London, April 1980, p. 181.

During these years, the USSR became the foremost world oil producer; its year's output stood 37 percent higher in 1979 than in 1973 (at 4.31 billion barrels instead of 3.14 billion). Saudi Arabia remained third among the great oil producers, allowing its output to rise only by 25 percent in 1979 over 1973 (to 3.45 billion barrels from 2.77 billion). The entire net increase in the crude oil production of the non-OPEC and non-Communist countries was more than accounted for by the increase in the North Sea and Mexico: Great Britain, Norway, and Mexico, taken together, added 1.11 billion barrels a year to their production. The United States slipped from first to second; since the hugely increased Alaskan output did not fully offset declines in the lower 48 States, total American output of

crude oils fell by 7 percent (from 4.00 billion barrels to 3.72). By this decline, while the national labor force expanded by over 15 percent, American international vulnerability—economic and political—was decidedly increased.

### B. U.S. Oil Cost

In only 11 years, the cost of United States imports of crude oil and refined petroleum products has increased by over 25 times. The following is the trajectory:

#### U.S. imports of crude oils and petroleum products (\$ billions) <sup>1</sup>

1968	\$2.4
1972	4.7
1973	8.4
1974	26.6
1975	27.0
1976	34.6
1977	45.0
1978	42.0
1979	60.3

<sup>1</sup> "End-use" commodity classification, c.i.f. value.

It is to be anticipated that this import cost will rise, to something in the general range of \$90 billion, in the year 1980.

Little satisfaction is to be drawn from the observation that, as the United States enters the 1980's, it is experiencing a short-term 1980 reduction in the volume of petroleum imports. The years 1973-75 witnessed a similar experience—for similar reasons: price inflation; declining production; fall in purchasing power; some deliberate energy conservation. Under these combined influences, we now estimate that U.S. petroleum usage (including inventory accumulation) may be 7 percent lower in 1980 than in 1979 and imports of all oils perhaps one-sixth lower. The 1973-79 cycle is therefore worth recalling. Then also petroleum use fell from late 1973 to early 1975; 1976 climbed back; 1977-79 showed a modest rise in petroleum usage—and almost four times as great a percentage increase in import volumes. The cycle of the 1970's may be summarized as follows:

#### GROWTH IN U.S. PETROLEUM SUPPLY AND IMPORTS, 1973-75 TO 1977-79

[In thousands of barrels per day and indices of volume]

	Oils supplied	Index of supply	Oils imported	Index of imports	Share of im- ports in supply
1973 to 1975	16,761	100.0	6,141	100.0	36.6
1977 to 1979	18,551	110.7	8,483	138.1	45.7

In 1979, U.S. petroleum product supply was about 18,434,000 barrels per day and imports of crude and products about 8,411,000. If the one declines by about 7 percent and the other by roughly one-sixth, the 1980 year's consumption will average over 17 million barrels per day and imports roughly 7 million barrels per day. (The greater impact on imports reflects the fact that domestic output of crude is even rising, by perhaps 2 percent, in 1980 over 1979.) The declines in usage and imports will be a mixed comfort. They will only secondarily reflect a gain in conservation and hardly at all a gain through sub-



stituting more secure and cheaper domestic energy materials for more precarious and costly imported supplies. It is no blessing that a diet of the hospital bed may require fewer calories than does a life of healthy exertion.

It is not safe to count on any likelihood that the American economy will be called upon, in the average year of the 1980's, to provide for a growth in its labor force of less than 1½ percent. And it is possible that—if both immigration and the desire for labor force participation continue to expand—we are now underestimating this growth in the 1980's, just as most expert opinion did in the 1970's. Moreover, a healthy economy will also strive for an annual growth in real income, surely not lower than 2½ percent per person employed. (At this rate, real income doubles in 28 years.)

Denied real growth, the economy will, almost certainly, be forced to continue to pay its "improvement factor," as now, in the false money of inflation. Then it will surely continue to incur the socio-political stresses—and the disappointed secessions from public affairs—that are the fair recompense of the counterfeiter. Even with severe conservation, it is doubtful that an expanding and improving American economy is feasible without a growth in energy consumption rather larger than the growth in the labor force. A growth need of 2 percent or 2½ percent per year in energy consumption is a modest assumption, even for these years when energy economizing is being learned. To have passed the year 1980 without any growth in the Nation's energy consumption and also with a deep economic decline provides dubious cause for rejoicing. Surely it is not a happy precedent for these next decades.

In a stagnating economy, U.S. imports of crude petroleum and petroleum products may well fall to the range of 7 million barrels per day in 1980. The United States will not however thereby escape an inflationary rise in the total landed price paid for the year's oil imports from over \$60 billion in 1979 to the range of \$90 billion in 1980. The price being paid for British oil from the North Sea now, in May 1980, may be taken as suggestive. (This price is keyed to the price paid for the premium African light crudes, which alone accounted directly for over 40 percent of the c.i.f. cost of U.S. crude imports in 1979. It is indicative also for Indonesian and other premium crudes.) In the first nine months of 1979, the U.S. landed cost of British crude averaged \$19.98 per barrel. This \$20 price, multiplied by the total volume of U.S. petroleum imports, was almost exactly equal to the total cost of U.S. imports of all oils in the year. On April 17, 1980, the British National Oil Corporation announced the most recent of many increases of this price: it was \$34.80 per barrel, back-dated (no doubt, following Middle Eastern moralities) to April 1. This new price would yield about \$36.00 landed in the United States. It is an increase of about 80 percent over the above average for 1979.

A simple multiplication of 7 million barrels per day by \$36.00 yields \$92 billion per year. We do not profess to forecast what further price increases may take place during 1980. There will probably be some in OPEC, in the North Sea, in Mexico and elsewhere. The Saudis will attempt to "converge" their contract prices to those of other OPEC exporters. (In any case, Saudi "Arabian Light" was already quoted \$38.00 "spot" in Los Angeles in March.) Moreover, we do not allow specifically for the fact that the cost of refined products, likely to

constitute some 20 percent to 25 percent of U.S. imports in 1980, is poorly represented by the cost of crude. Even among narrowed imports, the low-valued residuals are likely to be more than half of the import volume, the remainder consisting of higher-priced gasolines, jet fuels, light heating oils, etc. (largely coming from Caribbean refineries that *must* export to the U.S. or curtail their refining). We suggest merely that a year's cost in the very general range of \$90 billion is what must be reckoned with in the depressed economy of the United States of 1980.

### C. Energy Cost

The price of \$36.00 per barrel comes to 85.7 cents per gallon. This price—escalated by then—is suggestive of the prices that will be received by United States crude producers, for good grades of crude, after September 1981, when U.S. crude price controls are to terminate. (A round estimate would be in the range of \$40 a barrel.) However, 85.7 cents per gallon is not suggestive of the prices paid, already in 1980, by users of refined oils—whether the users are households, businesses, or government. Of major products, only residual fuel, in quantities purchased by bulk users, commonly costs less than the crude from which it is made; however, residual fuel amounted to only 15.3 percent of the total volume of petroleum products supplied in the United States in 1979. All other major products cost more.

The ordinary consumer is best acquainted with gasolines and with the distillate supplied as home heating oil. Gasolines and distillates were respectively 38.3 percent and 18.0 percent of U.S. consumption of petroleum in 1979. In mid-April 1980, the "standard" gasoline (major-brand "regular") was selling for an average pump price of about \$1.20 (about \$1.08 excluding tax). Distillates were being sold in April 1980 at final prices averaging between 90 cents and over \$1.00. Jet fuels (about 5.8 percent of total U.S. oil supply) are estimated to cost the airline industry about 95 cents per gallon in 1980.

Avoiding a precision that we find unattainable, it may still be worthwhile to suggest a vague image of the final amount that all American users may be paying for petroleum products in 1980. We take consumption at 17 million barrels per day. And we assume a final cost averaging \$1.00 per gallon—which may err on the low side. Then, by mere arithmetic, the American people will be paying about \$260 billion for the petroleum products it consumes in 1980. We do not set the cumulative probable error—or quantity and price—below 10 percent. Yet the aggregate may have a suggestive value.

The Gross National Product of the United States for the year 1980 may be estimated in the range of 2,550 billion highly inflated dollars. The final cost of petroleum products is then likely to be a sum in the general range of 10 percent of the GNP.

Petroleum liquids accounted for only 47.4 percent of the total thermal content of U.S. energy consumption in 1979. We have concentrated on petroleum because it is the primary area of American international dependence. However, for the influence of energy costs on the total U.S. price level, it is necessary to take into account also the price movements in (still controlled) natural gas, where net imports supplied only 6.0 percent of consumption: of coal, where net exports were 9.4 percent of domestic usage: and the unduplicated<sup>5</sup>

<sup>5</sup> By "unduplicated" we mean the cost after subtracting the amounts paid for coal, oil, and gas used to generate electricity.

cost of (still controlled) electricity supplies. Our rough calculations suggest that the unduplicated amounts paid for energy, valued in each case at the final user's purchase price, will come in 1980 to a total in the general range of 15 percent of the amount of GNP.

We have indicated about \$90 billion of 1980 oil imports as constituting no part of the domestic product of the United States. We have also suggested that the year's added transfer abroad for these imports may be in the range of \$30 billion. Then the added transfer will be of a magnitude between  $1\frac{1}{8}$  percent and  $1\frac{1}{4}$  percent of the GNP.

#### *D. The Example of France*

Among the major advanced nations who share international energy dependence, one stands out for accomplishment. France. Poorer than the United States (and others) in resources of fossil fuels and waterpower, France has proven itself, in energy policy, much richer in resolution and in effective public management.

French policy does not reflect a world-weary conviction that the healthy society of the next decades can do without more energy. On the contrary, while her population growth is modest and her employment rose by only about 60,000 persons in the whole five years 1973-78, France is planning—and has been, for a decade, steadily investing—to achieve a 3.0 percent per annum increase in her energy consumption in the years 1978-85. She is also now investing for further large increases in her energy supply after 1985. At the same time, she is endeavoring to become first in the Western world in everything connected with nuclear power.

Many of the critical French decisions, in these matters, were made about 1969, when the United States too was beginning to proclaim "energy crisis." At that time, and still now, France was even more dependent on oils than is the United States. Having no considerable domestic oil resources, she has now determined to allow no further increase in oil consumption. She rejected coal, as for her an undesirable increasing reliance. Being well-developed in hydropower, she saw no considerable way forward in that element. Finding resources of natural gas, she determined to exploit them. But above all, France made nuclear development central to her longer energy future. Perhaps half the uranium needed, up to the day of the breeder, had been found in France; the other half would be bought. The rest was a matter of machinery. That would be developed. A people proud of its scientific and technical ability would, in time, manage by the products of its brains and its hands.

The following is an outline of the French energy plan for the immediate future years:

FRENCH ENERGY PLAN FOR 1978-85  
(In million tonnes of oil equivalent (MTOE))

	Actual 1978		Planned 1985	
	MTOE	Percent share	MTOE	Percent share
Oil.....	107.4	58.6	100.0	44.5
Gas.....	21.1	11.5	36.5	16.2
Coal.....	32.4	17.7	29.5	13.1
Hydro and other.....	16.0	8.7	16.0	7.1
Nuclear.....	6.4	3.5	43.0	19.1
Total.....	183.3	100.0	225.0	100.0

The determination to make nuclear power central to French energy development involved several concessions of pride. First: in 1969 France abandoned her own (natural uranium-gas-graphite) nuclear system and adopted the Westinghouse system of the Pressurized Water Reactor. Only from 1982 will the French be building their own adapted PWR model, for France and export. Second: France was originally entirely dependent on American enrichment of uranium. Only now does she have her own (but European shared) enrichment facility, which is being expanded for a 1982 capacity half as large as that presently available in the United States. Third: France found it desirable, in most early steps of her nuclear advance, to share talents and costs with Western European associates. Only now, and in the development of advanced generators, is she pulling ahead of all others.

Today France is not merely speaking of "reprocessing" to extract the plutonium by-product of light water reactors, for use in fast-breeders: she is doing it. She also has a proven continuous industrial process (working since June 1978) for the vitrification disposal of highly active nuclear wastes. By 1985 she looks to have nuclear facilities to generate half of her electricity and to provide nearly one-fifth of her entire energy supply. Moreover, far ahead of the United States, she is now constructing the 1200 megawatt Super-Phenix, scheduled to be operating in 1984, the commercial size model for future fast-breeders. Other fast-breeders in the 1200-1500 megawatt range are due to be ordered in 1980. France sees herself, in the later 1980's and 1990's, as the world leader in nuclear power design, production, and export. (Shall we live to see American electric power utilities importing fast-breeder generators from France?) If thoughtful and decisive initiative is rewarded by leadership, France may indeed gain a first.

Nevertheless, the French model is not, in all respects, conclusive for the United States. *First:* in both countries, the displacement of natural gas and oil from large use as boiler fuels has high priority. In 1979, the United States still burned 17.9 percent of all its gas supply and 7.8 percent of all its oils under electric utility boilers alone. *Second:* on the primary merit of nuclear processes, for electric power generation, there is no serious questioning the French conclusion, for most large and advanced economies. The quality of political leadership is today to be measured by its forthcoming posture in recognizing this truth and in acting on the consequences.<sup>6</sup> *Third:* however, the United States has coal and should find clean ways to use more of it. After years of neglect, nuclear power alone cannot be expanded fast enough, in the next decade, to bear the necessary load. *Fourth:* the United States has substantial unidentified and undeveloped resources of oil and natural gas. Adequate stimulus should be provided for their location, development and high-ratio recovery. *Fifth:* the United States may yet prove to have, particularly in its oil shales, a large and economical base for unconventional hydrocarbon liquids, as conventional crude oil prices rise to the range of \$40 a barrel and beyond. These together with conventional liquids, need to be researched and developed, for the high quality (particularly transportation) uses for which there are no known economical substitutes. *Sixth:* the United States can afford to pay more attention than France does to new forms of energy (including

<sup>6</sup> An important act of recognition is embodied in the Report on "Nuclear Power Plant Safety . . ." issued in March 1980 by a Subcommittee on Energy Research and Production of the U.S. House of Representatives.

solar) even if their immediately visible sphere of cost-effectiveness is limited.

Like France, the United States must recognize that, in energy supply as in other matters, there are things in which it can collaborate with other countries and things in which it can not. A "North American" energy policy is no remedy. Neither Canada nor Mexico will charge less for its oil than does OPEC. At best, North American neighbors can perhaps be engaged to be more stable in supply than are Middle East potentates. Neighborhood also presents possibilities of projects where joint supply involves lower costs, for both participants, than two separate supplies. Shared purposes will make for collaborations. But a figment of shared purpose is a great bog.

### *E. Addendum*

We add to our earlier treatment two more recent judgments on a central issue. The one from a person of great scientific standing, civic courage, and personal wisdom. The other from personages of high political authority.

One of the causes of the weakening position of the West is its dependence on oil supplies, a "fatal dependency," as an American leader has remarked. The geopolitics of the Soviet Union is aimed precisely at this point. In these circumstances, the West cannot afford to deprive itself of nuclear energy, which gives room for diplomatic and economic "maneuvering." Concern about safety and environmental hazards should have no bearing on the principal issue—to build or not to build nuclear stations—but only on how to build them. The price in terms of polluting the environment is greater from coal and oil than from nuclear energy.

Andrei Sakharov, *New York Times*, June 8, 1980.

We underline the vital contribution of nuclear power to a more secure energy supply. The role of nuclear energy has to be increased, if world energy needs are to be met. We shall, therefore have to expand our nuclear generating capacity. We will continue to give the highest priority to insuring the health and safety of the public and to perfecting methods of dealing with the spent fuel and disposal of nuclear waste.

Venice Summit, June 1980.

## IV. INTERNATIONAL COLLABORATIONS

It is now some thirty-five years since the United States attempted a comprehensive and authoritative reconsideration of its international economic relations. That effort, in the immediate aftermath of World War II, took place under the symbolism of One World.<sup>7</sup> It is a generous symbolism and one that will never be entirely set aside by those who do not place the limits of human consideration at the boundaries of a Nation State. However, in regard to the collaborations of nations, a rational outlook would not—now or thirty-five years ago—concentrate exclusively, or even primarily on what is One and subject to a universalist treatment.

For most constructive purposes, the economic world is not now meaningfully conceived—nor will it be meaningfully conceived in the next decades—as being One or even Two or Three. Among the many nations, there will continue to be great variety—in economic condi-

<sup>7</sup> A suggestive communication of the thought and sentiment which prevailed at that time (also persisting in a positive evaluation of its universalism) is conveyed by Richard N. Gardner in his essay entitled "Bretton Woods," constituting pages 202-215 of "Essays on John Maynard Keynes," ed. Milo Keynes, Cambridge University Press, 1975.

tion, in development potential, in authoritative public purposes, and in the conduct of governments towards other peoples. As well as human community, there will continue to be differentiation, separation, and conflict. And, from the side of the United States, there will continue to be severe distinctions of reach: Madagascar is not Mexico. Therefore, the productive collaborations of the United States will rationally be widely differentiated—in some cases far-reaching, in others minimal. It should not be otherwise.

Looking back thirty-five years is to recall, perhaps with pained humor, particular episodes in the devoted effort of that time to establish One World also in economic affairs. A Senator of the United States has testified that the Bretton Woods conference, which designed the International Monetary Fund and the International Bank, had for him the flavor of an Evangelical congress. The able and active representatives of the U.S. Treasury, who provided distinguished leadership for the conference, took special pride in one negotiating achievement: they persuaded the USSR to agree to join both the Fund and the Bank. It was not long before the Soviet's agreement unraveled. And, in a little further time, the USSR was sternly instructing its satellite comrades (for instance, those in the Government of Poland, who had spent the war years in the Soviet Union) that they must reject all Marshall Plan assistance.

Pained humor apart, the episode raises a serious question. What would have been gained if the USSR had in fact joined the Fund and Bank? And, in parallel, what is gained when the Government of China joins the Fund and the Bank in 1980? Is China's adherence in 1980 to be valued higher than the (promised) adherence of the USSR in 1945? How far should one go in pursuing the formal universality of an institution, at the possible expense of reducing its real decision-making to inconsequence? If the Fund admits everybody, a "Group of Ten" (or some other specially constituted Group) becomes the real scene of serious consultations. A club to which everybody is admitted is likely to be a club at which nothing of interest ever happens.

### *A. The Poorest*

There is, however, at least one appropriately costly international club that rightly admits every nation willing to join. This club is not concerned with international monetary arrangements, nor with merchandise trade, nor with the investment that reasonably returns capital and profit to the investor. If we avoid obfuscating language and vain expectations, we will name its concern clearly: developmental charity. This is the concern of the International Development Association (IDA) and of lesser similar institutions.

The President of the World Bank group has identified the people who are assuredly the proper beneficiaries of this concern. He called them the people, in all countries, whose condition is one of "absolute poverty." He writes: ". . . some 800 million individuals continue to be trapped in what I have termed absolute poverty: a condition of life so characterized by malnutrition, illiteracy, disease, squalid surroundings, high infant mortality, and low life expectancy as to be beneath any reasonable definition of human decency."<sup>8</sup>

<sup>8</sup> "World Development Report, 1978," The World Bank, Washington, D.C., August 1978, page iii. Regrettably, this group has been conceived to exclude mainland China. Vice Premier Deng Xiaoping has publicly challenged the exclusion.

These people live dominantly in South Asia and in Africa south of the Sahara. Perhaps two-thirds live in four countries: Bangladesh, India, Pakistan, and Indonesia. These countries are in the group that the World Bank names "Low Income"—averaging perhaps a nominal (undervalued) \$170 per capita in 1977. They range from Bangladesh at the bottom (\$90) through India and Pakistan in the middle (\$150 to \$190) to Indonesia (\$300) at the top. The total population of these countries is estimated for 1977 at roughly 1.4 billion, and it is forecast to grow to something like 2.0 billion in the 2000. The IDA staff has expressed the vague hope that the number who live in "absolute poverty" may possibly be reduced to 400 million by the year 2000. Nothing in their number or condition is to be described with exactitude or forecast with assurance.

Also among the countries of the poorest, not all are poor, and the people of "absolute poverty" are those whom their economic and social betters pass by on the other side—as does the great world. The staff of the World Bank group writes: ". . . in most countries, the poor are apt to be bypassed by growth: many of them have only weak links to the organized market economy; they own few productive assets; they are often less educated and frequently in poor health; and with lower incomes they have less ability to save and invest. Furthermore, rates of population increase are often higher among the poor . . ."<sup>9</sup>

It is a thin pretense to call the funds advanced for development assistance to those in "absolute poverty" by the name of loans. What IDA calls "credits" are announced with this uniform legend: "The credit is for a 50-year term, with 10 years of grace. It is interest free, but will carry a  $\frac{3}{4}$  of 1 percent service charge to cover IDA's administrative costs." The  $\frac{3}{4}$  percent charge serves perhaps to assert the IDA claim to provide standards for execution. As of June 30, 1978, IDA had \$12.4 billion of these credits outstanding. Of the total, 42 percent had been given to India alone, and an additional 19 percent to Bangladesh, Pakistan, and Indonesia. The entire schedule for repayment to IDA called for 58 percent repayment in between 30 and 50 years, plus 28 percent in between 20 and 30 years. Time and monetary inflation will sweep away most of the burden of these repayments.

IDA is a principal multilateral channel, targeted toward the poorest. This aid to the poorest is one strand of a much more amorphous effort of Official Development Assistance (ODA) organized by the OECD and now supplemented by some rich members of OPEC. It was originally suggested that each of the more prosperous members of the OECD might contribute 1 percent of its annual national product, through multilateral and bilateral grants and "concessionary" loans, for the amorphous range of "development" endeavors which OECD announced itself to be supporting. (These endeavors, of course, excluded military aid.) Sweden, the Netherlands, Norway, and Denmark have made a serious stab at this 1 percent target. (See Table 7.) France and Belgium have gone more than half way. The United States is recorded at the 0.2 percent level; among the prosperous members of OECD, only Italy stands lower.

Without reaching to fundamentals, it may still be possible to conclude that it is not proper for the United States to be so outdone in

<sup>9</sup> *Ibid.*, page 26.

TABLE 7.—GOVERNMENT REVENUES AND GOVERNMENT TRANSFERS OF INCOME IN ADVANCED OECD COUNTRIES, AS SHARES OF NATIONAL GDP OR GNP

[In percent]

	Government revenues (1977 GDP)	Government transfer payments (1977 GDP)	Official development assistance (1978 GNP)
Sweden.....	60.9	24.4	0.9
Netherlands.....	54.0	30.9	.8
Norway.....	51.2	24.6	.9
Denmark.....	47.7	15.8	.7
Finland.....	43.5	14.5	.2
Germany.....	43.5	19.5	.3
Austria.....	43.0	20.6	.3
France.....	42.2	24.8	.6
Belgium.....	41.8	22.0	.6
United Kingdom.....	40.5	15.3	.4
Italy.....	37.4	22.7	.1
Canada.....	36.4	12.4	.5
Switzerland.....	34.3	15.3	.2
United States.....	32.0	11.6	.2
Australia.....	25.9	9.8	.5
Japan.....	24.5	9.2	.2

Source: OECD, Economic Surveys, Paris, as published through March 1980. Breakdown for New Zealand unavailable.

charity by the Scandinavians and Netherlanders. A substantially larger American multilateral participation would therefore seem justified, provided that this participation is firmly targeted—through IDA or similar channels—only for development assistance to combat absolute poverty. When limited to such a target, political and social distinctions can perhaps wisely be set aside. Such a restriction would not involve the United States in providing any funds for other activities of the World Bank group. For these other activities, quite other considerations arise.

In a pretense of hard-headed accountants' rationality, it is sometimes urged that international aid to the poorest peoples is justified as an investment in creating suppliers and customers. No sensible person is convinced by such talk. It is also sometimes urged, even by people who seem to have memories and eyes, that aid to overcome "absolute poverty" will win political and social adherents. This is nonsense. To stipulate any return is to ask to be deceived. When the poorest children of the earth are enabled to raise their eyes from the mud, they will, for the first time, be blessed with the strength to look around and ask, "Why is my inheritance so much less than that of those more favorably born?" Only a fool will expect political or social gratitude from those born to need.

### *B. Developing Countries*

Clearly, we do not make a bloc of all those nations that are conventionally listed as "developing." (There are 92 such countries of populations over one million, in the World Bank listing, excluding the major Communist countries, but including Vietnam, Cambodia, and Laos.) While the gradations of poor and prosperous are continuous, we do not join the "Lower Income" group whose top was defined as about \$300 per capita in 1977 (perhaps equivalent to \$400 in 1980) with the "Middle Income" group (55 countries, with roughly 900 million people in 1977) whose top income was then in the range of



\$3,000 per capita and may be said perhaps to reach up to \$4,000 now. Still less do we accept the designation "South," which is put forward as including all the developing countries plus all the rich petroleum exporters.<sup>10</sup>

"South" like "Third World" is a name in the language of political contention. As such it has weight. However, it is not in the language of significant economic distinctions. And, while everything human has a claim to be considered with charity, the nations which designate themselves as belonging to the South or the Third World are not all fitting objects of charitable development financing. Neither, in our judgment, are the countries of the Third World, taken as an indiscriminate group, suitable beneficiaries of an economic collaboration that disregards political and social differences.

A general presumption against substantial "concessionary" international financing is strong for all the "developing" countries listed by the World Bank as "Middle Income" and for all major petroleum exporters. This general presumption can be overborne by special facts of obligation, burden, or distress. But such facts can only be weighed case by case (as now for Turkey or Israel); they cannot be judged in some sweeping conglomerate. Among all major oil exporting countries, we find today a substantial poverty claim to concessionary international financing only in the case of Indonesia. Around the Mediterranean—north, south, east, and west—there seems to be no such case except Egypt. In Latin America, no major country would seem to be eligible except perhaps Mexico. In East Asia, the excluded from concessionary financing would be the vigorous commercial communities of Singapore, Hong Kong, Malaysia, Taiwan, and South Korea. The excluded are not here dominantly those rejected on political or social grounds. They are welcomed associates in business, not objects of special commiseration.

What a society like the American can do best for the whole group of "developing" countries is to accord them access to its now multi-trillion dollar markets. And any candid mind will acknowledge that—though with some bending to the stresses of domestic change and displacement—the United States has accorded such market access to the developing countries on a very wide scale. Indeed it is quite likely that, already in 1980, what are loosely called developing countries will supply more than half of all United States imports.

It seems not commonly appreciated how rapidly those countries which our Census Bureau identifies as "developing" have come to dominate U.S. import values. In the decade 1969–1979, imports from these countries have multiplied more than ten times, from \$8.9 billion (foreign market, f.a.s. value) in 1969 to \$92.3 billion in 1979. The share of developing countries in total U.S. import supply rose from 27 percent in 1969, to 33 percent in 1974, and 45 percent in 1979. In 1980, this share—enlarge by inflated oil prices—may well pass the 50 percent mark.

With the developing countries taken all together, the United States now has a huge and growing excess of imports. In 1979, this excess came to \$29.4 billion. In 1980 and beyond, this excess looks to become

<sup>10</sup> This is the mode of address of the Report issued by a Commission of which Willi Brandt was chairman, entitled "North-South: A Program for Survival," Cambridge, Mass., M.I.T. Press, 1980. The Report uses "South" and "Third World" interchangeably. This usage is, however, among the less grave of the Report's deficiencies.

greatly larger—in the near term, larger by tens of billions of dollars per annum.

If we omit all trade with countries who were considerable oil exporters, U.S. imports from remaining “developing” countries still came to \$43.7 billion in 1979. With these non-oil countries alone, the U.S. had a 1979 excess of exports (f.a.s. in both directions) of the trifling amount of \$0.8 billion.

The import trade is, of course, not to be identified simply as trade with foreigners. The world is too intertwined for that. The television set imported from Taiwan may be the product of an American expatriate manufacturer. The light crude from Nigeria may have been found and extracted by an American oil company. Both presumably brought capital and knowledge from the United States, and both will presumably earn a profit, some of which may eventually be remitted to the United States.

Despite these complexities, it cannot reasonably be denied that the United States has accorded the developing countries access to selling in American markets on a very large scale. We repeat: this access to large sales is the greatest constructive thing the United States could give the developing countries.

The United States has even allowed itself, as we think unwisely, to nibble at the unhealthy fruit, proffered by many developing countries,<sup>11</sup> of “stabilizing” the prices of the commodities which those countries desire to export. A short list of those commodities includes sugar, coffee, cocoa, rubber, jute, tin, copper, iron ore, and nickel. Particularly since the 1976 UNCTAD conference in Nairobi, the United States has been—in some measure—yielding to the pressure of those who suggest that participation in international “stabilization” of the prices of such commodities is one of the things that the developed nations morally owe to the developing. We deny the validity of this suggestion.

The proponent rhetoric, in this matter, is one of “stable and remunerative prices,” and the devil’s work is then named “volatile and unremunerative prices.” These names must not be allowed to intimidate. Commodity price stabilization (or, more honestly, enhancement) is a sufficiently questionable enterprise domestically. It holds greatly more danger than promise when attempted with the inflexibilities of many international partners. What is proposed is, of course, speciously described as “stabilization”: the aim is always a higher price. Commonly, this higher price is put forward as compatible with market-clearing “in the long run.” And the clearing may indeed take place, if the demand for the commodity is sufficiently inelastic (as in petroleum). But clearing also may not take place. Monopoly profits may go along with accumulating stocks and then with cumulating pressure for new financing to hold those stocks. The whole purpose of the “stabilization” game is to disconnect the price bell, with its clamorous signal: the commodity is in excess supply; its production will not be profitable; labor and capital are misdirected when they go that way.

At the very least, the presumption of American public policy should be against participation in ventures of international commodity price control.

<sup>11</sup> And by their indiscriminating advocates, such as the Willi Brandt group, *op. cit.*, especially pages 141-159.

### C. Channels and Guarantees

As discussed further below, we find a constructive role, in these next decades, for American investment abroad in the following forms:

- (1) Direct investment by private American firms in foreign business operations;
- (2) Lending abroad by American private banks and other private institutions;
- (3) Acquisition of foreign securities and other ownership interests by American individuals and businesses;
- (4) Lending by the Government of the United States to selected qualifying countries (through instruments like the Export-Import Bank or American channels of united finance).

As discussed below, we do not regard these constructive investments as parts of a national program of specially *fostering* foreign investment. Except in the case of item (4), we see no justified claim to fostering or differentially cultivating foreign investment.

Notably absent from our list is any investment lending, by the Government of the United States, on commercial repayment terms, through such multilateral institutions as the World Bank. Here the World Bank is to be taken as representative of institutions (worldwide or regional) which provide access to intergovernmental financing without regard to political or social considerations. By this exclusion, we do not deny a value to the existence of the *political* institutions of the United Nations. It is of singular value to have a set place where even determined enemy nations can meet and discuss, under developed rules of accepted procedure. However this value does not extend to economic support. We see no rational ground for the United States to provide investment financing to its enemies or to the enemies of human decencies or liberties. An institution like the World Bank, with a membership charter of United Nations scope, must disregard such socio-political considerations. Therefore, the only entirely appropriate role for the Government of the United States, in relation to the investment lending activities of the World Bank, may be abstention. If old commitments or conventional courtesies are believed to necessitate, total abstention may be diluted into tokenism. But minds should not be clouded by the ritual of such tokens.

We do acknowledge that a history may engage, and we are not unmindful of the history that lies at the base of such investment financing structures as the World Bank. Nor are we unmoved by the One World sentiment that formed an element of the founding outlook during World War II. However, it is our judgment that many of the basic assumptions of that time will be determined, on present reflective examination, to have proven invalid. We distinguish investment from charity. And we reject, without equivocation, the principle that an intergovernmental financial institution that does not make fundamental socio-political distinctions can rightly constitute a broad channel for United States investment support. Therefore, while we do not think it necessary for the Government of the United States to leave such investment institutions, we believe it obligatory for the United States to move, in mature deliberation, toward according them only a modest, selective role.

Our above list of appropriate investment structures also omits such activities of foreign investment guarantee as are now conducted by the Overseas Private Investment Corporation (hereinafter OPIC). It is our judgment that OPIC should be abolished. An American who invests abroad for private profit should bear his own risks, shoulder his own uncertainties—not off-load them to the Government of the United States. Now, if he goes to invest in a responsible country, he will not pay the OPIC premium for insurance. If he goes to a dubious country, where he nevertheless sees a chance for a killing (accruing to him) and also a danger of loss from blockage or confiscation (which he can impose on the Government of the United States), he applies for insurance. Heads I win, tails you lose! Only the most overblown appraisal of the public benefits from foreign investment can sustain a government in playing such a game. For the next decades surely, the United States should not do it.

The above analysis is clearly suggestive of our judgments on the appropriate posture of the Government of the United States in regard to trade and investment in the Communist countries of Europe and Asia. Trade, in ordinary civil commodities and services, need not be avoided, provided that it is not of a product character to create great dependence on continuity. Investment, at the risk of the private investor, can be indulged: it will not be in overwhelming volume. Only recently, a number of American gas and oil companies did indeed propose multi-billion dollar investments in the natural gas of the Arctic and Siberian regions of the USSR. (The USSR had said that it had no capital of its own for these remote, costly ventures.) But these oil and gas companies indicated, quite early, that they looked to the Government of the United States to provide or guarantee the capital for these huge projects and to fix United States import prices (notably for Liquefied Natural Gas) at a level which would assure profits to the proponents of the ventures. Again, heads I win, and tails you lose! There is no reason for the Government of the United States to finance or guarantee such investments.

#### *D. Trading*

It is to be hoped that, in the next decades as in the past, the American economy will continue to be one of multiple initiatives and multiple responsibilities. For international trade, this means that the role of government will usually be only secondary and supporting. Government will attempt to reduce obstacles and discriminations. But, in foreign trade, government initiatives and controls will continue to be exceptional, though not unimportant. Customs duties, which yielded \$7.2 billion in 1979, will be of declining relative importance, both as sources of revenue and as instruments of control.

In the eleven years 1968–79, while the nominal GNP of the United States nearly tripled (from \$869 billion to \$2,369 billion), United States commodity imports have more than sextupled (to a c.i.f. value of \$219 billion in 1979) and exports have more than quintupled (to a 1979 f.a.s. value of \$182 billion). The American economy is not “integrated” into a world market, as a pretendedly laudatory rhetoric would have it. The United States is, however, more involved with the other economies of the world than it was earlier in the present century.

To the extent that foresight can reach, we anticipate that American international commodity trade will grow in importance during the next decades. One great curtailment is to be desired: the displacement of energy imports deserves to be a prime national objective. In some other cases, it may, in later time, reasonably become a national objective to displace dependence on imports of further materials—monopolized, cartelized, and strategic. We are unable, however, to specify such cases, where need goes beyond a claim to public stockpiling and research into alternatives, at the present time.

In general, we suggest that public policy should be governed by a presumption in favor of enlarged but unconcentrated trade, in goods and services, with all nations. This presumption can, of course, be overborne for national security reasons. We do not see any reason why advanced American defense technology should be exported to the USSR, to China, or to their satellites, though we appreciate that the collaboration of other nations in denying technology is difficult to secure and that the area of defense technology is hard to delimit.

Moreover, we do not find validity in a naive and unqualified "most favored nation" status for any Communist country, no matter how peaceful its intentions. Our traditional international trade analysis has not confronted the hard case where a major advanced country is the sole national seller and the sole national buyer—consequently able to disregard costs for long periods. The case of small and competitively weak Communist countries is not so hard, as a practical matter, but even this case may yield troubling impacts in individual product markets. In the long perspective of the next decades, we regretfully can express no confidence that the United States Government will be able to abstain from controlling surveillance of trade even with smaller and more pacific Communist countries. There will be no relief gained by invoking the Roman law principle "the law does not concern itself with trifles"; these problems will not be trifling.

Again to our regret, we believe that it is necessary to plan for a long continuance of major government responsibility in the area of export financing. So long as other governments provide such financing, the Government of the United States can hardly, in prudence, abstain from a corresponding role. We do not believe that the American economy has such elasticity in the employment of its resources that it can afford to forego production and export in whatever areas other governments choose to finance and where equally attractive private financing is not available in the United States. (For similar reasons, we do not accept the argument of those who advise that the United States should regale itself with the temporary pleasures of cheap goods received from international dumping.) There would, no doubt, be an all-round gain of rationality if France could be persuaded to stop subsidizing export financing to the United States (and third parties) on condition that the United States stop subsidizing export financing to France (and third parties). However, experience does not suggest early success in such persuading. With France, with Japan, or with other countries.

#### *E. Investing and Lending*

International investment (further discussed separately below) is now of great importance to the United States, and it looks—despite all international troubles—to be of increasing importance in the next

decades. This investment involves a huge volume and variety of productive and remunerative activities by American interests abroad. And it has brought a smaller, but still highly valuable, inflow of competitive foreign enterprises into the United States.

For the year 1979 alone, the increase in United States private assets abroad is estimated at \$58.5 billion, while the increase of foreign private assets in the United States is estimated at \$49.1 billion. In the past eleven years of worldwide inflation, U.S. *net* income from international investment (i.e. the net accrual from abroad to Americans after deducting the U.S. accrual to foreigners) has quintupled, from \$6.0 billion in 1968 to \$32.3 billion in 1979. Additional to the \$32.3 billion, but closely connected with the foreign investment, the United States received *net* international income in 1979 of \$5.7 billion from royalties and fees. United States foreign trade is also, in substantial part, related to these international investment activities. Investment is indeed the linchpin for much of the entire international economic composite. Naturally, the investment relationship ties together particularly the advanced countries of the OECD. However, it reaches out also to Latin America, the Middle East, East Asia, and Africa.

We have suggested above that the Government of the United States would best avoid any activity of licensing or guaranteeing these private investments. They are private ventures, seeking private profits. Even informal government "approval" of such investment is dangerous, because it may be taken to imply a capacity to assure or protect which does not exist. Even OECD governments now-a-days frequently reserve to themselves—explicitly or implicitly—the right to change the terms of bargains they have made with private parties, domestic or foreign. When they do not violate, they squeeze, and the private party can only yield. The complaint even of the Government of the United States avails very little. It is therefore better to abstain entirely from any show of "approval," lest it mislead by suggesting that approval will be followed by effective U.S. Government protection.

No similar abstention from choice and responsibility is possible in loans to governments. At the end of 1978, the U.S. Government had outstanding \$54.3 billion from this family of credits. The family was steadily growing. In 1978 it had increased by \$4.7 billion, and in 1979 it was further increased by \$3.8 billion. Some \$4 billion was not in fact direct U.S. loans: it consisted of subscriptions to the capital of international lending institutions. There was also \$9.8 billion still outstanding to Western European countries. The remainder consisted of loans to the developing countries of Latin America, Africa, and Asia.

It is extremely doubtful that minimizing U.S. financial support for the investment lending activities of the World Bank (and of other similar institutions) would operate to diminish the burden upon the United States. Surely increased would be the national burden of selectivity and emphasis. In the end, the net cash outlay would probably also rise. The United States would no longer be called upon to finance avowed enemies. And the Nation could assert its own standards of human civility and of compliance with international obligations. But these independences need not make life easier. Would the United States then be prepared to adhere to the principle that it accords

government-to-government investment financing only to those "Middle Income" developing nations of "free" political institutions? What then would be the treatment of the two East Asian military dictatorships in whose territory the United States has defense positions—South Korea and the Philippines? How would it go with the military regimes of Argentina, Brazil, and Chile? And what would be the eventual posture of the United States (on the level beyond IDA charity) regarding Africa, where few governments exist except through their monopoly of military power?

A discriminating bi-lateralism has its problems.

#### *F. OECD and U.S.A.*

About one-sixth of the earth's people live in the 24 OECD countries. They are Australia, Austria, Belgium, Canada, Denmark, Finland, France, West Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, the Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Turkey, the United Kingdom, and the United States. They reflect a great range of prosperities and poverties. Along with the most affluent countries, the OECD also has members—Turkey, Greece, Ireland, Spain, Portugal—that are much less prosperous than such Communist countries as Hungary or East Germany.

The 24 OECD members are all countries of multiple enterprises, both private and public; yet they differ greatly in the extent to which their economies operate through private or public enterprises. One bond among the 24 is that they are, among all the peoples of the earth, the ones that have most nearly achieved equal and uncoerced economic collaboration; yet their collaboration is not free or hard jostling and severe conflicts of purpose and policy. Perhaps the deeper ground of collaboration among the 24 is social and political. Each of the 24 values personal freedoms and civil liberties. Each seeks in its society for healthy elements both of fraternal consideration and productive competition—though the common search follows various paths. Each strives, in some degree, to free its society from inherited elements of arbitrary inequality—though according to varying conceptions of what is arbitrary. Each forms its government through the contest of freely-organized multiple political parties. And all of the 24 share, in considerable degree, a common notion of which other governments stand out clearly today as persistent enemies of the ways of life embodied in the social, economic, and political institutions of the 24.

Many Americans have a somewhat delusive image of how the economic posture of the United States compares with that of other prosperous OECD countries. These Americans may therefore misconceive some related problems both of collaboration and competition. It is not at all uncommon for Americans to believe that they are heavily taxed, for government use and for transfers to the poor. If they then also recognize that the growth of the American economy is now faltering, they may proceed to attribute the deficiency of United States saving and investing to public profligacy and national indulgence of the less self-sustaining. To clarify these matters a little, we compare the United States with other relatively prosperous members of the OECD. (See Tables 7 and 8, along with our earlier Tables 1 and 2.)

TABLE 8.—USE OF GROSS DOMESTIC PRODUCT BY ADVANCED OECD NATIONS, 1977

[In percent]

	Private consumption	Public consumption	Gross domestic savings	Total
United States.....	66	18	16	100
Italy.....	66	14	20	100
Switzerland.....	64	13	23	100
Belgium.....	62	17	21	100
France.....	61	16	23	100
United Kingdom.....	59	21	20	100
Australia.....	59	16	25	100
New Zealand <sup>1</sup> .....	58	17	25	100
Netherlands.....	58	18	24	100
Japan <sup>1</sup> .....	57	11	32	100
Austria.....	57	17	26	100
Canada.....	57	20	23	100
Germany.....	56	20	24	100
Denmark.....	56	24	20	100
Norway.....	56	19	25	100
Sweden.....	54	28	18	100
Finland.....	51	20	29	100

<sup>1</sup> Data for these countries 1976 rather than 1977.

Source: World Bank, "World Development Report, 1979," Washington, August 1979, p. 135. Includes all OECD members to which the source attributes a GDP over \$3,000 per capita.

Among 15 advanced OECD countries, the United States ranks 13th in the share of the Gross Domestic Product levied as government revenue. While the United States government revenue comes to 32 percent, the median share among the 15 countries is 42 percent. The United States is also 13th with 11.6 percent in the share of the GDP "transferred" from the original income recipients to others. The representative large country in Western Europe takes roughly an additional 10 percent of its National Product in taxes and pays out approximately the same 10 percent share in additional income transfers. The Netherlands, which has the highest transfer rate—approaching three times that of the United States—is also among the high nations in 1950–78 general economic growth rate. But Japan, which has the lowest share of taxation and the lowest transfer rate (and under 1 percent of GDP of military spending) has the highest growth rate of the entire group!

It is in the 66 percent weight of private consumption in the National Product that the United States stands first in the group (with Italy a debatable companion).<sup>12</sup> The median *private* consumption share, among these nations, is 58 percent. Japan stands at 57 percent. The Scandinavians are at the low end. In *public* consumption, however, even taken all together—military and free education and public parks, etc.—the United States does not stand out. In this category of National Product use, the United States with 18 percent occupies the middle, together with the Netherlands. If public *civil* consumption were taken alone, the United States would rank well below the middle. And, more dramatically, just as the United States stands first in the share of the National Product devoted to private consumption, so it stands distinctly and separately *last* in the share of GDP devoted to domestic saving. The one is the counterpart of the other. The representative European country saves about a half larger share, while Japan saves twice as much.

<sup>12</sup> Italy is reported equal in private consumption share, but Italian per capita income is under half of the American.



This is the general posture, in which perspective we examine below some further questions of international trade, investment, and monetary relations.

TABLE 9.—SUMMARY STATEMENT OF U.S. INTERNATIONAL TRANSACTIONS, 1960-79

	U.S. net receipts, for goods, services and transfers	Included unilateral non military transfers to foreigners
A. Balance on current account (excess of U.S. receipts shown as plus):		
1960 to 1964.....	+\$21,629	-\$13,005
1965 to 1969.....	+12,054	-14,857
1970 to 1974.....	+4,365	-21,917
1975 to 1979.....	-6,451	-24,937
Total, 1960 to 1979.....	+31,497	-74,716
1st quarter, 1980.....	-2,567	-1,876
	All capital outflow abroad	Of which, increase in U.S. official monetary reserve assets
B. U.S. capital outflow abroad (increase of investment shown as minus):		
1960 to 1964.....	-\$30,640	+\$4,836
1965 to 1969.....	-45,354	-201
1970 to 1974.....	-93,925	+3,517
1975 to 1979.....	-249,704	-4,157
Total, 1960 to 1979.....	-419,623	+3,995
1st quarter, 1980.....	-11,817	-3,246
	Total capital inflow	Of which, increase of foreign official assets in United States
C. Foreign capital inflow into the United States (increase of investment shown as plus):		
1960 to 1964.....	+\$13,770	+\$6,037
1965 to 1969.....	+34,412	+341
1970 to 1974.....	+103,419	+60,380
1975 to 1979.....	+204,600	+71,507
Total, 1960 to 1979.....	+356,201	+138,265
1st quarter, 1980.....	5,016	-7,122

Source: "Survey of Current Business," June 1980, p. 32-33 and 40-41.

TABLE 10.—RECONCILIATION OF U.S. INTERNATIONAL BALANCE OF ACCOUNTS FOR 20 YR, 1960-79

	Billions
A-1 U.S. net receipts for excess of exports of all goods and services.....	+\$106
A-2 U.S. unilateral nonmilitary transfers to foreigners.....	-75
A-3 U.S. net receipts on current account.....	+31
B-1 All U.S. capital outflow to foreign countries.....	420
B-2 Outflow financed by reduction in U.S. official monetary reserve assets.....	-4
B-3 Outflow financed by other means.....	416
C-1 All foreign capital inflow into the United States.....	356
C-2 Inflow consisting of increase in foreign official holdings of assets in the United States.....	138
C-3 Inflow consisting of other assets.....	218
D Cumulative statistical discrepancy, through errors and omissions.....	29
Reconciliation:	
B-1 Capital outflow.....	420
A-3 Current surplus.....	-31
B-2 Reserves decline.....	-4
C-1 Capital inflow.....	-356
D Discrepancy.....	-29
Balance.....	0

Note: The statistical discrepancy comes to only \$29,000,000,000 (actually \$28,754,000,000) only when successive years are joined with regard to sign. The cumulative 20-yr error, without joiner and without regard to sign, is \$76,000,000,000 (actually \$75,972,000,000). The records for 1971, 1975, 1976, 1978, and 1979 are visibly troubling. We are wrongly lulled into assuming that the numbers for other years are better, when their errors may have offset and therefore don't jump to the eye. The errors of valuation and the omissions of reporting, in U.S. balance of payments statistics, are troubling to any effort at quantitative understanding.

## V. INTERNATIONAL TRADING AND RECIPROCITIES

First among all nations in aggregate national income, the United States stands first also in aggregate international commodity trading. (See Table 11.) Very far from first in international trade per capita: very far also from first in the foreign trade ratio of the national product; a large and varied continental economy fortunately precludes those preeminences. None the less first in the total value of international trading. In 1979 this first position meant a total U.S. foreign commodity trade of over \$400 billion—about \$219 billion of imports (c.i.f.) and about \$182 billion of exports (f.a.s.).

TABLE 11.—MERCHANDISE IMPORTS AND EXPORTS OF LARGEST TRADING NATIONS, 1979 AND 1975

[In billions of U.S. dollars, imports c.i.f., exports f.a.s. or f.o.b.]

	Imports		Exports	
	1979	1975	1979	1975
United States.....	219	103	182	108
West Germany.....	160	75	172	90
Japan.....	110	58	102	56
France.....	107	54	101	53
United Kingdom.....	103	54	91	45
Italy.....	78	38	72	35
Netherlands.....	68	36	64	35
Belgium.....	60	31	56	29
Canada.....	57	36	58	34
Switzerland.....	29	13	27	13
Sweden.....	29	17	27	13
Saudi Arabia.....	28	4	59	28
Spain.....	25	16	18	8
Korea.....	20	7	15	5
Austria.....	20	9	15	8
Brazil.....	20	14	15	9
Denmark.....	18	10	15	9
Australia.....	18	11	19	9
Singapore.....	18	8	14	12
Taiwan.....	15	6	16	5

Source: International Monetary Fund, International Financial Statistics, May 1980, pp. 46-47.

The magnitude of these internationally traded aggregates is best appreciated when it is arrayed beside total U.S. production of *movable* commodities. Movable commodity output for 1979 was \$1,031 billion. The remainder of the entire Gross National Product of \$2,369 billion consisted of \$1,085 billion of services and \$253 billion of structures. Avoiding precision, American commodity imports and exports may now be thought of as *each* having a value in the general range of one-fifth of the total value of the movable commodities produced in the United States.

Since the Oil Price Revolution of 1973-74, the readily visible impact of international trading on the American economy has greatly increased. In 1975 U.S. commodity imports came to 6¾ percent of GNP and in 1979 to 9¼ percent. During the next decades, it may reasonably be anticipated that the weight of American international trading will increase still more, despite a purposeful drive toward greater self-sufficiency in energy supply.

In general, we welcome these ongoing movements towards enlarged multilateral commodity trading. We look forward to the mutual removal of barriers, to the further refinement of competitive specializations, and to the enlargement of stable, gainful trading reciprocities. All these things we value, within a framework that is mindful also of the Nation's security and its shared defense responsibilities.

Clearly, however, we do not envision for the United States an immersion in international markets comparable to that of a Belgium or, still less, that of a Singapore. In 1979, Belgium's commodity imports amounted to 54 percent of its GNP, and Singapore's were actually 197 percent of GNP! A continental economy does not need such things. On the other hand, the influence of internationally open markets is not to be measured by actual commodity flows; at the margin of price competitiveness, the near potential of movement counts for almost as much as actual movement. (If I raise the price of my bicycles, the foreign supplier will move in. Therefore I do not raise my price, and he does not come.) Consequently, in the full complexity of the actual, any pretended *measuring* of the gain from international trading must be specious. As in many practical things, it suffices to know the *direction* of comparative advantage, without measuring its precise magnitude.

The relationships among actual world markets are important but not simple. In early 1980, Japanese economists were celebrating a great advance in their country's prosperity, as measured by the "Engel's coefficient" (the share of food in total consumption). In 1947, Japan's value for this coefficient stood at 63.3 percent. Through three decades, it declined steadily, finally in 1979 breaking the 30 percent line (with 29.2 percent). However, in the same year 1979, food accounted for just 20.0 percent of personal consumption expenditure in the United States. (And Japanese food cost would have absorbed a greatly higher share of consumers' spendings had the Japanese diet included meats and dairy products in American proportions.) Yet this great difference in the dominance of food expenditure is not a straightforward index of comparative Japanese poverty. The difference reflects rather the shielding of Japanese consumption from world markets, by government policy. Japanese consumers will not make up in five years, by having more fuel-efficient automobiles than the American, for what they lose each year by having more expensive food.

The case of food is striking—and not uniquely a burden on Japanese. Immobilities of another kind, quite separate from public policy, also shield from international competition large additional areas of spending—by consumers, private investors, and public authorities. Such shielding is notable for housing and household operation (which together accounted for 22¼ percent of American consumption expenditure in 1979). Much personal service consumption is equally shielded. And much construction. The world of economic costs is not really one!

The value of a natural gas discovery in Oregon is indeed affected by the price of crude oil in Saudi Arabia. But this influence toward worldwide price leveling works in a complicated and muffled way. Its workings are quite compatible with the fact that the consumption price level of Los Angeles and San Francisco did stand, in mid-1979 roughly one quarter below the price levels then prevailing in Geneva, Dusseldorf, Oslo, and Tokyo. (See our Table 2.) It is an enthusiasm that proclaims, "The world is one city." The world city has many barriers. Some are in the nature of things; others reflect the choices of men.

*A. Reciprocity?*

Reciprocity, in international trading, is narrowly conceived when it is viewed bilaterally, as an affair between two countries. The most gainful reciprocity is achieved only when each producer in the world city can equally sell to (and buy from) all users (and suppliers) whatever is offered at competitive cost. Each then exploits its distinctive comparative advantages. When reciprocity is so understood, however, it is immediately apparent that a spontaneous reciprocity is impossible with Communist societies: there not producers or users but the State decides what is to be imported or exported.

Regrettably, a non-Communist trader will discover only an uncertain guide to the future even from his best efforts to calculate what the Communist State buyer or seller would be trading if he were guided by relative production costs. Where trade looks to become substantial, a non-Communist society will nevertheless unavoidably attempt to estimate which commodities, in what volumes, and in what range of prices the Communist State trader will probably be willing to sell (or buy), in a relatively stable course. In a relatively stable course, we emphasize: only in poor textbooks is international trading presented as a thing of disconnected episodes.

Absent relative stability in selling and buying, a non-Communist member of the world city may find its production (or supply) displaced by the Communist State trader, in one year, only to be confronted by the need to rebuild this production (or supply) next year. Of course, every firm and every economy constantly encounters instabilities; however the discontinuities that can be imposed by a major State supplier or buyer are of a special order. To depend upon such a supplier or buyer, for more than a dispensable portion of sales or purchases, is to court great dangers. On an episodic or microscopic scale, such dangers merely increase costs. However no thoughtful society will be willing to assume that the gains from really substantial trading with a Communist State can be left to exclusively microscopic judgments. This is a case where such reciprocity as is attainable needs to be, in large part contrived: it cannot be presumed.

However the most damaging denial of international trading reciprocity to which the United States is now subject does not come from the great Communist States of Europe and Asia. It originates among the closest associates of the United States in all that concerns mutual security. These associates are the major industrial nations of Western Europe and also Japan. And perhaps their greatest single damaging denial of reciprocity consists of the barriers they have erected not against American manufactures but against American agricultural exports. The United States—unlike these associates—has great comparative advantages in agricultural production. But she is now substantially debarred from developing these advantages to their natural economic limits. As always in such denials of basic reciprocity, both potential sellers and buyers are losers. We do not profess to have measured the real income loss. But we are confident that it is to be thoughtfully considered with values that range to several tens of billions of dollars per year.

Even Americans now commonly underestimate the stake they have in agricultural production. The U.S. Department of Agriculture now estimates the total assets involved directly of farms, as of January 1, 1980, at a value of \$950 billion. But these "on farm" assets are only the beginning of the matter. Even if we rigorously exclude all food processing, there remain "off farm" the strictly farm-serving activities of manufacturing farm machinery, producing farm chemicals, packing materials, operating facilities of storage and transportation, etc., etc. The "off farm" contribution to the gross value of agricultural output now approaches half of the total. In 1979, the value of U.S. farm marketings reached an estimated \$131 billion, but the gross domestic output attributed to farm business was only \$70 billion. The following table suggests the skeleton of the total involvement of the U.S. economy in the decade 1969-79, during which farm marketings rose from \$48 billion to \$131 billion.

U.S. FARM INPUTS AND OUTPUTS  
[1967=100]

	Inputs			Output	Output ratios	
	Farm labor	Agricultural chemicals	Machines and power		Per unit of all inputs	Per hour of farm work
1969 .....	93	111	101	102	103	110
1979 .....	66	151	121	129	124	184

In this single decade, American farm "labor productivity" has advanced by two-thirds, because farm skills have advanced and because agricultural production has been supported by massively increased inputs from industry. Agricultural output therefore involves a great range of the distinctive competitive capabilities of the entire U.S. economy. It is these capabilities that are denied full expression by the Common Agricultural Policy of the European Economic Community and by the severe agricultural exclusions of Japan.

It is true that American agricultural exports have expanded greatly in the past decade. While U.S. farm marketings were tripling (in nominal dollars), agricultural exports were nearly sextupling (from \$6.0 billion in 1969 to \$34.7 billion in 1979). It is also true that, in the 1979 peak year, the United States exported about \$7½ billion of agricultural commodities to the countries of the European Economic Community (EEC) and about \$5¼ billion to Japan. These exports however constitute a tiny fraction of the markets involved. Under true reciprocal trading, these exports of agricultural products to the EEC and to Japan might easily be tripled, with a corresponding expansion of U.S. agricultural output and great gain both to buyers and sellers.

In April 1980, the Luxembourg meeting of the EEC moved toward adopting a program of Community agricultural support payments increased to the range of \$16 billion for 1980 and \$18 billion for 1981. But the burden carried by EEC food consumers, through enhanced prices, is many times as large as the amount of support payments. Not farm support payments but import exclusions and the sliding-scale tariff barriers to agricultural imports are here the major instruments of the EEC denial of international trading reciprocity.

With respect to agriculture, the Japanese denial of reciprocity in exploiting comparative advantages is even more fundamental than that of the EEC. Japan is poorly positioned for agricultural supply to the 120 million people it will have in the early 1980's. Geologically, Japan is a mountain chain, rising steeply out of the sea. Though it has rich-soiled, well-watered rice fields, vegetable gardens, and fruit, orchards (all receiving a minimum of 40 inches of annual precipitation), these are quantitatively only flat patches between hills and mountains, supplemented by terraced platforms along hillsides. Of a total Japanese land area of some 149,000 square miles, only a little over 21,200 square miles (say 13.6 million acres) are cultivated. With more than half the population of the United States, the Japanese cultivated area is only about 1.3% as large as the area contained within United States farms. Even in a year of very bad weather, the United States crops more than 20 times as great an area as is cultivated in Japan. And Japan is a country almost without pasture—therefore very disadvantageously situated for meat and dairy production.

It is easy to make too much of the Japanese 1979 imports of \$5½ billion of U.S. agricultural commodities. Some insight may be gained by comparing what Japan bought with the purchases of the Communist countries of Europe and Asia in the same year. (See our Table 12.) The Communist countries bought \$5½ billion and Japan \$5¼ billion. Commodities purchased are strikingly similar. They are overwhelmingly feed grains, unmilled wheat, soybeans, cotton, hides, and other products for which the Communist countries experienced extreme scarcity and for which Japan could hardly find land to produce at all. (Japan does not buy rice, though its domestic prices run more than twice as high as the world market.) It is doubtful that the total of Japan's 1979 agricultural imports from the United States included so much as one billion dollars of products from which any Japanese farmer felt competitive pressure.

TABLE 12.—EXPORTS OF U.S. AGRICULTURAL PRODUCTS TO JAPAN AND TO THE COMMUNIST COUNTRIES OF EUROPE AND ASIA, 1979  
(Millions of dollars, f.a.s.)

	Japan	Communist countries
Total agricultural commodities.....	\$5,255	\$5,468
Feed grains and animal feeds.....	1,622	2,705
Soybeans.....	1,032	726
Wheat, unmilled.....	537	1,260
Cotton, raw.....	450	405
Hides and skins, undressed.....	321	125
Tobacco, unmanufactured.....	229	15
Oils and fats, animal and vegetable.....	80	151
Vegetables and fruits.....	336	28
Meats and dairy products.....	410	(1)
Other.....	243	53

<sup>1</sup> Negligible.

Source: U.S. Department of Commerce, "Highlights of U.S. Export and Import Trades," December 1979, pp. 48-49.

To indulge—this once—in bilateral comparisons, we call to attention the U.S. course of importation from Japan of the category of commodities named "Machinery and Transport Equipment." There Japan justly claims some competitive advantages. U.S. imports of

this category from Japan rose, in the five years 1974 to 1979, from \$6.595 billion to \$18.576 billion. These imports became a factor of decisive importance in U.S. manufactures. The Japanese public authorities argue persuasively that the admission of U.S. agricultural commodities would necessitate some painful "adjustments" in Japanese life. But U.S. importations from Japan—of automotives, telecommunication equipment, office machinery, etc., etc.—has also necessitated very painful adjustments. These adjustments, once made, look to be gainful to the United States. But gains, to the entire world city, would be far greater if more reciprocal.

In general, public discourse has been heavily obfuscated by failure to confront the burdening weight of the denial of comparative advantage in agricultural production. Facile assertions of sociopolitical necessity have passed without determined refutation. Pretendedly objective economists have much to atone for in this sphere. Today, only two of the twenty-four OECD countries—the United Kingdom and Belgium—report a lower share of employment in agriculture than does the United States. The United States reports 3.7 percent, West Germany 6.5 percent, France 9.1 percent, Japan 11.7 percent, and Italy 15.5 percent (all ratios for 1978). Admittedly, much of this reportedly agricultural population has earnings also outside of agriculture. However this is equally true for the United States. In every year since 1967, with the single exception of 1973, the personal income received by the U.S. farm population from non-farm sources was greater than its income from farming. "Adjustment" in agricultural employments characterizes all advancing regions of the world city. The remaining unwillingness to adjust, however, constitutes a rejection of important potential grain from the differing production advantages of the various regions of the city.

The public authorities of the United States do not come to claim of injury, in this matter, with clean hands. They are much wronged, but they are also wrongdoers. The United States also denies the profit from comparative advantage, in agriculture, to other countries. This denial is conspicuous for sugar, in which the advanced industrial countries largely deny the gain from comparative advantage to the subtropicals. It is selectively true for meats. It is heavy for wool, for some dairy products, some vegetables, and some fruits. In any comprehensive reconsideration of the gains from enlarged international trade in agricultural products, the United States has much to rectify—as well as more rectification to request.

### *B. Value-Added Taxation*

It has been argued that the Value Added Tax (VAT), particularly as administered in the EEC, operates in a manner to maximize the competitive power of VAT producers in exporting to non-VAT countries, such as the United States. We believe this argument is sound. It has moreover also been argued, secondly, that the structure of VAT administration is such as to form a reasonable basis for a finding of *discrimination* against non-VAT producers and exporters, such as the American. We believe this second argument, though not without serious foundation, is more questionable. And, thirdly, it has been suggested that the VAT advantage in international trading is so great

as to constitute a major reason for transforming the American fiscal system, so that the United States too would be able to burden imports by assessing VAT and stimulate exports by remitting VAT. We believe this third argument is quite unsound. So far as international trade is concerned, the proponents of an American VAT put forward a remedy that—if fiscal stimulus to exports is desired—can be achieved by easier means. More generally, if a Value Added Tax system is to be adopted in the United States, such adoption must be motivated rationally only by quite another logic—relating to domestic American economic, social, and political considerations—not by supposed international trade advantages.

Historically speaking, the primary motives for the adoption of VAT have been quite simple. First: concealment of the burden of taxation. Second, and related: dampening the need for progressively higher tax rates, having their incidence on higher increments of personal incomes.

A tax paid directly by an individual (or a household) serves the civic purpose of acquainting the taxpayer with the cost he is paying for government purchases of goods and services, government fixed capital, and government transfers of income. A far-reaching individual income tax, for which—in ideal practice—every individual or household must file an annual return, makes the maximum contribution to such citizen awareness. A VAT, in contrast, reaches toward the lower limit of tax information: it merely raises all prices and leaves the ordinary taxpayer quite unknowing. It is perfectly compatible with this difference that the authoritarian system of the USSR should take pride in abolishing all direct taxes on individuals or households. It is surely less compatible with their avowed political principles that democratic societies should move that way.

However, many societies—including those of the EEC—have attempted to stimulate work effort, and to enhance the attraction of higher earnings of all kinds, by dampening the rise of marginal tax rates on higher increments of income. They have lacked the political courage to seek this end by moving systematically toward higher base rates of personal income tax and avowedly lower incremental rates. Consequently they have sought the same ends, in concealment, by such haphazard instruments as a VAT, sometimes diluted (but now very infrequently) by limited exclusions of basic foods, medicines, etc.

The treatment of exports and imports is incidental, though for international trade it is the nub. In the EEC system, VAT does not accrue to a country that *produces* an export. Let us call that country Italy and presume that a passenger automobile is entirely of Italian manufacture. Then all the services and transfers of the Italian government, for which VAT is a part payment on domestic sales, are given without such payment in the case of exports: the entire VAT is remitted to the exporter. Let us assume that the automobile is exported to the United Kingdom. Then the United Kingdom, which has supplied none of the government services connected with the car's manufacture, imposes *both* a VAT tax of 15 percent on the total Italian manufactured value and a customs duty of 10 percent on the import value. As between members of the EEC, this practice is considered non-discriminatory because the customs duty is traditionally unexceptionable, and the VAT is imposed on British cars equally with Italian ones. (This equal VAT is indeed considered



an advantage because the Italian VAT rate could have been 18 percent or even 22 percent.)

However when the Italian car manufacturer (or the British, French, German, etc.) exports to the United States, his home country VAT is equally remitted. On entry into the United States, the passenger automobile pays a customs duty, now 3 percent of the foreign manufactured value. But the import pays no VAT, because the United States has no VAT. Clearly, other things being equal, the Italian manufacturer is in a position to sell cars cheaper in the United States than in the United Kingdom and also—disallowing consideration of transportation costs—cheaper than in Italy. If sale in the United States cheaper than sale (disallowing incurred transportation cost) in the EEC constitutes dumping, then the VAT system—as administered—creates a vast system of EEC government-sponsored dumping. In market-sensitive terms, this dumping is felt more strongly with commodities for which the costs of delivery to the United States are not considerable.

Obviously the image of dumping does not arise because of the existence of VAT as a domestic system of taxation. It arises because of the special practice of *remitting* in the country which bears the burden of production and *imposing* in the country of reception—whenever the receiving country also has such a tax on his own producers. If VAT were imposed, without remitting, in the country where the “value added” arises, there would be no problem. VAT country exporters would not then be in a position to sell more cheaply abroad, to non-VAT countries, than they can sell at home. Then the suspicion would never have arisen that VAT administration was specially structured for unequal competition in sales to non-VAT countries. Today, that suspicion naturally has some force.

The quick and superficial VAT apologist response to the charge of structured discrimination or unfair competition is that all receiving countries are free to impose a VAT also on imports—providing that they impose such a tax also on their own producers. This response means vulgarly: you can compete with me “fairly” only by organizing your fiscal life like mine. There are more serious ways of approaching these issues. Without plumbing them to the depths, we suggest pondering three questions. First: even after the remission of VAT taxes on exports, are European producers indeed less heavily burdened by taxes than are American? Second: is the American economy really prejudiced if Europeans sell their commodities, in a stable manner, somewhat more cheaply to the United States than at home—by a margin related to the lower incremental tax burden? Third: if the U.S. does nevertheless wish to lower the cost of exporting, by fiscal means, are there not easier ways than incorporating a VAT into the structure of the American fiscal system?

Our answers to these three questions, in this place, must be brief and cannot therefore avoid the appearance of dogmatism. First, as our brief skeleton portrayal of relative tax systems above may suggest (see Table 8), we think it unlikely that remission of VAT payments on exports—while undoubtedly operating to make exporting to non-VAT countries more profitable than other sales—would suffice to bring the general tax burden prevailing in most advanced OECD countries down

to the level of the United States, for wide spheres of commodity production. This question would repay further, specific investigation. Second, we do not find these cheaply supplied imports prejudicial to the American economy, so long as those supplies and prices have relative long-term stability. Third, if the United States Government does determine—what we do not recommend—that it desires to lower the cost of U.S. exports, by fiscal means, we believe that there are easier, less comprehensive methods of achieving this end than going to a VAT.

Among possible fiscal cost reductions for exports, we do not assign great weight to temporary tax deferrals, such as are embodied in the system of Domestic International Sales Corporations (DISC). DISC is estimated to cost the U.S. Treasury some \$1.3 billion in the fiscal year 1980 and \$1.5 billion in fiscal 1981, yet it has only limited impact. To reduce costs generally for exports, in parallel to the remissions of other nations through VAT, the Federal government could remit all or part of business payments of payroll taxes incurred for exports. (The total of such taxes, for social insurance, paid by employers in the calendar year 1979, was about \$109 billion.) Perhaps the fifty States and local governments could also be induced to remit, for exports, a proportional share of the business property taxes they received in 1979. (These amounted to about \$64 billion for the year.) We repeat: we do not recommend this fiscal cost-bearing for exports; we merely suggest that, if desired, the end of fiscal support for exports can be achieved more readily than by installing a comprehensive VAT system. We make no obeisance to the notion that the granting of fiscal support to exports need embody a precise copy of the EEC system nor of any other system presently installed. Reciprocity is not identity.

## VI. SOME PROBLEMS OF INTERNATIONAL INVESTMENT

Thirty-five years ago, few thoughtful Americans took any attitude toward foreign investment other than that such investment deserved to be "fostered." North America was perceived as rich, the rest of the world as either stuck in secular poverty or in need of postwar reconstruction. America's wealth was conceived as residing in an abundance of capital and in preeminent skills of management and production. If the rest of the world had productive capacities, these were viewed as consisting largely of natural resources and manpower, plus (what was less commonly pondered) productive cultural traditions and social institutions.

In the aftermath of the most destructive of modern wars (though more destructive East than West), the supply of American capital, to alleviate the poverty of other nations, was widely evaluated as an obligation. Where the distinctive production capabilities of poorer nations were acknowledged to be of considerable positive weight, the employment of these capabilities together with an American capital participation was judged, by most Americans, to be self-evidently of mutual advantage. And it was thought that this mutuality of advantage would be universally appreciated by other nations—quite universally most Americans thought in 1945, universally aside from the sphere of Stalinist control by 1948.

At the opening of the 1980's, American attitudes on these matters of foreign investment, must be appraised—though with all appreciation of uncertainty—as very different from the attitudes of 1945. Americans are by no means as supportive of foreign investment as 35 years ago. Indeed the center point of American appraisals of foreign investment in perhaps best now characterized as uncertainly poised along the range of unattentive indifference, conscious neutrality, and deliberate rejection.

Only what may be named, not unsympathetically, the foreign investment “lobby” remains today an unfaltering proponent of the Nation’s many-faceted support for foreign investment. (And the various members of the lobby are, of course, not equally supportive of each facet.) We say that this lobby is to be named “not unsympathetically” because it is not at all improper, in a libertarian community, that distinctive outlooks—and even distinctive interests—should put forward their own points of view. However, these special points of view are not to be identified with a more general public consensus. Certainly, in the United States today, this view that looks with a special favor upon American investment abroad does not enjoy a supporting public consensus remotely comparable to that which prevailed thirty-five years ago.

Moreover, we suggest, this shift in American outlook has grounds in reasons which need to be carefully appreciated in any reflective consideration of the international economic posture of the United States during the next decades.

As previously above, but now with some further specification, we distinguish four major groups of American foreign investment. *First* and most weighty, direct and controlling ownerships abroad by non-financial U.S. private businesses. These are commonly meant when reference is made to American “multinational” companies. *Second*, lending abroad and the rendering of other financial services to foreign customers, by U.S. banks and other U.S. financial institutions, alike through their U.S. headquarters, their foreign branches, and their foreign subsidiaries. *Third*, the holding of foreign securities and other non-controlling ownership interests by U.S. individuals and businesses. *Fourth*, lending by the Government of the United States—both directly and through intergovernmental intermediaries—to foreign governments and to foreign business entities.

Each of these four activities today encounters substantial American appraisals of dubiety or negation, such as were much less common three decades ago.

Perhaps the most fundamental reason for this difference in appraisal is a drastic reversal in attitudes toward the adequacy of American capital resources *for domestic uses*. Where the United States was once regarded as a nation of capital abundance, it is now—at the beginning of the 1980's—regarded as capital shy. From 1969 to 1979, both the United States labor force and U.S. civilian employment increased by nearly 25 percent. But U.S. domestic investment rose by only 18½ percent.<sup>13</sup> Was the United States then becoming poor in capital supply? Was this among the fundamental reasons for the lagging rate of increase in output per person employed?

<sup>13</sup> Investment defined as Gross Domestic Private Investment plus Gross Government Investment in fixed structures and equipment, both at constant 1972 prices.

An international comparison may be even more striking. For the six years of the 1974–79 business cycle, gross investment in the United States, private and public, measured each year in the prices of that year, came to an average of 18 percent of the Gross Domestic Product. In these same years, the representative advanced European nation of the OECD group had an investment ratio about one-third higher; Japan averaged fully three-quarters higher. To some extent, the low investment ratio of the U.S. reflected high cyclical instability: in 1973 the ratio was nearly 20 percent; in 1975 it fell to 15¼ percent, while in 1978 it was 19¼ percent and in 1979 still 19 percent. Yet the American domestic economy, even in its best years, did not approach the domestic investment ratio of most other advanced OECD countries.

Is the United States then in a position to *stimulate* capital flow outward? Or would it be better for the United States to encourage the flow *inward* of foreign capital—together with the sometimes superior foreign management skills and production technologies?

We share the widely held conviction that a great effort toward a more self-sufficient energy supply deserves to be placed among the highest priorities of American public policy, for the next decades. Such an effort would require greatly enlarged domestic investments in conventional, nuclear, and synthetic energy supplies. Some have estimated that these energy requirements would call for an additional annual U.S. domestic investment of 2 percent (or even more) of the GDP throughout the 1980's and 1990's. We think these estimates, while unavoidably imprecise, are suggestive of the appropriate area of magnitude.

Further, one more general current appraisal of the recent U.S. failure in productivity growth suggests that the generality of American enterprises—apart from energy—need also to be positioned (through business tax reductions) to retain and invest an additional annual cash flow, perhaps amounting to something like 1 percent or 2 percent of GDP. The implication of such thinking—for energy expansion plus the heightening of other capital intensity—is a target rise in the Nation's investment ratio from the 1974–79 average of 18 percent to perhaps 22 percent. For today's prices and incomes, the 4 percent shift comes to a range of \$100 billion per annum. Yet the resulting domestic ratio would still be below that characteristic for the more advanced countries of the OECD group.

We are not engaged by the precision of such calculations. And, apart from measurement problems, they have not overcome the dilemmas arising from their proposed income shifts. Two are central. *First*, it is not at all clear that the generality of American enterprises, after being supplied with greater retained cash flow by tax reduction, would promptly engage in investments of greater capital intensity, if their effective domestic demand had meanwhile been curtailed, through the shifting of taxation away from business receipts toward other taxpayers precisely for the purpose of providing businesses with this greater cash flow. (Energy supplies, now dependent on insecure imports at frequently rising price, are not at all characteristic of the demand position of the "generality" of American firms.) *Second*, there is no national consensus—nor any authoritatively accepted pattern—according to which government expenditures are to be cur-

tailed, to provide resources for increasing retained business cash flow, if business income is to be taxed less without taxing other income more. Moreover, at the beginning of the 1980's, the outlook for substantially increased National Defense expenditure precludes confidence in a considerable reduction of the share of GDP devoted to Federal public purposes.

Prevailing American ideologies favoring a higher ratio of investment are caught in the two above interrelated dilemmas, and further fixed in a vise by their common rejection of the consideration that (though the economy moves readily into price inflation) real demand is actually short of what would maximize the Nation's total output. Much of the espousal of a higher ratio of domestic U.S. investment may therefore come to little more than a prayer. This prayer asks that somehow—not in some fancied "long run" but in a tangible short run—a higher ratio of investment will emerge out of a higher total national income. Yet prevailing fiscal and monetary policy fears any pressure toward higher total income, as bound up with higher inflation. Equally rejected, by current policy, is a system of mandatory wage and price controls, which might make some pressure toward increased output a little less fearsome.

American preference for a higher ratio of domestic investment therefore now yields little more than the aspiring observation: "Americans would all be better off—after some time—if we invested a larger share of our national output and all grew more prosperous more quickly." Such an observation is not a policy. A policy must answer the classic question: "How does the cat get across the water?"

Despite these difficulties—and we judge them great—there is no denying the broadening American consensus that the United States must somehow find ways to increase the share of the national income devoted to domestic investment. We doubt that such a perspective is compatible with a general presumption toward specially fostering, stimulating, or encouraging U.S. investment abroad. Barriers to foreign investment may not prove necessary, but "fostering" attention to foreign investment seems now—and for many years forward—a quite inconsistent policy.

A restrained attitude toward United States investment abroad should yield at least four fundamental consequences.

*First:* tax advantages for foreign investment should be eliminated. No American firm or individual, nor any American controlled business branch or subsidiary, should enjoy any tax advantage from investment abroad above that accorded on a return (as income or capital gain) of equal size in the United States. Earnings abroad, whether remitted to the United States or not, should enjoy no special deferral or abatement of tax liability. A more severe regime would consider all taxes paid abroad as only costs and none as credits against U.S. tax liabilities. We do not recommend such severity. Neither however do we exclude the possibility that so severe a tax regime may, one day, come under deliberate consideration; it would be the instrument of a policy of strongly discouraging all U.S. private investment abroad—except the most profitable.

*Second:* in principle, the United States Government should move toward abstaining from guaranteeing any private investment abroad, whether in the form of equity or loan. Private investors should carry

their own risks. The weighing of profit against uncertainty should be a completely private operation. Unfortunately (as mentioned above), it may be impossible to carry this principle through immediately, and in all cases. Competitive considerations may cause this principle to be bent. And there may be some clear cases of national interest where this principle should get set aside. Arguably it might be set aside for some cases of private investing or lending to the least developed countries.

*Third:* the Government of the United States should be minimalist also in its own lending to "middle income" developing countries. In general, a society like the American handles such matters better on a basis of private business. We do not deny that there are cases where lending by the Government of the United States, to foreign governments or foreign business entities, meets the merits of particular situations. We urge, however, that such situations be always considered a burden, never an opportunity.

*Fourth:* no American public authority should ever take a hand in pushing for the entry of American investment into any society in which such investment is not candidly welcomed. No doors need to be broken down. Commodore Perry is not a model for these next decades.

#### *A. The Multinational Complex*

What we call a Multinational Company is a characteristic resident of the World City of the twentieth century. It is a City united by the knowledge that it can share advantages and disasters. It is also segmented into various quarters, dominated by separately identifiable communities, enjoying vastly diverging inheritances, remembering different histories, living under different laws. And nothing is more characteristic of this World City of the twentieth century than the cloudy uncertainty of its residents over appropriate involvement, concern, and obligation to the City, as distinguished from one of its separate quarters.

A company is called Multinational when it does business—mines, manufactures, merchandises—on the spot in more than one quarter of the City. Such a company is said to have a Home country, the quarter of its parentage. (And sometimes, though rarely, a company—a Royal Dutch-Shell, a Unilever—can have parents from two quarters. These two are then likely to have conjoined histories.) When the Multinational is doing business outside its Home quarter, it is said to be operating in a Host country. But no one has a Host who is other than a Guest, and a guest is not an equal member of the family. The pushy guest can claim "national" status, after making some gestures of local domicile, but it is a very rare quarter of the city in which it is thought decent that the guest should so conduct himself.

Those who view the Multinational as going where he should not, or trying to do too much business there, acting the native when he should be remembering the Home of his parentage, call him un-national rather than multi-national. Then the "un" is most often tendered not in praise for universal interest in the City but as a pejorative sling at one who disinterests himself in the claims of his own quarter. "Home," it is then said, "is indeed where the heart

is: the Multinational Company's heart is wherever it can make money." And this is not said in praise.

At the beginning of the 1980's, the United States is the dominant Home country of Multinationals. By the rough, undervaluing measure of ownership "book value," firms of U.S. parentage hold nearly half of all the world's direct away-from-home-country investments. And, by the contemporarily more sensitive measure of current earnings, the United States' parentage share is very probably greater than half. Some large American firms—an Exxon, an IBM, a Citicorp, a Ford, and a goodly number of others—earn more abroad than in their home country. And this American prominence permits the issues of the influences of the Multinationals to be interwoven with the issues of United States influence.

However, the majority of larger firms in all the most advanced OECD countries are now also, in some degree, multinational. The economies of four countries particularly—the United Kingdom, Japan, West Germany, and Switzerland—taken together, are proportionately substantially as heavily represented in Multinational guest quarters as is the United States. Taken together, these four countries recently (1978) had an aggregate of about three-quarters of the real Gross Domestic Product of the United States, and they had already earlier (1976) achieved a share in foreign direct investment (measured by ownership book value) about two-thirds as great as the American. Having regard to the recent surge of Japanese and British foreign direct investing, these four countries together quite probably entered the 1980's with about as great a proportionate Multinational foreign representation as the United States now holds.

Throughout the 1960's and 1970's, it was the fashion of those who discovered the Multinationals to make out that their operation was very big. Big and beneficial, big and fearsome, or only awesomely big—but in any case big indeed. We must not be carried away. It is in apparent imagined support for this image of bigness that two scholars report (in a study dated November 1979): "It has been estimated that the offshore production of MNCs [Multinationals] accounts for as much as 20% of world output of goods and services . . ." We suggest that, on the contrary, the correct valuation lies rather, on various bases of valuation, somewhere between 5% and 10% of world output.

Even at our suggested level of magnitude, the "offshore" or away-from-home-country output of Multinationals (including, of course, the output of foreign Multinationals in the United States) would be a larger share of the world supply of goods and services than is contributed by any OECD country except the United States and perhaps Japan. In our own estimate the entire domestic product of the United States is "something like" one-fifth of world output. And (as our Table 1 indicates) the real GDP of Japan was, already in 1978, about 35 percent of that of the United States. The "offshore" output of the Multinationals of all countries is sufficiently impressive if its aggregate bears comparison with these.

### *B. Earning Versus Remitting*

In the conventional international account of "U.S. income" or "U.S. receipts," the direct investment earnings of the Multinationals

of U.S. parentage appear as a major positive factor. This appearance however is best accommodated with some reticence. What is credited to the account of the United States in such a statement is received by the United States only to the extent that any parental Home may be said to receive income which in fact goes to members of the family who live, work, spend, and invest quite apart. The following table summarizes some of these appearances:

INTERNATIONAL SERVICE TRANSACTIONS OF THE UNITED STATES  
[In billions of dollars]

	1978	1979
(A) Net U.S. investment earnings:		
1. From multinational affiliates.....	\$21.6	\$31.7
2. From other investments.....	(1)	.6
Subtotal.....	21.6	32.3
(B) Net U.S. fees and royalties:		
1. From multinational affiliates.....	4.4	4.7
2. From other foreign entities.....	.9	1.0
Subtotal.....	5.3	5.7
(C) Total service transactions:		
1. U.S. receipts.....	79.0	104.2
2. U.S. payments.....	-53.6	-69.5
Net U.S. receipts.....	25.4	34.8

<sup>1</sup> Negligible.

Note: "Net"—after deducting payments to foreigners in same category.

Clearly, as a mere arithmetical matter, in both 1978 and 1979, the Service account of the United States would be conventionally named "strong." Moreover, tribute to the Multinationals: in both years the receipts of U.S. Multinationals abroad, after deducting payments to foreign Multinationals in the United States, more than equaled the entire surplus which "accrued to the United States" on account of all international Service transactions. However this "accrual to the United States" is more than a little Pickwickian. Of these net U.S. earnings, in line A1, some \$12.1 billion in 1978 and \$18.1 billion in 1979 were, from the beginning, retained and reinvested abroad. Moreover an additional \$4.6 billion in 1978 and \$6.6 billion in 1979 was drawn abroad, from U.S. home account, to enlarge the Multinational investment.

Further, accounts are only accounts: they must not be confused with foreign exchange transactions. In the sense of the purchase of dollars with foreign currencies, none of these "receipts" need have been received in the U.S. home office. A corporate Treasurer was perfectly free, in the measure of his liquidity, to hold these receipts abroad, wherever he could earn most interest or wherever he believed he would profit from currency appreciation. The free Multinational is no captive National. And correspondingly an "international balance of payments" must not be endowed with a meaning it does not have.

### C. Enterprise Structures

Due to the 1979-80 Second Oil Price Revolution, the petroleum Multinationals of U.S. origin have again ascended to the first place in foreign earnings. The second half of 1979 was the most profitable



period in all the history of the international oil enterprise, until that record was outdone in the still more profitable first quarter of 1980. In the continuing scarcity of oil and gas, of which no end can now be anticipated, and since there is no American windfall tax on foreign income, this outstanding earnings position of the petroleum enterprise abroad may still have a long—though checkered—life. The after-tax foreign earnings of the American petroleum Multinationals, for the year 1979, are reported as \$13,222 million. This was an earnings ratio of about 40 percent of the book value of their beginning year foreign investment. In 1978, these foreign earnings were reported as only \$5.846 billion, a modest return of 18% on average year book value.

"Book value," always more impressive to accountants than to the market, is particularly uninformative in the petroleum industry. At the end of the year 1977, the U.S. petroleum Multinationals reported a book value of \$31.4 billion for their ownership interest in foreign affiliates. For 1978 these affiliates reported gross capital outlays of \$10.0 billion. Yet, for the end of this year 1978, the parents reported an ownership interest grown only to \$33.3 billion.

Something of this disappearance is due to the established petroleum business practice of "expensing" (i.e. charging against current income) all exploratory costs, though these can be the most productive capital outlays of the enterprise. Something further is due to the maximizing of depreciation and depletion charges. Something also derives from financing by borrowing. (It should be kept in mind that, at the close of 1978, as at several previous years, the entire ownership interest of the American-origin petroleum Multinationals in the Middle East was carried on their reported books at a *negative* value—a net debt due. The figure reported to the U.S. Department of Commerce, for the end of 1978, was a *negative* Middle East ownership interest of \$3,519 million.) On the base of a \$33.3 billion book value for the end of 1978, the American-origin petroleum Multinationals have reported that their petroleum affiliates plan to make capital outlays of \$12.0 billion in 1979 and \$15.4 billion in 1980. Therefore we surmise that their book values will be reported as totaling something like \$40 billion for the end of 1979 and will grow even more in 1980. But whoever wishes to make a meaningful evaluation of these enterprises would best not stay fixed on these books; he would do better to look—with whatever burden of uncertainties—to earnings and earnings prospects.

The uncertainties, the coerced rebargainings, and the experienced expropriations have led some informed and thoughtful students of these questions to advocate abandonment of all American-origin equity ownerships in foreign extractive industries. They write: "American policy . . . should abandon entirely the idea of direct ownership of foreign mineral rights or subsoil resources . . . and encourage [only] . . . service or management contracts in developed countries . . . as well as developing countries."<sup>14</sup> We reject this conclusion. We reject also the whole bundle of secondary public policies which the students whom we have quoted also build on their primary position. Their procedure is a saddening example of attempting to fix one form of operation on all the diverse patterns of life and

<sup>14</sup> *American Multinationals and American Interests*, by C. Fred Bergsten, Thomas Horst, and Theodore H. Moran, Brookings, Washington, D.C., 1978. Quotation from page 160.

law which prevail in the variegated quarters of the World City. Service or management contracts with the Host, for extractive exploitation, may be useful, to the extent feasible—and that is not all the way, nor a way free of fiction—in Indonesia or Bahrein. Such contracts will not do—not suiting the needs of Hosts or Guests—for Canadian tar sands, or North Sea oils, or Australian minerals.

We reject particularly the proposal, supported by the students quoted above, that United States public policy should force the Multinationals to operate abroad, in the extractive industries, only through service and management contracts with foreign Hosts. This force is proposed to be applied by according U.S. Government loans, guarantees, and tax credits, for service and management contracts, while denying all these benefits to extractive equity investments. We urge that, on the contrary, the Government of the United States neither push toward one form of enterprise nor obstruct other forms. The Multinational entrepreneur is himself best positioned to help shape a variety of operating structures in the various country situations. Moreover the entrepreneur will make his best contribution if no government guarantee stands behind him, to inherit the burden of entrepreneurial misjudgment.

#### *D. Invest or Export?*

The location of purely extractive industries, or of service trades, permits no choice. If Alcoa wishes to mine Jamaican bauxite, it must dig in Jamaica. If Weyerhaeuser wishes to harvest Indonesian hardwoods, it must fell trees in Indonesia. In a special extraction, if Kaiser wishes to profit from the hydropower of the Volta River, it must go to Ghana. Similarly, if Sears Roebuck wishes to retail in Rio de Janeiro, it must open a store there. No such constraining simplicity prevails for the generality of large-scale manufacturing.

Superficially considered, there are always two alternatives: to manufacture at Home and export the product or to manufacture as a Guest abroad in the place where one sells. Men of business, even in the most unsophisticated quarters of the World City, understand very well—and in conclusive specificity—why a firm, of a size for which manufacturing abroad is a possible option, chooses one alternative or the other. But, in the more polite quarters of the City, there persist indulgent traditions that require obfuscation regarding what comes first and is most important and what comes last—an also ran—in determining the international location of manufacturing.

In our judgment, the following are the reasons which prevail now, and have prevailed during recent decades, for the choice of foreign locations for some manufacturing, by firms for whom foreign markets are sufficiently important—actually or potentially—to demand a deliberate choice. We list these reasons in what we judge to be their order of importance, particularly as influencing the conduct of manufacturing firms of United States origin:

*First*, denial of foreign market access to manufactured imports, through tariffs, quotas, and prohibitions.

*Second*, inducements to invest abroad, through Host subsidies, tax exemptions, and Host engagements that comparable inducements will be withheld from second-comers.

*Third*, labor supplies abroad that are cheap, trainable, and not likely to become expensive in the near future.

*Fourth*, cost advantages in transportation, the delivery of fragile or perishable goods, and the combining of manufacturing with direct service.

A striking example of the forces that have pushed successfully for multiple foreign locations is constituted by the record of the production facilities of the American-origin automotive industry. All over the world, these firms encountered tariffs equal to 100 percent, 200 percent, or 300 percent of their U.S. profit margin on sales. They responded by proliferating relatively small, high-cost facilities, producing relatively expensive vehicles—to the general satisfaction of their foreign government Hosts. They asked and received direct financial subsidies even from such countries as Canada, Britain, and Belgium. Where tax exemptions were available, they received the maximum. Correspondingly, they bent to successively larger requirements of foreign “domestic content.” However, as tested in the greatest relatively unobstructed market—the United States—these great American automotive companies did not emerge with highly competitive products. While they were making easy money in several houses as Guests, they were preparing for defeat at Home.

For, in these latter years, the Japanese automotive industry was following a different course. A late-comer, it could seize few “inside” positions abroad. It produced at home and exported, selling where there was market access with a minimum of Guest production presence. Following this home production pattern, Japanese firms produced in Japan, in the year ending March 31, 1980, just under 10.1 million assembled passenger cars, trucks, and buses—not including knock-down sets for overseas assembly. Slightly over a half of these completed vehicles were exported.

The foremost Japanese firm, Toyota Motors (which had indeed sinned by having a small production in Australia and a minuscule production in Peru) produced 3,166,000 assembled vehicles and exported 1,503,000 of them, in the year ending March 31, 1980. Toyota can advertise and market in the United States as well as any American competitor, and it does not need to manufacture in the United States to maintain a service of parts and maintenance as good as that of any of the American automotive “Big Three.” Manufacturing in Japan and transporting assembled vehicles by modern means, Toyota is fully competitive in Chicago and London and Frankfurt and Cape Town. It would be competitive also in Rome<sup>15</sup> and Moscow, if it were not excluded in their countries. Such a firm finds no cost advantage in duplicating abroad its basic production facilities and its network of parts supply. So long as it is not denied (or believably threatened to be denied) import entry into the United States, Toyota need not manufacture here. Only a believable impact of tariff or quota exclusion would bring about such transfer. Such is the consequence of free trade in World City of the 1980’s. Most of the present pattern of the distribution of Multinational manufacturing facilities reflects not free trade but its denial.

<sup>15</sup> The second Japanese auto producer, Nissan, has moved to jump over the Italian wall by agreeing to produce in Italy—60,000 cars a year!—jointly with Alfa Romeo. In a characteristic display of free enterprise, the great Fiat opened a bitter campaign against Nissan’s access—raising the novel image of the Japanese camel with his nose in the tent.

What we have said above of vehicles is even more true of the location abroad of manufacturing facilities for products higher in value per pound of weight. They went abroad commonly to jump over import walls or in response to Host inducements to invest. More rarely, they went in search of cheaper and more docile labor. Transportation costs of delivery were not—and are not—competitively important. Distribution costs played a very small part. All over the World City, everything connected with advertising, sales, and services is quite separable from manufacturing. Wherever there is a significant market, there are scores of firms eager and able to assume the distribution function for the whole universe of manufacturers—foods and chemicals and pharmaceuticals and metals and machinery and other products.

It must not be thought that we are suggesting that special “inducements” to invest are only a non-U.S. phenomenon. The Irish Republic is not more forthcoming in granting fifteen and twenty year exemptions, from both national and local taxes, than is the Commonwealth of Puerto Rico.

About one-fifth of all manufacturing abroad by Multinationals of U.S. origin is located in less developed countries (Brazil, Mexico, Venezuela, Taiwan, Korea, Philippines, etc.) These are countries where labor is cheap and sometimes highly trainable. These countries have been abundant also in investment inducements and in protection against import competition. Moreover, they are countries where authoritarian regimes are counted upon to repress wage advances. The combination of cheap labor, protection against competitive imports, and special financial inducements has been effective in bringing substantial Multinational manufacturing investment to them.

### *E. Investment Role*

At the end of the year 1978, the direct investment position abroad of U.S. Multinational was carried at a book value of \$168.1 billion. Some \$120.7 billion was located in “Developed” countries and \$40.5 billion in “Developing” countries, with a residual \$6.9 billion “International or Unallocated.” By industry, \$33.3 billion was in petroleum, \$74.2 billion in manufacturing, and \$60.6 billion in other businesses. A preliminary estimate is that this book value increased by \$24.8 billion in 1979. This increase would bring the total U.S. Multinational direct investment position abroad at the end of 1979 to around \$193 billion. Early in 1980 the \$200 billion mark will have been passed.

More meaningfully, it is likely that earnings abroad from these direct investments, accruing to Multinationals of U.S. origin, will surpass \$40 billion in 1980. This is only about 45 percent as great an aggregate as the United States will probably be paying for petroleum imports in 1980. Yet these earnings are a considerable factor in the world economy. It is unlikely that the Multinationals of all other nations together will have earned an equal amount in 1980 from all their controlled affiliates outside their many Host countries. Due to the high rate of worldwide inflation of prices and profits, time comparisons of the magnitude of money earned have uncertain meaning. Yet it may be useful to reflect that the 1980 earnings of Multinationals of U.S. origin will probably be twice as great as the \$20.1 billion earnings of these companies as recently as 1977.

The \$200 billion of present foreign investment by U.S. Multinationals is different, in magnitude and disposition, from what it would have been had investment capital been following the path of comparative advantage—the path of maximizing profitability—in a World City of free markets. Along that unexperienced path, U.S. investment in manufacturing abroad would have been smaller. Not improbably, the entire foreign Multinational investment aggregate, by firms of U.S. origin, would also have been smaller. More capital would have been invested in the United States—to serve foreign markets as well as domestic American ones. Entrepreneurship of American origin would have concerned itself more with domestic production. The demand for labor in the United States would have been higher. American incomes would have been higher. Foreign incomes would probably have been lower.

But it was not so. And now a base of involvements has been established which will not be erased. It is on these involvements that the next decades are to be built. Perhaps with some improvements.

It is a thoughtless vanity for the Government of the United States to waste its strength in seeking equal "National" treatment abroad for business entities of U.S. origin. Still more vain is it to insist that a Guest from the United States should receive better treatment than a National: that will occur only where the Host perceives that his interest lies in such better treatment. Where other countries welcome Multinationals from the United States, they may freely accord such Guests equal or preferred treatment. If not, not. For the United States to threaten other countries in this matter—with threats going beyond denial of U.S. favors—is to shoot with an empty gun. The United States will make no reprisals.<sup>16</sup> To do so would be to cut off its nose to spite its face. The American economy gains from affording entry and equality to foreign investors. We will sensibly admit these foreign enterprises even from countries that do not welcome enterprises of American origin. Under these circumstances, it is a pointless charade to employ diplomatic personnel for years in an effort to negotiate treaties in which all parties will agree to be equally practicing good Hosts toward all foreign Multinationals.

The nub of the special problem of government jurisdiction over Multinationals is, of course, that both Home and Host governments claim overlapping rights, in some matters. These are claimed lawful rights to tell the Multinationals, and their foreign resident branches and subsidiaries, how to behave themselves. Some duality is unavoidable. And it will not be surmounted by treaty skills in contriving mechanisms for international judicial or arbitral policy determination. Where there is no structural coincidence of the underlying economic policies of governments, there will continue to be jostling. Where there is a substantial coincidence of fundamental policies, collaboration can be worked out.

One experience of this present time, in the matter of Iran, is suggestive of how far collaboration can go. When the Government of the United States froze Iranian funds in American banks, it extended the freezing order to deposits with branches and subsidiaries of those

<sup>16</sup> The United Kingdom may deny Dow Chemical equal access to the natural gas of the North Sea. The United States will not respond by denying British Petroleum the largest position in the extraction of the petroleum of Alaska.

banks everywhere abroad. Every OECD country claimed jurisdiction over all foreign-owned banks operating in its territory. No other OECD country joined the United States in putting in effect such a freezing order, for its own banks. Yet no OECD country has—up to now—ordered an American-owned Guest bank to ignore the instructions of the Government of the United States. On the other hand, it is highly probable that, should any OECD country shift its policy hard in favor of the present Iranian authorities, jurisdiction would be found to order its Guest banks to unfreeze Iranian deposits, to conform to the new policy direction of their Hosts.

Clearly, mechanisms of effective control over the actions of Multinationals abroad—whether in their banking, or their exporting of military supplies, or their engaging in monopolistic practices—can be contrived with modest skills, when the underlying matter is one in which the relevant Homes and Hosts share a common policy. The Multinationals are by no means as fearsome as they have been made out. The keys to the City are not in their hands. Indeed they have no common hands. And, in so far as they have separate hands, those are not more engaged in mischief-making than is usual among business firms everywhere. For the economic welfare of the World City, in the next decades, all the Multinational companies of the earth do not constitute remotely so serious a problem as does one OPEC, effectively wielding great power of profound trouble-making.

## VII. SOME PROBLEMS OF INTERNATIONAL MONEY

Before the end of World War II—indeed before Stalingrad, and when no successful battle had yet been engaged in the west—men of vision and determination were planning for the better World City which, they thought, could be fashioned once victory and peace had been won. One structure of this renewed City, the concern particularly of the American and British treasuries, was to be a new international monetary system, freed of the shortcomings that had characterized the distressful decade of the 1930's.

This new monetary regime would reach out to all the world. However, its weighted voting would give control to the governments of the wealthier quarters of the World City—West and East—also conceived as joint victors in the then ongoing war. At the center of this structure—Clearing Union or expandable Monetary Fund—would be a new world money, not the American dollar and not British sterling. In the aspiring language of the chief U.S. Treasury designer, this new creation would be named *Unitas*. In the British idiom, restrained in expression but expansive in implication, it would be *Bancor*.<sup>17</sup>

Men of political authority, on both sides of the Atlantic, who thought themselves more practical, reshaped these early designs by 1944 into an international Agreement for member currencies pegged to gold at \$35 per ounce, adjustable up to a cumulative 10% by individual nation's initiatives but beyond that limit adjustable only by controlling members' weighted consent. To administer this international Agree-

<sup>17</sup> It will be recollected that, when the distinguished spokesman of the British Treasury conceded that the deficit drawings of *Bancor* should be limited, he suggested a limit for all countries together of \$25 billion (at a price level one-fifth that of 1980). The same spokesman, however, also proposed, at the postwar termination of Lend Lease, that Britain alone should receive from the United States a free gift of \$6 billion.

ment, they designed an International Monetary Fund (IMF), with perhaps two structural defects—one (maybe the lesser) contributed by the Americans and the other (maybe the greater) by the British.

The Americans insisted that the Directors of the IMF should be full-time officials, resident in Washington. This full-time Washington design meant that the Directors of the IMF would not be men of authority, involved in the continuing monetary and fiscal responsibilities of their respective countries: basic initiatives would reside elsewhere. The British insisted that the IMF should normally be "passive": the Fund should have no initiating operations. Its only day-to-day function would be to make studies. The IMF could move into action only in response to a necessitous call from a member.<sup>18</sup>

In considered retrospect, it cannot be said that the IMF was more than a secondary instrument of international economic collaboration—though a useful one—during its first fifteen years of life (1945–1959).<sup>19</sup> During all those years, to the end of 1959, the total gross drawings on the Fund came to only about \$3.4 billion, of which about \$3 billion was drawn in U.S. dollars. In the same postwar period, the Government of the United States made grants and loans to other nations totaling more than \$48 billion, apart from military aid.

From the earliest postwar days, the recipients of U.S. loans and grants were urged to set aside some part of these inter-governmental transfers to constitute national monetary reserves. Consequently, in those fifteen years, the official dollar-valued monetary reserves of the world, apart from U.S. reserves, rose at an average annual rate of about 5½ percent. (During twelve years 1948–59, the U.S. dollar, as measured by the U.S. GNP deflator, declined in real value by an average of 2½ percent per year. The real rise in reserves was therefore about half the nominal.) At the end of 1959, Western Europe and Japan had official monetary reserves above \$22 billion, out of a world total of \$57 billion. By then, Western Europe and Japan had also sufficiently recovered, in moral confidence and political self-assertion, to question the permanent value of their dollar monetary reserve holdings. Next year, in October 1960, scorning the official dollar value of \$35 per ounce of gold, bidders on the free London market moved the dollar down so that it even touched 40 per ounce of gold. (The vision of a \$600 or \$700 value would then have been dismissed, even by the most imaginative, as a nightmare—fitting crazed mate with \$40 per barrel crude oil.)

In the following 14 years (1959–73), the international monetary system, as born in 1945, came limpingly to an end. It was a demise only passingly lamented. During those years, stronger national independences were confirmed, especially in Western Europe and East Asia. The economic, financial, political, and military authority of the United States was relatively depressed. The system of 1945 had been born in an atmosphere of belief that the generation which emerged from World War II could create several elements of common government for the World City. By 1973 that belief was greatly weakened. And now, at the beginning of the 1980's, the rational grounds for such a belief are even weaker.

<sup>18</sup> Some account of both questionable insistences is given by R. F. Harrod in "The Life of John Maynard Keynes," London, 1951, pages 582ff. and 625ff.

<sup>19</sup> We date birth, somewhat provincially, from President Truman's signature of the Bretton Woods Agreements Act on July 31, 1945, though operations began only in 1946.

The system of 1945 had been one of currencies pegged to gold, therefore pegged to one another, and accordingly—by the letter of the founding IMF Agreement—alterable (beyond the one 10 percent variation) only with controlling members' consent. That system has been displaced by a less easily described market of currencies: some nominally "freely floating"; some avowedly "managed" in exchange price by individual national market intervention; some adjustably pegged in multilateral regional grouping; some tied by an individual nation's chosen peg; several loosely cooperating in support of one another, but only at the exchange cost of the depreciating currency. The persistence of unilateral and multilateral pegging is not to be minimized. The United States, the United Kingdom, and Japan are the major industrial countries that avow no pegging; early in 1980, some 32 other IMF member nations could be placed in the same non-pegging group. However some 104 IMF member countries do still variously peg the exchange values of their currencies—41 pegging to the United States dollar alone.

In the system of 1945, the United States had an IMF veto, through its quota of 20.8 percent in a regime where an 80 percent weighted vote was required for important decisions. In the system that matured in 1976, both the United States and the European Economic Community had IMF vetoes in a regime where an 85 percent weighted vote was now required. In fact, under both systems, before 1973 and after, the strong did as they wished, and the weak (subject to IMF pressure because needing IMF advances) did as they could.

The IMF became known as an ever-ready advocate of national fiscal, monetary, and foreign-exchange surgical "adjustment." The characteristic national posture was one that the nation—if provided with temporary foreign-exchange accommodation—could come through with substantially less "adjusting" than the IMF advocated. When the system of 1945 was already dissolving, a future Chairman of the Board of Governors of the Federal Reserve System passed along a story, delimiting three groups of nations, among which "adjusting" and adjustors took rather different paths: ". . . when disagreement arose between the IMF and member countries on the need for policy changes, if the country was small, it fell into line; if it was large, the IMF fell into line; if several large countries were involved, the IMF disappeared."<sup>20</sup>

At the 1975 annual IMF meeting, the Secretary of the Treasury of the United States testified to American abandonment of support for any unitary international monetary authority. ". . . We believe strongly," he said, "that countries must be free to choose their own exchange rate system . . . The right to float must be clear and unencumbered." In the same year 1975, a distinguished British advocate of floating rates still proposed a major role for supervisory international authority. Indeed he urged a reversal of the "passivity" of the IMF, which, as he well knew, the Government of the United Kingdom had, three decades earlier, made a condition of its adherence to an international monetary system. He now wrote: ". . . the developed countries should allow their balances of payments to be adjusted through variations in the exchange rates between their currencies." But, with equal force, he also argued: ". . . the financial

<sup>20</sup> Robert Solomon, "The International Monetary System," New York, 1977, page 250.



authorities of the developed countries should surrender to an international exchange equalization fund the task of offsetting *temporary divergences* of exchange rates from *what is considered to be* their equilibrium trends."<sup>21</sup> (*Italics added.*) Alas, the nub of the difficulties lies in the words we have *italicized!* Who is to determine what is only a "temporary divergence"? Who considers? What uncoerced national authority, in 1975 or in 1980 or in the perceptible future, stands ready to pass on the responsibility for this "considering" to an international body? A body not braked by double vetoes? And, on another plane, how is the difficulty eased by such multi-meaning terms as "equilibrium trends"?

Particularly since 1976, the IMF has let it be known that it is engaged in monetary "surveillance"—even "firm surveillance." This linguistic contribution followed the adoption, in January 1976, of a new Article which determined that the IMF should thereafter exercise ". . . firm surveillance over the exchange rate policies of members, and shall adopt specific principles for the guidance of all members . . ." In subsequent years, private foreign exchange position taking has grown massively. "Offshore" credit markets, in dollars and other currencies, minimally regulated, have enjoyed spectacular expansion. This expansion of private international financing has diminished the relative importance of the IMF (and the World Bank). In the great markets of foreign exchange and international credit, the "surveillance" of the IMF is commonly regarded as fitting and proper for those quarters of the World City that are named insensitively "basket cases" or—at most—for those quarters which threaten to become basket cases. For better or for worse, the ordinary world of relatively prosperous international moneys and credits has not yet been noticeably affected by the addition of IMF "surveillance" to the language of international intercourse.

### A. Stagflation

There is no candid denying that, in almost all advanced industrial countries, the 1970's have constituted a decade of economic disappointment.<sup>22</sup> And few thoughtful persons, in these countries, now look forward to the 1980's and 1990's with minds of confident optimism. Can it be that some part of these disappointments is due to shortcomings of the international monetary order (or disorder) that has prevailed in the 1970's? And, if so, is there reasonable prospect that a better ordering of these international monetary practices may be brought into being, during these next years?

Our shared disappointment is no willful emotionalism. The advanced economies have everywhere experienced a decline in their rates of productivity improvement, per person employed. In the United States, slowing of improvement has passed over into retrogression. (Even before the onset of the 1980 recession, the United States was producing a little less, per person employed, than it had been producing two years earlier.) Moreover the improved stability

<sup>21</sup> James E. Meade, "The Intelligent Radical's Guide to Economic Policy," London, 1975, pages 124-153. Quotation from page 151.

<sup>22</sup> The Japanese are perhaps less disappointed than most. However their rate of advance has also greatly slowed. And they have now pushed forward, to an unspecified future, the target—confidently professed ten years ago—of soon equalling the standard of living of the most prosperous countries.

of our economies, so confidently proclaimed in the 1950's and 1960's, has proven to be a case of meretricious advertising. Irresponsible publicists told the American people that their economy now has "built-in stabilizers." The facts are painfully otherwise. In 1973-75 and now perhaps again in 1980-81, the United States is experiencing a loss of production and a rate of unemployment fully comparable to the worst experience of the first three decades of this century—before the lingo of "built-in stabilizers" had been invented.

Moreover, to return to the narrower ground of monetary affairs, all the world has been gripped in successive waves of increasing price inflation, of which no reasoned judgment can now foresee an end. In the eleven years of 1962 through 1972, the average annual rate of inflation in the United States (measured comprehensively, as in the attached Table 11) was 3.9%, and this rate of price advance (cumulating to 53% in eleven years) was thought intolerable. But for the seven years 1973-79 inclusive, the U.S. annual rate of price inflation averaged 7.4% (so cumulating to 65% in only 7 years), and there is no sustained slowing in sight. Further, and we must emphasize this fact, the 1962-79 inflation record of the United States is surely not the worst and perhaps it is the best (least) of all major non-Communist economies. Among these countries, only the United Kingdom had a lower reported rate of inflation in 1962-72 and only Western Germany a lower reported rate in 1973-79. When, in 1973-79, the annual average rate of inflation in the U.S. came to 7.4%, non-Communist Europe averaged 9.8%, the major oil-exporting countries 14.3%, and non-oil developing countries a horrible 25.7%. (See Table 13 and Table 14.) Price inflation characterizes the entire non-Communist world.

TABLE 13.—ANNUAL AVERAGE INCREASE OF PRICES IN NON-COMMUNIST INDUSTRIAL COUNTRIES, 1962-79; MEASURED BY GNP DEFLATORS

	[In percent]	
	1962-72	1973-79
(1) United States.....	3.9	7.4
(2) 7 large industrial countries, including (1).....	4.6	8.4
(3) All industrial countries, including (2) and 7 smaller for 1962-72, but 14 smaller for 1973-79.....	4.1	8.7
(4) European countries.....	4.9	9.8

Source: "Annual Report 1979," IMF, Washington, p. 3. "World Economic Outlook," IMF, Washington, p. 86, May 1980.

TABLE 14.—ANNUAL AVERAGE INCREASE OF PRICES IN NON-COMMUNIST DEVELOPING COUNTRIES, 1967-79; MEASURED BY CONSUMER PRICES

	[In percent]	
	1967-72	1973-79
Oil exporting countries.....	8.0	14.3
Nonoil developing countries.....	9.3	25.7

Source: "World Economic Outlook," Washington, May 1980, p. 87.

On the deepest level, this general and persistent inflation is perhaps best understood as reflecting a lack of balance between aspirations (or demands) and accomplishments. Men of every rank and condition

everywhere insist on having more than has been produced. Then—without explicit recognition of the ongoing game—various attempts are made to mollify these insistences by supplying the false image of what is demanded. These attempts inevitably fail, only to be repeated. (In truth, any limited sector of the community could receive real improvement, but only at the expense of other sectors. This—most painful, because contentious—reality is quickly swept under the carpet. All must receive more.) Unachieved “catch-ups” and unaccomplished “improvement factors” are everywhere pretended to be paid. The truth—that there is no real counterpart to these pretended higher incomes—is not acknowledged.

Economic analysis and policy, however, will not rest with this high level of socio-political analysis. It rightly seeks for the mechanisms through which the spirit of the time works its will. And, with respect to the 1970's and their sequels, it singles out three complexes. *First*, the national domestic complex of wages-prices-incomes-fiscal management-monetary management. *Second*, the prodigious cartellized international petroleum price advance, originating in the 1970's but throwing its shadow forward down the century. *Third*, the international order of money and credit, through which inflationary impulses may be transmitted—in varying degree—to all the quarters of the World City.

The complex which we identify as *First* may well be the most important. However it is the primary concern of other papers. Here we have only one question to ask of it. If this complex is only national and domestic, if its prevailing inflationary push reflects only deficiencies of national economic practices, curable then by national understanding and appropriate domestic actions, why does much the same pattern (though with varying intensity) repeat itself, at similar times, all over the world?

We assign great importance to the *Second* complex, the petroleum price push toward inflation. The oil exporters' cartel has posed to the oil importing world a conundrum which no major oil importing country has yet resolved—the conundrum of great price inflation together with severe demand deflation. It is one of the great common problems of these decades. If Germany was once thought to handle this problem better, Germany now anticipates a 1980 international current account deficit of more than \$15 billion (following a deficit of \$5½ billion in 1979)—and the German public authorities are borrowing foreign exchange from Saudi Arabia. If Japan was once thought to rival Germany in monetary rectitude, Japan now anticipates a 1980 current account deficit in the range of \$15 to \$20 billion (following a deficit of \$8¼ billion in 1979)—and the Japanese have therefore now acquired the courage to invite foreigners to make the Yen an additional currency for deposits, reserves, and securities holdings. Even Switzerland, long admired by some when it sought financial stability at the expense of zero economic growth, has now desisted from disinviting capital inflow. By a peculiar paradox, at this entry into the 1980's, the United States looks likely to come near to a zero current account international payments deficit (as conventionally reckoned) both in 1979 and in 1980. Early in recession, profoundly deficient in domestic demand, imports weak, capacity released for export markets—and the

United States will soon be condemned abroad for failing, in these years, to share in the deficit burden that is the counterpart of OPEC's now unprecedentedly huge international current account surplus.

That surplus is huge indeed. The World City has never before seen anything quite like it. (See Table 15.) Now, in the second half of 1980, the surplus of the OPEC countries, on current international account, is running at an annual rate in the general range of \$135 billion a year. This is the general dimension of the surplus of foreign money now accruing to the OPEC countries after they pay for all the goods and services they are importing. This surplus is nearly half the foreign money they are now being paid for their oil exports.

TABLE 15.—OPEC OIL EXPORTS: VOLUMES, PRICES, REVENUES, AND CURRENT ACCOUNT SURPLUSES, 1974-80

	1974	1977	1978	1979	Estimated annual rate of 2d half—1980
(1) Export volume, in millions of barrels per day.....	29.6	29.4	27.9	28.6	27-25
(2) Export net revenue per barrel (rounded).....	\$8.40	\$12	\$11.40	\$19.10	\$33
(3) Total net revenue from oil exports in billions per year.....	\$90.5	\$128.6	\$115.8	\$199	\$290-\$300
(4) Current account surplus, in billions.....	\$68	\$32	\$5	\$68	\$130-\$140

Source: For 1974-79, lines (1), (2), and (3) adapted from "Petroleum Economist," London, June 1980, p. 243. For 1974-79, line (4), rounded from "World Economic Outlook," Washington, IMF, May 1980, p. 95. For 2d half 1980 annualized, own estimates. All values, and especially line (4), should be understood to be only broadly indicative, due to discrepancies in reporting and coverage.

The year 1971 was the first in which Middle East countries received net payments of more than \$1.00 per barrel of crude oil exported. In 1978, OPEC received an average of less than \$11.50 per barrel for oil exports and in 1979 just over \$19. But in the second half of 1980 the OPEC price looks to average rather over \$33 per barrel. (Due to the Saudi factor, this price will still be some dollars lower than the prices paid, in the free world market, for crude oils from such countries as the U.S.S.R., Mexico, Britain, and Norway.) By our reckoning, despite the depression of oil demand, the countries that are *net* volume oil exporters, at prices in harmony with those of OPEC, will be supplying petroleum net importers, in the year 1980, something like 28.5 million barrels of oil per day.<sup>23</sup> At the price level prevailing in the second half of 1980, these oil exports will probably cost (f.a.s.) something in the range of \$345 billion per year. The payment accruing to these exporters corresponds in amount to nearly one-third of the final market price of all the movable commodities (excluding services and structures) now being produced in the United States.

The OPEC countries alone, supplying 85 percent to 90 percent of the total 28.5 million barrels per day, will be receiving payments for oils, at the price levels of the second half of 1980, at an annual rate in the general area of \$300 billion. Nearly half of this amount the OPEC countries will apparently not spend this year. (This unspent residue is a greater dollar amount than the total net investment of the private American economy in 1980.) The IMF staff has estimated

<sup>23</sup> We include, among net volume oil exporters, at OPEC harmonized prices, Mexico, Norway, Malaysia, China, etc., but not Canada or the United Kingdom which are not net volume sellers, and only the exports of the U.S.S.R. outside its concessionary priced sales within Comecon.

that, in the seven years 1973-79, the cumulative international account current surplus of the OPEC countries came to about \$255 billion. Early in 1980, this staff estimated the current surplus for this year at \$115 billion. However, after the further price increases of the early summer, and the ongoing "convergence" price movement of Saudi Arabia, an estimate (for the second half of the year) in the general range of \$135 billion per year seems more realistic.

### *B. Floating*

The addition of some \$135 billion to OPEC's already abundant cash balances will not faze the great foreign exchange markets of the World City. If it were one week's addition to the trade, it would make waves; in a year, it is business as usual. The deposit banks of the World City also will not be flustered. Collectively, they now create several times as much money as that, each year. That such amounts of money are not created for the use of the needy quarters of the City is a matter of course, to be understood with a well-bred shrug by mature men in the great community of banking.

In March 1980, the Federal Reserve Bank of New York made a survey of the trading in foreign exchange by 90 major American banks. It found that the volume of this trading, handled by these banks in March, had a value of \$491.3 billion. Reckoning crudely, this reflects a trading level of some \$6 trillion a year. The New York foreign exchange market is said to be "less active" than that of London, Frankfurt, Zurich, and perhaps even Luxembourg. For 1977, a Citibank study put the world total at \$50 trillion. Current professional opinion regards an estimate of \$70 trillion as "reasonable." This \$70 trillion is roughly 46 times the entire world's \$1½ trillion of merchandise exports in 1979. It is about 28 times the present year's magnitude of the Gross National Product of the United States. For what little such a statement may mean, \$70 trillion is an amount something like 5 or 6 times all the world's annual gross product in 1980. When foreign exchange money trading is related to the underlying international exchange of goods and services that this trading is supposed to serve, the trading raises the image felicitously captured by a distinguished banker: "a jet engine mounted on a tricycle."

The character of this trading is illuminated a little by some further facts gathered in the March 1980 survey. Only 8 percent of the foreign exchange trade was a bank's dealing with non-bank customers; the remaining 92 percent was between banks, for their own accounts. Of the business for customers, 36 percent consisted of "spot" transactions (delivery in two days), 43 percent was for "forward" delivery (at various times up to 180 days), and 21 percent was made up of "swap" commitments (involving simultaneous contracts for purchases and sales at different maturities). The Treasurers of non-bank businesses were also taking foreign exchange "positions"! In New York, that month, the trading by currencies ran as follows: 31.7 percent German marks, 22.8 percent British pounds, 12.3 percent Canadian dollars, 10.2 percent Japanese yen, 10.1 percent Swiss francs, 6.8 percent French francs, 1.9 percent Dutch guilders, 1.0 percent Belgian francs, 0.9 percent Italian lira, and 2.3 percent all other currencies. It is an image of the world of foreign moneys, as seen from New York.

This huge whirlpool of speculation—riding high on the comparatively thin stream of trade, services, and long-term investments—is what fixes “freely floating” foreign exchange rates, from day to day. Bankers (and, to a greatly lesser extent, other businessmen) take positions in the foreign exchange market. These positions do indeed reflect their anticipations of the stream flow of funds, resulting from international trading in goods and services (the current account) and also from the long-term investment of capital. But these anticipations also reflect the immensely larger daily flow of moneys among speculators themselves (“short-term capital”). One must never conclude that the speculative whirlpool is powerless to affect the underlying stream.

We are wrongly taught when told that the long-term international value relationships, among the various moneys, arise only out of their balances of payments on the accounts of current transactions and the accounts of long-term capital flows. Movements of short-term capital (money) have always been understood to be a third fact. But these short-term speculative movements were considered not to be long-term shaping. When the speculator proved right, he reversed his transaction, at a profit. When he proved wrong, he reversed his transaction, at a loss. In either case, he “unwound” his position, and left the underlying stream flow unchanged. But this depiction is in fundamental error.

A speculative position of considerable volume, duration, and direction does contribute to shaping future currency values permanently. As E. M. Bernstein has well said, in his paper for the SSEC, the undervaluation (down-valuation) of a currency acts like a tax on imports and a bounty on exports: it therefore raises prices in the country whose currency is undervalued. Contrary-wise, the overvaluation (up-valuation) of a currency acts as a tax on exports and a bounty on imports: it therefore holds down prices in the currency that is overvalued. So far, everything seems to balance out. *But the movements of our price system are not symmetrical.* Mr. Ed Dale has well described this asymmetry, in this SSEC paper on Stagflation. Many prices rise easily but fall with great difficulty. If substantial exchange speculations undervalue first the currency of one country and then another, the domestic price levels of *both* countries are successively moved upward (though not necessarily equally), in a manner than would not have occurred at all in the absence of the *temporary* speculative foreign exchange movements. Writing in the summer of 1979, Mr. Bernstein therefore said:

The recent recovery of the dollar will be helpful in moderating the rate of inflation if the dollar remains strong, but it will not offset the increase in prices and costs that has already been built into the structure of the economy as a result of the previous depreciation.

And later he added the general reflection:

The optimistic view that when the dollar was overvalued or undervalued it would call forth speculation that would return the rate to its appropriate value was not borne out by experience.<sup>24</sup>

Freely floating exchange rates are therefore (in an economy of price asymmetry) dominantly inflationary. Our immense foreign exchange speculation works dominantly toward inflation. Inflation

<sup>24</sup> “The Exchange Rate Policy of the United States,” quotations from pages 33 and 36.

is built into the international monetary order (or disorder) established in the World City during the 1970's. Unfortunately, it does not look likely that these things will be soon bettered.

"I can call spirits from the vasty deep." "Why, so can I, or so can any man; But will they come when you do call for them?" The record of management—by the governments and central banks—in the 1970's, in calling up the exchange rates they (presumably) desired to have prevail, makes no impressive history. For one, the market intervention of these self-styled managers usually has weak hands. The world of laymen is much impressed when it is told that the official money managers have assembled \$35 billion for a great campaign of monetary correction. But \$35 billion is an amount (\$70,000 billion ÷ 250 ÷ 8) duplicatingly transacted—among all the trading capitals of the World City—in the first hour of a Monday morning. Therefore official "management," through market action, fails unless the bulk of speculators opt—as they usually initially do—for a safe ride in the same direction as that taken by the official managers.

But these official managers rarely declare their exact goal. They are moving against what they consider to be an overvaluation or undervaluation, and that is clear. But how far would they like to go? It is easier for them, and less wounding to pride, to remain in the decent obscurity of highfalutin language. Therefore, in truth, it is rarely possible, for the outsider, to say unequivocally in what measure the official intervention has succeeded or failed. What was its exact target? Did it have an exact target? Not uncommonly, in a few weeks, the early proclaimed managers' success erodes into a condition not unlike that which prevailed before these official managers came on the scene. Then they have only three alternatives. First: to stay their hands from managing. Second: to elicit the "voluntary" cooperation of the great banks by threatening reprisals. (Perhaps easier in Tokyo than in New York or Zurich.) Third: to go to legal licensing of major exchange transactions. The second and third alternatives would not have fazed Keynes or White, but these alternatives have not been in accord with the ethos of the 1970's. The first alternative therefore usually prevails (with the extenuating apologia that perhaps the basic factors are different than was suggested in the appraisal prior to the managers' intervention).

### *C. Turbulent Devaluations*

In the course of six years of an established regime of floating exchange rates (from end June 1974 to end June 1980), the United States dollar may be said to have depreciated about 13 percent, along a path of many turns and twists.<sup>25</sup>

The road included one stretch of two years in which the international value of the U.S. dollar was relatively stable. This period extended from September 1975 to September 1977. (See the attached analytical Table 17 and its base data in Table 16.) During those two comforting years, the value of the dollar in relation to the weighted basket of 15 other major currencies (which, together with the dollar, make up the IMF's monetary SDR unit) first rose by about 3.0% per cent and then declined by almost the same amount. A well-behaved monetary universe!

<sup>25</sup> We reckon from end June 1974, leaving out the first 15 months from the abandonment of par values—the period of first adaptation to floating.

TABLE 16.—VALUE OF THE U.S. DOLLAR RELATIVE TO THE 15 OTHER CURRENCIES INCLUDED IN THE SPECIAL DRAWING RIGHT OF THE INTERNATIONAL MONETARY FUND

[All values at end of indicated month]

	1974	1975	1976	1977	1978	1979	1980
January.....		96.12	104.89	107.18	98.92	91.07	88.05
February.....		93.72	104.89	106.66	97.54	90.69	89.22
March.....		95.15	106.61	106.22	96.38	90.93	94.73
April.....		95.83	107.41	105.79	97.61	92.40	90.12
May.....		95.22	108.63	105.87	98.35	92.80	88.48
June.....	100.00	96.41	108.08	105.29	96.05	90.49	87.23
July.....	100.42	101.94	107.95	104.53	93.78	89.54	-----
August.....	102.77	102.45	107.40	105.84	92.60	89.56	-----
September.....	102.44	105.50	106.51	105.61	91.52	87.86	-----
October.....	101.42	102.62	106.84	103.39	84.99	91.03	-----
November.....	99.93	104.58	107.53	102.93	92.43	88.80	-----
December.....	97.82	104.63	105.84	98.97	89.32	87.90	-----

Source: Adapted from IMF value sa of the SDR, as published in "International Financial Statistics," IMF, Washington, August 1980, p. 10.

Notes: A full report of the composition of the SDR is provided in the "Annual Report 1978" of the IMF, on pp. 56-57. The above index is obtained by subtracting \$0.40 (for the USA base factor) from the monthly values published regularly in the "sa" series of the IMF's "International Financial Statistics" and dividing the remainder into \$0.80635 (for the residual base factor). Both the above index and the Federal Reserve multilateral trade-weighted average index stand at 100 for June 1974. For December 1979, the above index stands at 87.9 and the Federal Reserve index at 86.3.

TABLE 17.—FLUCTUATIONS IN THE FOREIGN EXCHANGE VALUE OF THE U.S. DOLLAR, IN RELATION TO THE WEIGHTED BASKET OF 15 OTHER MAJOR CURRENCIES THAT TOGETHER WITH THE DOLLAR, MAKE UP THE VALUE OF SPECIAL DRAWING RIGHT (SDR), OF THE INTERNATIONAL MONETARY FUND (IMF)

[All values are end of month]

	Index	Down (percent)	Up (percent)	Period (months)
June 1974 base date.....	100.00	-----	-----	-----
August 1974.....	102.77	-----	-----	-----
February 1975.....	93.72	-8.8	-----	6
February 1975.....	93.72	-----	-----	-----
September 1975.....	105.50	-----	+12.6	7
September 1975.....	105.50	-----	-----	-----
May 1976.....	108.63	-----	+3.0	8
September 1977.....	108.63	-----	-----	-----
September 1977.....	105.61	2.8	-----	16
October 1978.....	105.61	-----	-----	-----
October 1978.....	84.99	-19.5	-----	13
November 1978.....	84.99	-----	-----	-----
November 1978.....	92.43	-----	+8.8	1
September 1979.....	92.43	-----	-----	-----
September 1979.....	87.86	-4.9	-----	10
October 1979.....	87.86	-----	-----	-----
October 1979.....	91.03	-----	+3.6	1
December 1979.....	91.03	-----	-----	-----
December 1979.....	87.90	-3.4	-----	2
December 1979.....	87.90	-----	-----	-----
March 1980.....	94.73	-----	+7.8	4
March 1980.....	94.73	-----	-----	-----
June 1980.....	87.23	-7.9	-----	3

Source: See table 16.

All other periods, however, have been volatile, and 1977-80 has been more volatile than the earlier years. The following is a simplified picture of the dollar's course, in international exchange value, during these years of volatile floating:

	Percent
1. August 1974 to February 1975 (6 months).....	-8.8
2. February 1975 to September 1975 (7 months).....	+12.6
3. September 1977 to October 1978 (13 months).....	-19.5
4. October 1978 to November 1978 (1 month).....	+8.8
5. November 1978 to September 1979 (10 months).....	-4.9
6. September 1979 to October 1979 (1 month).....	+3.6
7. October 1979 to December 1979 (2 months).....	-3.4
8. December 1979 to March 1980 (4 months).....	+7.8
9. March 1980 to June 1980 (3 months).....	-7.9



The above tabulation minimizes volatility, because it records values not on the highest or lowest day of a movement but uniformly at the end of the month. Item (4) reflects the great publicized Federal Reserve foreign exchange management initiative of the decade; as is shown in item (5), it was more than half eroded in the subsequent 10 months, after the music had stopped. This erosion was fueled largely by a huge flow abroad from United States banks. Item (8) reflects the enormous speculative movement into dollars, which peaked in March–April 1980, when U.S. interest rates were pushed to heights unprecedented in American history, after the U.S. economy had begun its steep fall into recession. And item (9) is a bland statistical notation of the “unwinding” of that foreign exchange speculation, when the interest-rate tower collapsed.

In all, the foreign exchange market has experienced enough rumbling and shaking, falling and rising, to make a significant contribution to the American inflation of the 1970's. Sober reflection can anticipate that the same international monetary system, if continued, will make a further weighty contribution to price inflation in the next decades.

Seeing these things, and not being paralyzed with admiration of the free-floating market, a handful of nations have taken steps to form a European Monetary System.<sup>26</sup> This EMS has been in operation only since March 13, 1979; it is therefore too soon to close an evaluation. All of its members are committed generally to the fine words of collaboration for monetary stability and economic growth, but with varying meaning. For six currencies in the system (the German mark, French franc, Belgian-Luxembourg franc, Dutch guilder, Danish krone, and Irish pound), their governments accept a pegged—but adjustable—parity, and they commit themselves to intervene in the foreign exchange markets, if necessary, bilaterally in relation to each member currency, subject to a margin of 2¼ percent up or down on either side of the parity line.<sup>27</sup> With respect to the Italian lira, the Government of Italy has been accorded 6 percent margins, instead of 2¼ percent. The Government of the United Kingdom, for its part, has accepted only a Pickwickian membership, without any obligation for intervention. The intervention members pledge one another unlimited short-term credit. Moreover these members have moved toward a common European Currency Unit (ECU), which can function, among EMS members, somewhat like the SDR of the IMF. The ECU was created by swaps of dollars and gold (at “market-related” values) from the members’ official reserves.

The first year’s experience of the EMS illustrates how hard it is for such a union to function when major currencies (the dollar, sterling, the yen, etc.) are fluctuating widely outside it. For the EMS, the year 1979–80 was troubled specially by the gyrations of the dollar. (Lesser difficulties arose from special problems in Denmark.) From May 1979 to mid-September, the German mark rose against the dollar by about 7½ percent. Consequently—though most EMS currencies were moving up together—it was decided to up-value the parity position of the mark against the Danish krone by 5 percent and against all

<sup>26</sup> A succinct professional account of its first year is provided by the Fiftieth Annual Report of the Bank for International Settlements, Basle, 1980, pages 141–143 and 149.

<sup>27</sup> This 4½ percent band is very close to the 5 percent which Harry White suggested, before World War II, as a possibly desirable widening of the “gold points.”

other EMS currencies by 2 percent. A month later, the special problems of the Danish krone were handled by a further reduction of 4.76 percent in the krone's parity in relation to all other EMS parities. Meanwhile, however, the mark—and the other EMS currencies—continued to rise against the dollar: the mark touched 58.82 cents in December, about 12¼ percent above May.

Shortly thereafter, the turbulence reversed direction. The mark (and the entire EMS) was caught up in the consequences of the American interest rate crescendo that climaxed early in April 1980. From December to early April, the dollar soared, and the mark fell by 13½ percent, to 50.57 cents. Helmut Schmidt then permitted himself an observation of how convenient it would be (and, no doubt, how good for German exports) to have a mark that was two to the dollar. The Swiss franc experienced an even greater exodus of the runners to the high interest American market. From January 3 to April 1, the Swiss franc dropped 16 percent in relation to the dollar. By May, however, the American interest rates had collapsed, and the mark had risen in relation to the dollar by fully 10 percent from its April low. In June, it was more than 11 percent above that April low. Impressively, throughout this American firestorm, the EMS group held within its agreed parity band. However this first year experience underlined the exposure of the EMS endeavor to battering from the major world currencies outside its membership. It is an endeavor that engages sympathy, but may also need it.

#### D. "Substitution Account"

A less engaging drive, for which the United States dollar is the centerpiece, is that for the establishment, at the International Monetary Fund, of what is now called a "Substitution Account." In this proposal, what are to be turned in for "substitution" are the non-American official holdings of United States dollars. To be received as a substitute is an additional supply of SDR's. The proposal reaches back to the IMF's "Committee of Twenty," which sat—under circumstances very different from those of the present day—from 1972 to 1974. Some, viewing the "Substitution Account" as one to convert a myth into a profit, had hoped the idea would quietly die. However, at the Interim meeting of the IMF in April 1980, this hoped for demise was shown to be at least premature in its dating.<sup>28</sup>

The foreign official holdings of dollars in question are most comprehensively measured, by the U.S. Department of Commerce, as amounting, on March 31, 1980, to \$151 billion. Using a narrower coverage, more specifically related to official *monetary* reserves, the U.S. Treasury and the Federal Reserve System record, for the same date, \$142 billion. (As the difference is nothing to our purpose, and the narrower figures are available monthly, we use them where turning points are involved.) As of the same March 31 date, the IMF reports the total official monetary reserves of its members, other than the United States and *apart* from gold, as having a value more than twice as large as their dollar holdings alone—a total reported as equal to 268.57 billion SDR's, then equivalent to about \$336 billion. At the same time, the same members, apart again from the United States,

<sup>28</sup> See the statements of Minister Pandolfi and Managing Director de Larosiere as reproduced in the IMF Survey, Washington, May 5, 1980.

reported themselves as also having 669 billion ounces of gold in their official monetary reserves; at a prevailing market price in the general range of \$600 per ounce, these gold holdings came to over \$400 billion. (And no holding country had an international obligation to refrain from selling gold to the market. Buying is a different matter.) A dollar balance of \$151 billion may therefore be said to be somewhat more than one-fifth of the market value of these countries' official holdings of all foreign currencies and gold.

In the first three months of 1980, the commodity imports of the same IMF countries, always apart from the United States, had a value of \$402 billion. For both commodities and services, it is estimated that about two-thirds of all international transactions are denominated in U.S. dollars. Dollars are therefore a desirable form of liquidity. And only a few per cent of all foreign official dollars are held in non-interest bearing demand or transactional form. Under these circumstances, and in a world of floating exchange rates, it is a vanity to debate whether foreign official dollar holdings of \$151 billion are now "large," "small," or "just right." In defense of the last evaluation, there is the simple observation that any official holder can sell his dollars, on the foreign exchange market, every day.

In the indolence of the mind; there is still some carryover, from the days of fixed monetary parities, of the notion of a dollar "over-hang". Certainly from August 15, 1971 (when President Nixon formally suspended the access of foreign monetary authorities to convert their dollars into gold), and until March 16, 1973 (when all IMF parities were formally abandoned), there was significant meaning in the idea of such an "over-hang." A Central Bank or Treasury could acquire dollars which it could not convert into gold, at official values. Yet this national Monetary Authority might also not be able to sell those dollars except at a price below the internationally agreed parity. After March 16, 1973, there was no covenanted parity. But the new world was not yet brave—or fully conscious of how it had changed.

A country could still be unhappy with its dollar holdings. This country might not be rushing forward to exchange (all, or most, or a substantial part of) its dollar holdings for other currencies. Those others might be thought worse (less stable, less negotiable) even than the dollar. A national Monetary Authority could now dump its accumulated dollar holdings, or sell them from day to day as acquired. But then currencies other than the dollar (including the currency of the seller), becoming relatively scarce, would come to cost more. At cheaper international exchange rates for the dollar, the United States would expand its exports of goods and services. At higher values for other currencies, countries other than the United States would find their export potentials relatively curtailed. Governments doubted their own ability to maintain full employment in their national economies after a large shift toward higher U.S. exports. Seeing no better alternative, they held on to their monetary reserves of dollars. But they did not cease from dreaming of some good fairy that would come forward to guarantee them *a stable or appreciating* store of value in exchange for their dollars. From time to time, moreover, the dream took a sharp turn. Absent a good fairy, why not the United States? (Did not the dollars come from there?) And, if not

the United States, why not the IMF? (Is it not the IMF's business to make moneys good?) It was in this temper—pushed forward also by the old sentiment of a dollar “over-hang”—that the ideology of an IMF “Substitution Account” was born.

The record is sufficiently clear. In all the five years 1965–69, the dollar assets of foreign official reserve agencies made a net accumulation of only the trifling amount of \$341 million: for those years, there was surely no addition to an “over-hang.” However, in the next four years, as the crisis of the parity system built up, the dollar holdings of foreign official reserve agencies swelled by \$50.1 billion! On the U.S. Treasury measurement, these holdings came to \$66.9 billion at the end of 1973. Before the 1971 closing of the gold window, informal pressure had been exerted to minimize gold conversion. And, after the closing, the pressure was overt. A reasonable observer could then judge that a substantial part of the \$66.9 billion might well represent an “over-hang” of dollars, of which foreign monetary agencies were anxious to rid themselves.

After March 1973 however, the system was transformed. Holders could sell, at the market price, though of course the price might not be as high as they would wish. But *they did not sell*. On the contrary, foreign official monetary reserve agencies continued to add to their dollar holdings, year after year. In five years, from the end of 1973 to the end of 1978, they added \$95.3 billion. One month later, in January 1979, the accumulation peaked (for the present) at \$162.7 billion. Thereafter, in only four months—as though to provide an object lesson of the possible—this official store of dollar liquidity fell by \$21.6 billion. At the end of May 1979, it stood at \$141.1 billion. And in the subsequent eleven months, to the end of April 1980, though there was turbulence, the total official holding *retreated* slightly to \$140.5 billion. On the widely accepted—though not impeccable—“official settlements basis” of measuring “deficit” and “surplus,” the United States was in balance of payments surplus from January 1979 through April 1980. This was the most considerable period of such surplus since 1968–69. Before this sharp turn, some had come to believe that such a U.S. surplus could not come again.

It is against this background that the moribund question of an IMF “Substitution Account” has, most peculiarly, been revived. More than revived. It has been put forward, at the Hamburg interim meeting of the IMF, in late April 1980, as the high path to the monetary stabilities of the future. Three questions therefore arise—only one at all serious:

- (1) How is interest to be paid on deposits in the Substitution Account?
- (2) What are to be the terms of entry and exit for funds deposited in the Substitution Account?
- (3) If an exchange-rate guarantee is to be given for dollars deposited in the Account, how is the guarantee to be provided?

Interest is not a problem. As the Government of the United States pays interest, through its Treasury bills and notes and bonds, when dollars are placed directly by any government, there is no reason why the Government of the United States, should not pay the same interest

when the same dollars come to the U.S. Treasury through a Substitution Account trustee—or any other trustee.

Entry and exit are not a problem. Only voluntary entry and exit are possible. Even the most enthusiastic member of the IMF management now concedes this point. No IMF member will place his dollars in the Substitution Account if he believes he can administer them more profitably himself. (This point has been spoken.) He may prefer to make his own dollar placements. He may wish also to move his own money, at his own option, to sterling to marks to yen to francs, etc., etc. Exit is, in the end, as much an area of voluntarism as entry—though, in IMF discussions, the requirement of exit is now still surrounded by obfuscating language. No country will put its money in unless it can also take the value out. If a country's monetary management loses nothing by selling its Account SDR position (or part of that position) to a willing buyer, it will practice that courtesy. Otherwise the country must have exit in current money.

Exchange guarantee is also simple, though the sponsors do not yet see it so. There is no reasoned basis for any guarantee except by those who put their dollars into the Substitution Account and then presumably in proportion to their placements. If these present holders of dollars wish to form a special co-guarantee club, there seems no need for anyone to stand in their way. Regrettably however, the IMF management does not even speak clearly about exchange guarantee, no guarantee, or co-guarantee. It repeatedly makes the ambiguous pronouncement that it wishes to assure "maintenance of financial balance in the account." And the IMF management then proceeds to make two really astounding suggestions for achieving "financial balance."

*First*, to allocate some part of the appreciation of the gold stock of the IMF to insuring the Substitution Account's value. This gold is now carried at 35 SDR's per ounce (about \$46.35 per ounce at the SDR's value of June 30, 1980). It could indeed be a handsome present to give the participants in the Substitution Account the appreciation from such a valuation as a guarantee fund. The IMF has in the past made a modest distribution of such appreciation, but that distribution was given in charity to the poorest countries. It has not previously been suggested that the charity of the IMF should be distributed to its members in proportion to the magnitude of their dollar holdings.

*Second*, to invite the Government of the United States to make ". . . commitments, shared in a way still to be determined . . ." to act as the co-guarantor. Dollars were accepted in payment, at a value not enhanced by carrying a special guarantee. Now the value of the dollars of some particular holders is to be increased by a United States contribution. Any participant in the Account may enter or leave, with such dollars as he chooses to put in or take out, but the United States would remain as Account guarantor. This would be, for the United States, to accept the role of "Heads you win, and tails I lose." Even moderately bright children do not voluntarily play such games.

It is to be hoped that the proposal of an IMF Substitution Account will quietly lapse into inattention.

### *E. Toward a Better Dollar*

Without such non-starters as a Substitution Account, how bad is the international posture of the dollar? How much better can it be made? What is the way to make it better?

Let us not begin by assuming that floating operates to reduce the volume of productive international business. For international trading of commodities and services, our regime of the floating dollar does not constitute a substantial deterrent. Sophisticated merchants know how to protect themselves. If they would rather speculate than insure, they have that option too.

Also for long-term international equity investment, the system of floating is not a major barrier. Never in American history has the international movement of investment—outward and inward—been greater than in 1974–80, when the regime of floating has been firmly ensconced.

For international lending and borrowing, the floating system presents more obstacles. But not decisive ones. (There are greater problems to all lending, for any term beyond the shortest.) The international lender can always restrict himself to accepting only obligations payable in the currency of his reliance. Basic socio-political and economic instabilities, quite apart from currency floating, are more limiting factors in international lending.

In economies of price asymmetry, like those now dominant, floating currencies operate to increase inflation. (Depreciations push prices up more than appreciations pull them down.) But we must clear in our minds as to *why* inflation is objectionable.

Perhaps most important is the fact that inflation impacts very differently on the diverse sections of a community. Prices and incomes do not all move together. Inflation therefore makes for social stress. It sharpens sentiments of deprivation and injustice. Even those who get more money feel cheated, because they thought they would be better off when they had this much.

However, the influence of inflation on economic growth is more complicated. In general, inflation tends to transfer real incomes from those who save in money deposits and debt securities to those who invest in physical assets (including homes), equity ownerships, and operating businesses. So far, inflation is stimulative of economic growth. And indeed there is no reason to deny that a *steady* rate of inflation would heighten economic growth—if not for the consequences of the socio-political stresses that are inflation's byproducts. It is the unsteadiness, the *uncertainty* of the rate of inflation that is a deterrent to investment and growth. It is the uncertainty that transfers priority to the speculator over the more cautious investor.

Taking together the social stress that inflation enhances, and the investment uncertainty that it adds, we do not reject the prevailing judgment that inflation is undesirable. And we do not doubt that the floating currencies which have prevailed since 1973 have been a factor in the high level of inflation that has characterized these years.

However it is necessary to relate these foreign exchange movements to other influences. In our presentation above (particularly at pages 62–66), we have referred to three groups of inflation factors. We

name them: first, domestic "Stagflation" second, "OPEC" energy; and third, international "Floating." But we are not acquainted with any method of disentangling the three groups, so that we could assign each of them a separate weight.

Let us take the two worst years of economic performance of the 1970's—the deep recession years 1974 and 1975. They included the highest year's rate of unemployment, the lowest year's rate of gross private domestic investment, the largest year's total government deficit, and the highest year's rate of inflation, of all the 30 years from 1950 through 1979. The GNP deflator indicated a price rise of 9.7 percent for 1974 and 9.6 percent for 1975. Are we to say then that this is the classic recession of domestic Stagflation? Or are we to remember that these were also the years of the first Oil Price Revolution and of great fluctuations in newly floating foreign exchange markets? A similar disentangling difficulty arises for the time (1979–80) of what we now name the second Oil Price Revolution. And perhaps we should now be wary of the impulse to expiate our guilt for poor American economic performance by attributing all that goes wrong in economic affairs to domestic misconducts in the matrix we name Stagflation.

Nevertheless, for what it is worth, and with all acknowledgment of subjectivity, we suggest that, in so far as United States' price inflation is concerned, we may have listed these three groups of factors—Stagflation, OPEC, and Floating—in the order of their weight.

We wish that the World City were so governed, and economic changes were of such nature, that we could recommend a move toward greater international dollar stabilization somewhat reconcilable with what James E. Meade has suggested (as summarized on page 62 above). But there is no such trusted world government. And, in our view, there are no such neutrally knowable "equilibrium trends" as he assumes.

A solution by American direct joinder with the float of the European Monetary System is not appropriate. (And it is would presumably not be welcomed.) The dollar is not a regional currency. It has no place in any mere regional grouping, nor in any mere bilateral pegging—undertaken by the United States—with any other one currency.

If an overt stabilization is then to be sought through adjustable pegging, no other peg has so good a claim as the SDR. Only that peg can be conceived as a step toward a more sophisticated system that could one day include, variously clustered, all or most of the currencies of the World City.

Probably, if the United States were to choose an adjustable peg to the SDR, the gain—for all the world—would be maximized by finding the courage to announce this choice, not keeping it an unannounced internal household policy. The opportunity of gain has a price, particularly if the subsequent stabilization achievement is not notable. The generation of Central Bank and Treasury money managers can not be expected to welcome the price.

An unadjustable peg would be a disaster. Supportingly disastrous would be the encouragement of an ideology which suggested that it would be a great achievement, for the United States and the World City, if the peg were not moved for ten years. (Maynard Keynes and Harry White would again turn in their graves.) National price levels, national economic growths, the demands of nations for one another's

goods and services, the tides of investment, the desires of various monetary authorities to employ a major currency (like the dollar) as a reserve of liquidity—all these things, and their cumulative effects, will certainly change in far less than a decade. (It was a great gain for the vitality of the EMS to have made two changes of peg, one general and one special, in its first year.) We would expect there to be a considerable increase in foreign official desires to hold dollars as monetary reserves after the announcement of a planned dollar-SDR peg. But such an increase can not be certain, nor its magnitude known in advance. No more can it be certain whether the Japanese automobile industry will continue to increase its share of the world market for automobiles, displacing the share of American-origin producers. But it is certain that—so far as this trade weighs—if Japanese exports do so increase their automobiles share, the yen should tend to rise and the dollar fall. And we can not now know these things.

If the United States were to peg the dollar to the SDR, its band of flotation up and down, on each side of the central point, should perhaps initially be modestly wider than the  $2\frac{1}{4}$  percent of the inner EMS group. The mode of expression of the width of this band would, of course, be a special one, since the U.S. dollar is itself a major component of the SDR currency basket (with a value of 40 cents out of a total equivalent to \$1.20635 on the first day of formulation).

The U.S. peg would again be a disaster, for all the world, if there were no disposition to move it up as well as down. Indeed if the internal production and price regime of the United States were functioning properly in 1980, there would today already be a serious question of up-valuation. It is problematical whether it can be proper for the United States to have a nil or negligible deficit balance on current account, in 1979 and 1980, when OPEC had a current account surplus of something like \$70 billion in 1979 and may be experiencing a surplus in the general range of twice as large in the second half of 1980. But this problem is painfully compounded by the drastic underemployment of the American economy, which greatly weakens the propensity to import. Such issues will not today be left to a supranational authority.

If there were courage to move toward greater international exchange stabilization for the dollar, then there should also be courage to begin a consistent program of selling at least 75 percent of U.S. monetary gold holdings. At the end of June 1980, the American official gold hoard was just under 265 million ounces. At a market price around \$600 per ounce, this represents a value of \$159 billion. Perhaps an initial decision might be made to sell 200 million ounces during a period of something like ten years. Disposal might then take place at a rate of perhaps  $1\frac{1}{2}$  or 2 million ounces per month. Of course it cannot be presumed that a price like \$600 per ounce would be obtained. Total world gold production in 1979 is estimated under 40 million troy ounces, and the 1979 year's total absorption of gold by non-monetary purchasers is estimated under 60 million ounces. United States sales would therefore be a relatively considerable volume. And the United States should properly give advance notice to all other members of the IMF, placing them in a position to sell also, if they wish. Such a considered and steady disposal of monetary gold, together with other stabilizing monetary policies, would operate to strengthen the position of the dollar among world currencies. This



strength would make a distinctive, long-term contribution toward the abatement of inflation in the United States.

In all these international monetary matters, however, there is danger of exaggeration. The better ordering of the international monetary regime of the dollar is a matter of importance. Of itself, however, it will not ensure a productive and improving American economy.

### VIII. INTERNATIONAL BANK REGULATION AND "RECYCLING"

In 1980, the major financial centers of the World City are awash with money. Everywhere—and in the United States not less than elsewhere—the great private banking institutions today strive for more freedom from "interfering" government regulation. However these banks are also, just now, increasingly—and nervously—asking that national governments and intergovernmental financial institutions (the IMF, the World Bank) erect for them a strong safety net. They fear that, in the absence of such a governmental and intergovernmental net, the structure of international credits which they erected in the 1970's may soon—in 1981, in 1982, or at the next oil "shock"—experience a massive collapse.<sup>29</sup>

In the seven years 1972–1979, the economies of the non-Communist world may have increased their real output at an average rate approaching 5 percent a year. This implies a real growth from 100 in 1972 to something approaching 141 in 1979. Meanwhile, in the same seven years, the deposit banks of the major non-Communist countries increased their gross *foreign* assets (their gross claims on foreigners) from \$247 billion to \$1,399 billion, or on a scale from 100 to 567. (See the attached Table 18.) This increase involves an average annual rate of growth, in the foreign assets of the deposit banks of the World City, somewhat above 28 percent.

TABLE 18.—FOREIGN ASSETS OF DEPOSIT BANKS, 1972–79

(In billions of dollars equivalent, at yearend; except percent)

	1972	1975	1978	1979	1979 as percent of 1972
Total, 73 countries.....	\$247.0	\$555	\$1,122	\$1,399	567
United Kingdom.....	60.0	125	213	281	468
United States.....	19.0	57	125	144	771
France.....	20.0	41	98	123	623
Switzerland.....	25.0	48	89	117	470
Bahamas.....	18.0	55	105	112	608
Luxembourg.....	9.0	29	68	92	977
Germany.....	16.0	39	75	85	539
Netherlands.....	8.0	20	47	57	681
Belgium.....	8.0	18	39	49	599
Italy.....	21.0	19	30	34	161
Singapore.....	3.0	11	24	33	1,253
Japan.....	9.0	13	21	30	338
Caymans <sup>1</sup> .....	3.0	7	18	27	861
Hong Kong.....	2.0	NA	21	26	1,203
Canada.....	8.0	14	22	25	287
Bahrain.....	.1	2	21	24	2,155

<sup>1</sup> U.S. banks only, drawn from U.S. reporting, 1st entry 1974.

Source: IMF "International Financial Statistics," August 1980, p. 40.

Note: The above 16 countries hold 90 percent of the foreign assets of the 73.

<sup>29</sup> See, for a thoughtful expression, the highly capable paper of the Managing Director of the Deutsche Bank, Willfried Guth, "The Problems Raised by the Growth of International Bank Lending," New Orleans, June 1980, especially pages 28ff.

During those seven years, the United States was painfully laggard in economic growth. From 1972 to 1979 (from the eve of one recession to the eve of another), the average increase in American real domestic output (GDP) was only 2.9 percent a year, while the American labor force expanded by 2.4 percent a year. However, the United States banking community did not lag in the acquisition of foreign assets. If we consider only the gross assets booked to the offices of banks seated in the United States at the end of 1972 and at the end of 1979, the increase in this book amount of claims on foreigners was from \$19 billion to \$144 billion, or in the ratio of 100 to 771. The annual average rate of increase comes to just below 34 percent.

However, the \$144 billion of gross foreign assets booked to bank offices seated in the United States at the end of 1979 is a great understatement of the reality of American banking participation in the affairs of the World City. The additional \$27 billion shown in our table under the mytho-poetic name "Cayman Islands" is entirely the activity of mainland American banks. None of that activity has more than a purely nominal relationship to the islands of the Caribbean named "Caymans." The Caymans are not a financial center. The banking activity conducted in their name is actually done elsewhere and "booked" to this name, first, to avoid bank regulation and bank reserve requirements and, second, to facilitate customer concealment and customer tax avoidance.

The Bahamas serve purposes similar to those of the Caymans. However, there the reported \$112 billion is not entirely (perhaps not even half) of direct United States mainland origin. And similar—but more entangled—"offshore booking" characterizes the United States banking participations in several other countries which appear in our Table 18.

As of the end of 1979, the foreign branches of U.S. banks reported gross asset claims on foreigners of \$317 billion. (But we must be careful! IBM Europe, S.A., and IBM Japan, Ltd. are both "foreigners" alike to Morgan's of New York and to Morgan's of London.) Of the \$317 billion total, some \$115 billion consisted of the asset claims on foreigners of the branches of American banks seated in the United Kingdom and \$81 billion of their branches booked as in the Bahamas and Caymans. Many other countries hosted the bank offices for the remaining "offshore" \$121 billion. However even this \$317 billion gross addition to the \$144 billion held directly by the U.S. parent offices does not complete the picture. These two sectors still omit the (much smaller but extremely diverse) operations conducted abroad for U.S. holding companies not through branches but through subsidiaries, which do not report publicly on the same regular basis as do branches.

Foreign branches can play an accommodating role in the lives of their United States parents. One facet of this accommodation is suggested by the bare statistical record of that part of the assets booked as "in" the Caymans and Bahamas which consists of these branch banks' claims on their U.S. parents. At the end of 1976, the assets in claims on parents in these islands amounted to only \$1.1 billion. But at the end of November 1979 these branch assets in claims on parents were booked as \$19.9 billion: next month they fell to \$15.2 billion: two months later, in February 1980, they had been rebuilt to \$22.4 billion: again two months later, in April, they had contracted to

\$15.3 billion. These Caribbean branches are named, by their U.S. parents, as suppliers and users accordion-like, of amounts in excess of \$7 billion within 60 days.

It should not be thought that—in accordance with some restricted idea of “commercial” banking—the foreign financing of the U.S. banking community consists only in short-term advances, utilized to facilitate the current international movement of goods and services. On the contrary. For the end of 1979, the three national monetary authorities of the United States Government collaborated in a study of two important components of the American international banking position: (1) “cross-country” lending (i.e. the lending by American bank offices in one country to borrowers in another country) and (2) “cross-currency” lending (i.e. the lending to a borrower in a currency other than that of his own residence). This study found that \$71.8 billion of such “cross-country” or “cross-currency” lending was for periods over one year. Some \$53.2 billion was loaned for 1 to 5 years. Some \$18.6 billion was loaned for over 5 years. The American banks were lending “long” what they were borrowing “short.”

The American (and British, and German, and other) banks had no considerable funds other than “short.” For the four leading American international banks, capital in 1979 did not average as much as 4 percent of assets. These banks could loan only their funds from demand deposits, time deposits, certificates of deposit, etc.—all “short.” They counted on the inflow from OPEC and others, operating, from day to day, in the firm conviction articulated even by one of their sophisticates: “. . . there will always be investable funds somewhere in the world financial system . . .” (Guth). How else could American banks have remained in the forefront of so many syndicates, formed by leading banks of several nations, to provide the bulk of private financing for countries with balance of payments deficits?

Quite naturally, cross-country and cross-currency borrowers are not always those conventionally ranked as gilt-edged. We attempt no ranking. However it should be noted that, at the close of 1979, U.S. banks had lent, cross-country or cross-currency, to “non-oil exporting developing countries,” for periods over one year, a total of \$27,217,000,000; of this total, \$20.7 billion was then to be outstanding for 1 to 5 years and \$6.5 billion for over 5 years. Additionally, American banks had lent to east European Communist countries \$4,122,000,000, of which \$3.2 billion to be outstanding then for 1 to 5 years and \$0.9 billion for over 5 years. In the 1970’s, there has been no significant private international bond market for such lendings. Bank syndicates have substituted themselves for bond buyers, lending for up to 8 years, with floating interest rates based on a differential above the London inter-bank offering rate (LIBOR), supplemented by “front-end” fees and commissions. It is remunerative business—as long as the borrower pays.

The American economy has lagged. American international banking has not.

#### A. “Free” Banking

What the American international banking community would like would be to move “the Cayman Islands” formally to New York City. Alternatively what is done could be called the establishment of an

"international banking free zone" in New York City. (The two moves are substantially identical.) An unimaginative materialism requires that islands be in some physical place, or that a "free zone" have a physical location. Such a lack of imagination leads to an unnecessarily expensive duplication of offices and telephone exchanges. And, in truth, with a little more imagination, New York need not be allowed to preempt. All banks in the nation that do international business, or rather their international departments, could be found to be "in the Cayman Islands" or "in the international banking free zone." And thereafter perhaps, by one further leap, national chauvinisms too could be set aside. Why the Caymans? Why London? Why Luxembourg? Why a "New York" free banking zone? Why not one free international banking zone for the whole World City?

Short of these more creative innovations, the ideal requisites of an "offshore" banking location are regarded, by the international banking community, to be the following:

(1) The Host sovereign must admit the distinction between "residents" and non-residents, and make all banking transactions with non-residents free of regulation.

(2) Free of regulation means, for bankers, also free of legal bank reserve requirements. Bankers are found adequately controlled by their own prudence.

(3) What is free of regulation must be free of taxation, both for bankers and their "offshore" customers. What happens when bankers or customers leave the free zone is somebody else's business.

(4) If the Host is to be really first-rate, he must not be confining in interpreting who is a non-resident or what is a non-resident transaction.

(5) The same branch (or subsidiary) of a foreign parent which deals in its international department only with non-residents should be allowed, with another set of accounts, to deal with residents, to accept resident deposits, to make resident loans and to do all the things a resident branch (or subsidiary) may do. For this reason, if physical offices must be, it is better for them to be on the streets of London or New York, rather than on the Cayman's cliffs.

For a United States bank, it makes a great difference whether its offshore office can be a tax-free subsidiary or only a branch. A branch is legally, for American tax purposes, a mere part of its parent. Though the branch be unburdened of taxes in the free zone, the parent will have to pay full annual taxes on the branch's earnings to the Treasury of the United States. A subsidiary, in contrast, could allow its free zone earnings to accumulate indefinitely, utilizing these earnings in its non-resident business, until—in some far-off day—these earnings were chosen to be remitted out of the free zone and into the United States.

After deliberate attention to the praises accorded offshore banking of all varieties, it is quite possible to regard all such offshore banking facilities with considered, differentiated dubiety. Indeed we do. We do not deny a utility to the presence of American bank branches abroad, in great financial capitals, where their local presence—even in this day of advanced communications—can be helpful to the con-

duct of business. Nor do we see any objection to retail banking abroad, where welcomed by the Host country, like any other retail business; such retail banking supplies a local service and works primarily with funds raised in the country of operation. Otherwise, we see no gain to the World City, nor to the United States, from the indulgence of the pseudo-capitals of finance of the Caymans, the Bahamas, or Luxembourg—not to mention other (more marginal) cases. And we see no merit—despite their eminent sponsors—in the erection, on American territory, of “international banking free zones.”

Such free zones, like the pseudo-capitals of finance in foreign territories, are mere havens for the avoidance of examination, regulation, and taxation. Where examination is pointless, regulation unduly onerous, or taxation unwisely burdensome, it is surely in accordance with reason that these errors should be rectified. It is not in accordance with reason that havens for the avoidance of public responsibility should be proliferated in an atmosphere of knowing winks. For “international banking free zones” we have a particularly negative appraisal, and for three reasons.

First, nominally “non-resident” transactions, conducted under such a roof, may become a widening escape hatch for what would otherwise be regulated domestic lending and borrowing. As multinational corporate business widens, it becomes not at all difficult, for ingenious men, to convert regulated domestic transactions into unregulated offshore transactions. A “New York free international banking zone” might well develop into a great university for research into such devices. Even today, Ford of Germany can lend its accumulated earned surplus to Ford of the United States (without paying taxes, as would be required on a remitted dividend). Ford of Germany can then borrow offshore instead of Ford of the United States borrowing—perhaps onshore. As offshore banking grows, the regulated domestic banking structure can be left with handling small business loans and personal accounts. What can be done for other businesses can be done even more smoothly for banks themselves. If there is an unregulated foreign office, that foreign facility can perform many operations that might attract a frown in a regulated domestic office. Having no reserve requirements, the offshore branch office can presumably also do the business more profitably.

Second, if the “offshore” is uncontrolled, dollar money supply is significantly shaped by that condition. Offshore bank offices, like onshore bank offices, expand and contract the supply of money, by granting deposit credits and extinguishing them. Such offshore money expansions and contractions do also affect dollar exchange rates and interest rates. These influences certainly do reach the United States. But even if—by some miracle of isolation—the actions of American banks abroad (abroad physically or conceptually) had *no* impact on the continental U.S. economy, these actions would certainly affect foreign countries. And, in so far as these bank actions do often escape the control of any one or even all foreign jurisdictions, the Government of the United States would hardly be acquitting its responsibilities to the World City by failing to help regulate abroad what it considers necessary to regulate at home. It is no serious answer to such problems to argue—as has been argued—that international regulation is impossible, since there is no World Central Bank. It is not the course of a stable mind first to erect a Utopia and then to

conclude that—absent Utopia—no policy is feasible other than to invite the Devil to take the hindmost.

Third, there is the issue of risk and the propagation of the impact of great financial failures. It is a specious assurance that some bankers purvey—no doubt in good faith—when they say that their international operations are so selective that their ongoing experience of loan losses is greater in domestic than in foreign business. No doubt, in a day-to-day way, they report correctly. However they omit the experience (such as the recent one with Turkey) where there is a complete national moratorium, where all debts have to be extended, some principal lost, some interest arrears cancelled, and where several governments and intergovernmental institutions (the IMF, the World Bank) have to combine in a major rescue operation that is quite beyond the reach of private banks. A distinguished banker, whom we have already quoted above, has said:

It is a fact that we cannot ignore that loan repayment for debtor countries will increasingly be possible only by incurring additional debt. Already in 1978, 27 percent of the funds raised in the Eurocredit market were used to finance maturing debt. This share is expected to grow to 50 percent in 1980 and 65 percent in 1985. Clearly, not a very gratifying prospect.

We do not see the way clear to 1985. However, in the world of 1980 and beyond, where OPEC countries may accumulate a foreign exchange surplus in the range of \$150 billion in a single year, there is no rational precluding of an even more disturbing scenario. Nor can there be assurance that such a scenario will omit to threaten the solvency of major international banks, ample in portfolios of now remunerative obligations. Regulation and examination may not prevent these things. But perhaps they can add to awareness of dangers, can forewarn, and (as in the case of Franklin National) can intervene before the damage becomes widely cumulative.

It is quite beyond our present mission to formulate even headnotes for the appropriate supervision of those American banks that operate abroad and internationally, as well as within the United States. We suggest only three principles.

(1) Every such bank should be appraised and regulated as a consolidated entity, not excluding the imposition of requirements and reserves, for foreign liabilities, additional to those required by a foreign Host.

(2) All regulation of banks of United States' parentage should begin with a presumption—rebuttable only on persuasive demonstration—that practice disallowed in the United States are also not allowed to American banks abroad.

(3) The tax liabilities of all American banks operating abroad should be so structured that there is no tax saving to any such bank from doing abroad anything that the Bank could do equally well (taxes apart) in the United States.

### *B. Recycling*

“Recycling” is now the key word in the pharmacology of international financial soporifics.

If the bottle were labeled, it might bear this legend: “You have bought now. You will pay later.” But the contents have not been approved by the Food and Drug Administration. Nor has the predic-

tive accuracy of such a label been passed upon by the Securities and Exchange Commission. What is clear is that the intermediaries in the "recycling" trade have earned a marketers' profit. Their dealings in this service constitute a large part of the placements in the Euro-dollar and Eurocurrency business. That this trade makes all the participants more than a little nervous may be a substantial justification for its (perhaps temporary) profitability.

"Recycling" is a special name for a simple process. Let us follow the path of a country (Brazil, South Korea, Israel, etc.) that is a heavy importer of petroleum. The importer pays for his oils in dollars: the seller demands that currency. The seller (his banks, his official agencies) deposits such of these dollars as he does not use for imports (maybe a half, maybe a third) in his customary "offshore" bank. The bank receiving the dollar deposit may have its office in London, or Luxembourg, or Hongkong, or elsewhere. Its name may be Bank of America, Lloyd's, the Dresdener, Banque de Paris, or another. In any case, the offshore bank will be one that pays competitive interest rates on the time deposit or negotiable Certificate of Deposit which the depositor chooses, characteristically with a maturity of 90 to 180 days. The depositor has confidence that the great international bank of his choice will certainly repay him. Consequently, if he does not wish to use the money in his deposit or C.D. after the 90 to 180 days, he will extend his deposit or "roll-over" the C.D. In time, and no great time, the oil importing country (its banks, its official agencies), running short of dollars, will approach its international bank for a "medium term" loan. The loan applicant asks for seven years, and he is told that five years will be more manageable, cheaper. He accepts five. The first lending bank does not act alone; it finds other good banks of high standing to "co-manage" the operation. These lead banks find others to join a "syndicate." The syndicate strength indicates that \$500 million is feasible this time, for this borrower. He will pay LIBOR plus  $\frac{1}{2}$  percent or 1 percent or  $1\frac{1}{2}$  percent, depending on his credit rating. He will also pay a "front-end" commission of perhaps 1 percent of the principal. The business is done. A "recycling" has been arranged.

As we have recalled to memory above (page 18), a prominent part of the accredited international financial wisdom of 1974 consisted of the judgment that the First Oil Price Revolution could not prevail. Either the OPEC cartel would dissolve or the international financial system would break up. At that time, OPEC export prices for various specifications of crude oils were moving toward \$12.00 per barrel. At present, it seems likely that, by the end of 1980 (after Saudi "convergence"), no medium grade of crude oil will be exported at a price below \$32.00 a barrel, and the more prized light specifications (largely imported by the United States), will be selling above \$36.00 per barrel (in Africa, in the North Sea, and elsewhere). Now however there are no esteemed personages announcing that the OPEC cartel will dissolve or the international financial system break up. On the financial side, the stabilization of expectations is attributed largely to the perfecting of "recycling." Therefore it is worthwhile to inquire into what has to be recycled and what promise the recycling operation holds.

So far as the petroleum side is concerned, present anticipations may be outlined as in the following table:

## ESTIMATES OF SOME ASPECTS OF WORLD OIL TRADE, 1980

	Barrels per day (millions)	Barrels per year (millions)	Revenues of exporters (billions)	Cost to United States, c.i.f. (billions)
Exports of net oil exporters, including U.S.S.R. apart COMECON:				
OPEC supply.....	25.0	9,125	\$300	.....
Other net exporting countries.....	3.5	1,277	45	.....
Total.....	28.5	10,402	345	.....
U.S. imports of all oils.....	7.0	2,555	.....	\$92

The precisions of the above table do not reflect precise foreknowledge. They are 'simplifications,' probably not grossly erroneous.

We simplify further by dismissing any recycling need for the 1980 oil revenues from the 3½ million barrels per day that we attribute to net oil exporting countries other than OPEC. These others (the USSR, Mexico, China, Norway, Malaysia, etc.) dominantly have heavy foreign debts and elastic import requirements. They will spend their oil revenues to import commodities and services. Nobody needs to "recycle" much money received by them. That money reflects a finished income transfer.

The OPEC group is more complicated. It includes countries that usually quickly spend any incremental revenues from exports, and also countries that do not. Moreover the OPEC group has not reacted to higher revenues in the same way each year. In 1979 (according to the calculations of the Bank of England)<sup>30</sup> the group's total exports rose by \$77 billion over 1978; however the group's imports rose by only \$1 billion! In other years, much smaller increases in export earnings were accompanied by much larger rises in imports. Who predicts these future relationships with assurance is deceiving those to whom he communicates.

In 1979, OPEC's oil exports were about 28.6 million barrels per day, and its revenues from oil exports just under \$200 billion. Apparently, the group's surplus, on current account, that year, was in the range of \$70 billion—perhaps a little less. For 1980, we estimate that OPEC's exports are more likely to be under 25 million barrels per day than over. Revenue should be roughly \$300 billion; the year's increment is about \$100 billion. If we assume that 40 percent of this increment is spent abroad, already in this first year (partly due to higher world prices), the OPEC countries are left with a 1980 Current Account surplus of some \$130 billion. Assume 30 percent, and we derive a surplus of \$140 billion. Greater precision is unfortunately specious.

Obviously, if the OPEC countries have a current surplus of \$130 billion, some other countries must have current deficits totaling the same \$130 billion. In 1980, the United States and the United Kingdom will not be in the deficit company: both are already too deep in recession, too low in imports, to have a 1980 current account deficit. Four other major countries, however (Japan, Germany, France, and Italy), do together import half as much oil as OPEC exports. They can, for any one year, draw down their reserves of foreign exchange and gold.<sup>31</sup> Nevertheless they are in the market for foreign loans and foreign

<sup>30</sup> The Bank adds Bahrain, Oman, Trinidad, and Brunei to the OPEC group and derives a 1979 Current Account surplus of \$74 billion.

<sup>31</sup> For the four together, official monetary reserves of foreign exchange \$105 billion and gold (at \$600 per ounce) \$161 billion, end of May 1980. See Tables 19 and 20.



capital imports. Germany has hurried to borrow directly from the Saudis.<sup>32</sup> And the Japanese financial press rejoices at every sign that OPEC investors are buying Japanese common stocks. Even the strong are trying to borrow back what they have paid.

TABLE 19.—FOREIGN EXCHANGE RESERVES OF OFFICIAL MONETARY AUTHORITIES (APART FROM GOLD)

[In billions of SDR's<sup>1</sup> except percent]

	End May 1980	End year 1973	Percent 1980 of 1973
Total, all countries reporting.....	258.7	101.6	255
Germany.....	32.6	20.8	157
France.....	18.1	3.1	587
Italy.....	16.0	1.8	882
United Kingdom.....	15.5	3.9	397
Saudi Arabia.....	15.5	3.1	505
Japan.....	13.2	8.5	156
Switzerland.....	8.9	4.2	215
Spain.....	8.6	4.9	177
Libya.....	7.1	1.7	426
Netherlands.....	6.8	2.7	249
Argentina.....	<sup>2</sup> 6.5	.9	731
Nigeria.....	5.5	<sup>4</sup> 4.5	123
Brazil.....	<sup>3</sup> 5.0	4.9	99
United States.....	4.4	<sup>5</sup> 0	-----
Belgium.....	3.9	1.6	236

<sup>1</sup> SDR value equals \$1.20635 at end 1973 and \$1.31135 at end May 1980.<sup>2</sup> Argentina, April 1980; Brazil, March 1980; Nigeria, end 1974.<sup>3</sup> 7,000,000 SDR's.

Source: IMF, "International Financial Statistics," August 1980, p. 34. "All countries" means all countries reporting to the IMF, approximately 123, excluding the U.S.S.R., China, etc.

TABLE 20.—OFFICIAL MONETARY RESERVES OF GOLD

	Millions of ounces		Approximate value, in billions, at \$600/oz. end May 1980 only
	End year 1973	End May 1980	
Total, all countries reporting.....	1,020	934	\$561
United States.....	276	265	159
Germany.....	118	95	57
Switzerland.....	83	83	50
France.....	101	82	49
Italy.....	82	67	40
Netherlands.....	54	44	26
Belgium.....	42	34	21
Japan.....	21	24	15
Portugal.....	28	22	13
Canada.....	22	21	13
Austria.....	21	21	13
United Kingdom.....	21	19	11
Spain.....	14	15	9
Venezuela.....	11	11	7
South Africa.....	19	11	7

Source: IMF, "International Financial Statistics," August 1980, pp. 36-38. Total reporting countries, in excess of 120 do not include the U.S.S.R., China, etc.

Recycling or no recycling, no nation to which oil imports are important can look toward the financial future in calm. In the early 1970's, Saudi "light" crude was quoted \$1.30 per barrel. In early summer 1980, it is quoted \$28. By the end of 1980, it will probably "converge" to be quoted \$32 or higher. And he would be a bold man

<sup>32</sup> Germany has now reported an unprecedented Current Account deficit of about \$2.9 billion for the single month of July 1980.

who would wager that the export price of this key crude oil specification will not pass 30 times its dollar price of the early 1970's before January 1, 1985.

How will it go then, in these next years, with what are now distinguished as "non oil-exporting developing countries"? These countries are now variously estimated to experience a combined international current account deficit, already in 1980, somewhat in excess of \$60 billion (before Official Development Assistance). The OECD staff calculates this deficit at \$33 billion in 1978, \$45 billion in 1979, \$60 billion in 1980, and at an annual rate of \$69 billion in the first half of 1981. Who will continue to recycle for these less-developed countries, and for how many years?

The nub of the acceptability of recycling rests with the soundness of one assumption: *he who cannot pay now will nevertheless be able to pay later*. But will he be able to pay later, if oil prices are raised again and again? How firm is the credit mountain which the international banking community has erected—and is now further elevating—on the differentials above LIBOR? And why should any thoughtful person who has looked soberly upon that mountain sleep more quietly because he has been sung a song of the achievements of "recycling"?

The private international banking community now commonly says that it can see the way through 1980. The LDC's have sufficiently borrowed, have sufficiently accumulated monetary reserves, have enough unused foreign lines of credit, have enough pledges of Official Development Assistance, to come through this 1980 year without many moratoria and reschedulings. For 1981 and beyond, the private banking community however also says, quite directly, that it cannot see the way forward. At that point, the "recycling" function is envisioned as going over increasingly to the IMF, perhaps the World Bank, and to the loans and grants of strong national Governments. At early summer 1980, the unengaged resources of the IMF are in the range of \$30 to \$35 billion. Those resources can be committed only as the IMF modifies seriously the principle that it provides credits only for short-term adjustment problems. After that limit, new resources must be found, under all elasticity of principle.

There is no present ground to look, for an abatement of the underlying deficit problem, toward a moderation of oil price increases. The great oil exporters have learned the lesson that they will be paid more if they supply less, and none will molest them for the withholding. Under these circumstances, this lesson will retain its validity, until alternative energy sources, of equal marginal cost, are in place. At the present pace of expanding alternative energy supplies, hamstrung by the gross neglect of the nuclear option, even the most optimistic rational mind cannot look to see an effective supply challenge to OPEC monopolistic extortion put in place before the late 1990's. And, in North America, that effective supply challenge of the 1990's would—almost certainly—require such a capital outlay, and such measures of environmental construction, for production from oil shales and tar sands, as only the one largest of American private energy companies has yet publicly advocated.

To some extent, the process of "recycling" is engaging because of the hope that the inflation rate will exceed the interest rate. Then the

borrower of OPEC surpluses will be repaying less than he has received. Our studies do not extend to an exact evaluation of this syndrome. In judgment, we believe that it has operated to reduce interest costs rather to extinguish them.

On the portfolio side, this unreality of nominal interest rates has supported the effort of OPEC investors to buy fixed foreign capital assets and such equity securities from which a genuine appreciation can be anticipated. The accumulation of foreign exchange surpluses by the OPEC countries from 1973 through 1979 is variously estimated up to \$255 billion. The Bank of England has traced \$115 billion of this accumulation as still residing, at the end of 1979, in international bank deposits. A considerable further fraction is held in short-term or otherwise readily marketable securities of major Western governments. Should the entire \$255 billion have been converted into OPEC ownership of worldwide fixed assets, the recycling problem would become limited to handling new surplus increments—now perhaps somewhere in the general range of \$150 billion per year.

This recycling problem comes to the fringe—but only the fringe—of the truly fundamental international economic position that has led to the current demand of spokesmen for the poorer countries (politically “the South”) that they be made beneficiaries for “massive transfers of resources,” to flow to them continuously, by irrevocable treaty commitment, from the more prosperous countries (politically “the North”). By a political history beyond our current attention, this demand is advanced loudly to the industrialized West, softly to the industrialized East, and in a whisper to the OPEC debt holders.

Noise volume here is of secondary importance. What is significant is that the “recycling” process is handled only by the great international banks of the West, apart from the hitherto small participation of the IMF. These banks are financial intermediaries. The debts arising are held almost entirely on the Asset side of their portfolios; the corresponding Liabilities are owed to official and private residents of OPEC. As these private Banks approach the edge of fear, they now would like increasingly to forego further accumulation of such (perhaps shaky) Assets, out of reluctance to incur further (overwhelmingly short-term) Liabilities. The private Banks would like to send these borrowers now elsewhere—to the IMF, to the World Bank, to Western governments, no matter, so long as elsewhere, The physician’s role of the financial intermediary becomes less attractive.

As physicians and patients (international banks and deficit borrowers) become increasingly wary of the medicine of “recycling,” the underlying problem cannot fail to be landed in the laps of governments. And, not less than elsewhere, in the lap of the Government of the United States.

# DYNAMIC TRANSFORMATION OF THE WORLD ECONOMY: THE U.S. POLICY RESPONSE

By Richard D. Bartel \*

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### I. INTRODUCTION

Fundamental economic changes have transformed the global economy in the 1970's. Unfolding with extraordinary speed, these changes eroded the U.S. position of solitary strength and dominance in international politics and economic affairs that had remained unchallenged since the end of the Second World War. These changes, moreover, affected the performance of the American economy, as measured by its economic growth, price stability and the expectations of continued advances in our standard of living and quality of life.

Among the many economic changes in the 1970's, two seem to be fundamental: The eight-fold jump in U.S. oil import prices from 1973 to 1979 is clearly the most dramatic, and this revolution of energy prices will affect every aspect of our economic life—production and productivity, investment and technology change, consumption and the quality of life—this decade and beyond. An equally important, more subtle change, is a significant shift in U.S. comparative advantage related to the changing structure of global industrial production over the course of the last decade. Developing countries have emerged as efficient manufacturers of standard industrial goods and have become major exporters of manufactures on world markets. In many respects, this development reflects the success of private enterprise as vehicles of economic growth and technology change around the globe. The consequence, however, is a noteworthy shift in the comparative advantage of the traditional industrial countries, including the United States relative to the developing world. It holds far-reaching importance for public policy with respect to growth, price stability and long-run structural adjustment, not just in the United States, but in all mature industrial countries.

\*Challenge magazine.

*Long-Run Growth and Fundamental Structural Transformation*

The Special Study on Economic Change has as its special congressional mandate a focus on economic change viewed in long-term perspective. In appraising economic developments in the long time span from the Second World War to the present and the potentialities for the next two decades, the authors of the International Area of SSEC research have identified the fundamental economic changes that have long-term consequences for the U.S. economy and public policy. The issues surrounding the oil-price revolution of the 1970's and the changing U.S. comparative advantage surfaced in many of the research papers in this area of research, as key themes in explaining our past economic performance and in assessing prospects for the future.

Oil and energy and changing comparative advantage are judged key changes in the global economic fabric because they have altered the well-established structures of production, trade and consumption in a comprehensive and permanent way. In the wake of rapidly rising energy prices and the shift in the locus of global production toward the developing world, all mature industrial countries must confront economic forces to which they must adjust. These forces have emerged from the fairly continuous process of global economic growth in the 1950's and 1960's. The very nature of that growth was dynamic in the sense that growth altered the established parameters of economic behavior—those coefficients which economists estimate in their models and assume fixed for short-term analysis. Technological changes in production, consumption, transportation, and communication, together with innovative institutions in both the public and private sectors spread quickly to all continents in the last decade.

The importance of these two sets of transformations emphasized here is derived from their dynamic nature. The "creative destruction" of dynamic growth processes in the long run—to draw from Joseph Schumpeter's insights over 50 years ago—permanently altered the established patterns of economic behavior and propelled structural change. The energy crisis was in part spawned by the world-wide demands of energy-intensive growth and technology change and in turn will generate intensified technology change in the future. The emergence of developing countries as efficient manufacturers has added an entirely new dimension to the supply of industrial goods and to the market for manufactures, while placing new demands on sources of energy, raw materials and food.

*Terms of Trade Deterioration: A New Long Cycle?*

An important consequence flows from the two fundamental changes stressed in this paper; namely, the eightfold rise in oil import prices and the proliferation of new supplies of manufactures in the developing world. The economic forces underlying those developments have in the decade of the 1970's already caused a substantial deterioration in the external terms of trade of the mature industrial countries including the United States. Not only did the pattern of both relative prices shift, but the composition of world trade as between manufactures, food and raw materials including fuel was also altered substantially in real terms. The world-wide expansion of demand for fuel and food, reflect-

ing the industrialization of the third world and their rising real income, coupled with the peaking of oil production in the United States, inevitably set the stage for rising import prices for oil consumers. The steady expansion in the supply of manufactures exports brought downward pressures on relative prices of manufactured goods in world markets.

Thus the terms of trade, defined as the ratio of a country's export to import prices, shifted sharply in favor of oil exporters and against importers of both oil and food. While these particular developments of the 1970's are unique, the economic forces they set loose bear a close resemblance to major changes in the past in relative prices that stemmed from fundamental structural changes in world production and demand of manufactures, food and raw materials. Such fundamental economic swings, according to Rostow's persuasive evidence, occurred in four previous periods in the past two centuries. "These shifts in relative prices flowed from gross distortions in the balance between the demands of industry and consumers and the supply of raw materials and food necessary to match them." (W. W. Rostow, *The World Economy, History & Prospect*, Univ. of Texas Press, 1978.

#### *Policy Strategies and Recommendations*

While the oil price revolution and shifting structure of global production reshaped the world economy of the 1970's, the United States and other industrial countries grappled with economic turbulence unprecedented in the post-war period. The United States entered the 1980's confronting stagnating real growth and unprecedented price inflation—an international plague called stagflation. Conventional economic policy not only had to address extraordinary external shocks to domestic stability. Policy was, in addition, constrained by the fact that the United States was an "open economy" fully integrated into a world trade and monetary system characterized by flexible but managed exchange rates and considerable international capital mobility. The economic environment had changed drastically as did the rules governing economic policy in the post-Bretton Woods system. Conventional demand management policies appeared inadequate and seemed ineffective in addressing structural problems deeply rooted in the oil-price revolution and the shifting U.S. international comparative advantage.

Moreover, changes in conventional monetary and fiscal policy and general trade measures now generated repercussions via the external sector with volatile swings in exchange rates and short-term capital flows. The role of the United States as an open economy in a new global environment requires a new strategy for long-term economic policy. The thrust of policy should now be directed toward the supply side of the economy, stressing real adjustment, flexible prices to facilitate the reallocation of resources, stimulus to technology change and innovation, and deliberate efforts to expand productive capacity and sustain growth.

Major themes for changes in policy fall into several categories:

*Macroeconomic, demand management policies* still have an important role to play, despite all the popular criticism. Excess demand should be prevented by appropriate monetary and fiscal policy, to avoid a

general demand-pull inflation which would spill over into a current account deficit. Monetary policy should strive to achieve positive real rates of interest which would encourage savers to hold financial instruments and channel funds into productive investment. It should be recognized that monetary policy in an open economy faced with volatile international capital movements becomes at the same time exchange rate policy.

"Domestic" monetary policy cannot be isolated from an "international" monetary policy. To forget the lessons from the 1970's is to lend support to periodic instability and turbulence generated by inappropriate monetary policy. Fiscal policy should be conceived as a two-pronged instrument: *Budget policy* aimed to achieve an overall public-sector fiscal impact which avoids excess aggregate demand. *Tax incentives* designed to promote capital formation and the reallocation of productive resources between aggregate investment and exports on the one hand, and aggregate government and household consumption on the other. If Federal policy is to be successful in actually expanding supply potential, then incentives will have to be created through the tax system to make attractive *real, after-tax* returns on new capital formation. At times in recent years, real interest rates (including Federal tax incentives) to household borrowers were extremely low, if not negative (mortgage credit, for example), while real, after-tax returns on investment were also very low, despite the low real costs of borrowed funds.

*Industrial policy* should be a central part of long-run policy formulation in the future and it is, unfortunately, an area in which the United States lags behind Japan and some European countries. The latter gained experience in industrial policy during the post-World War II reconstruction when government agencies gradually evolved to carry out the necessary economic analysis and formulate policies for long-term structural adjustment. Industrial policy became a means for facilitating shifts in resources between economic sectors, regions and even internationally, and thereby supplemented price systems which had become calcified by years of government intervention. Industrial policy in the United States should be broad in scope to encompass resource shifts between industries and regions within the United States and should incorporate those issues associated with real adjustments to growing imports and the expansion of export industries.

Once again, issues of industrial structure should be treated in a global context, with international repercussions clearly in mind when analyzing specific policies. Industrial policy is by its very nature industry-specific, or microeconomic in its focus. Long-term policy should develop a strategy which has some conception of the shape of the industrial economy in the future. Questions of the viability of key industries—the steel, auto, shipbuilding industries for example—for the national defense posture should be addressed. The standards of international efficiency should be applied when the Government attempts to raise productivity, to apply new technology, to provide financial aid, or adjustment assistance. The alternatives should be clearly outlined—subsidization of current employment, current wages and current standards of operation; or real efforts to improve the

basic technology and to bring productive efficiency up to international standards.

*Commercial policy* embraces broad areas of export promotion, import restraints and international trade negotiations, and the issues of domestic adjustment to changing patterns of U.S. imports and exports. Current research stresses the need for real adjustment and price flexibility in order to reduce the welfare costs and maximize the welfare gains resulting from international trade and specialization. The United States, in comparison with its major competitor countries, should do much more to promote exports, particularly in providing marketing assistance, introducing small business to the possibilities for exports and in providing finance terms which are competitive with those offered by European and Japanese agencies. In the area of trade restraints, industry-specific measures should be applied when necessary rather than general export subsidies or import restraints which are likely to induce significant responses in the foreign exchange markets that may contribute to wider rate fluctuations.

The United States should continue to play a forceful role in ongoing multinational trade negotiations to break down the non-tariff barriers to our exports, and to develop new rules to govern the trade of both industrial and advanced developing countries. Conclusion of the Tokyo Round and MTN agreements represents a beginning, not the end, of these trade efforts. American agriculture—one of the single most important components of U.S. comparative advantage—has still much to gain from liberalization of world trade, while advanced developing countries should be encouraged to assume responsibilities along with the industrial countries for the orderly growth of trade in manufactures. The thorny problems of economic adjustment resulting from both the autonomous increase in the supply of importables, as well as the rising imports stemming from trade liberalization should be addressed within the broad context of an American industrial policy. In any case “adjustment assistance” will have to be more than extended unemployment insurance.

*The international monetary system* is evolving into a multi-reserve asset arrangement with the central role of the dollar gradually being supplemented by the IMF's SDR and other key currencies. The United States should encourage this development. It tends to reduce the potential conflict between long-run objectives of sustained growth and key currency status, the latter requiring a stable exchange rate. Providing that U.S. growth is generated by capital formation embodying technology change and innovation which enhances productivity gains, sustained growth and a strong trade performance need not be mutually exclusive. Indeed, the continued net surplus on investment income would further reinforce our external position and undergird a stable dollar reserve asset. Nevertheless, the severe real adjustments to the oil crisis and shifting comparative advantage make it essential to preserve dollar depreciation as one of the least costly and most effective adjustment mechanisms in a highly turbulent world environment.

The persistent OPEC current account surpluses into the 1980's underscores the need to provide strong support to multilateral institutions (IMF, IBRD Group) and their financing facilities. Future recycling of petro-dollars will reach a huge scale, probably exceeding the



prudential lending limits of commercial banks alone. The United States should give continued support to the supplemental financial facilities of the IMF, to the proposed Substitution Account and to suggestions for central bank sales of non-dollar instruments to the smaller central banks and OPEC holders who desire portfolio diversification. The United States should encourage ongoing, concerted efforts among central banks, governments and within international agencies to coordinate monetary and fiscal policy, as well as programs for international adjustment and energy policy.

## II. THE OIL CRISIS AND STRUCTURAL CHANGE

### *The End of Cheap Oil and Structural Change*

As the decade of the 1980's began, the United States confronted the harsh reality that the age of cheap energy had undoubtedly ended. The fragility of foreign supplies—OPEC and non-OPEC alike—was dramatically illustrated by the curtailment of Iranian supplies and the Afghanistan crisis. The war between Iran and Iraq dramatized the alarming potential for widespread disruption of Middle East supplies critical to the needs of the industrial economies. The series of Mideast crises and soaring fuel prices in 1979–80 abruptly ended the complacent and sanguine views of the energy scene that prevailed as recently as 1978, when real oil prices actually declined. To continue our current dependence on imported oil in the future clearly makes the United States extremely vulnerable to supply disruptions whether motivated by political, technical or economic circumstances.

In retrospect, the economic turbulence of the 1970's was generated by the eightfold increase in prices, on the one hand, together with the disparate monetary and fiscal policy responses of the major oil-importing countries, on the other. Even though we may be wiser by the lessons learned from the 1970's, the oil supply and demand outlook confronting the United States in the 1980's suggests that the American economy will continue to experience substantial jumps in the real price of oil, coupled with sharp inflationary impulses. Since the U.S. industrial, commercial, and housing capital stock was designed for more abundant, lower cost energy supplies than in other countries, oil price increases will tend to erode our productive efficiency and drag down the rate of productivity growth compared with other countries. In addition, we must expect recurrent problems in recycling petro-dollars, periodic and serious instabilities in the foreign exchange markets and in the international monetary system. Thus all industrial countries and the United States in particular—energy intensive economies that they are—will very likely be subjected to external economic shocks in the next two decades which will undermine their success in achieving sustained growth and price stability.

The analysis of the U.S. oil problem within a global framework indicates a more difficult economic adjustment for the United States than for other major industrial consuming countries largely because of the structural characteristics of the U.S. oil equation. The fact that the United States produces roughly half of its oil consumption has very important implications for its broad strategic position in inter-

national affairs as well as for the specific economic adjustment problems. One the on hand, substantial domestic supplies render the United States less vulnerable to economic collapse in the event of a complete disruption of Middle East supplies, whereas most other major industrial countries are completely dependent on imported oil. On the other hand, viewing the more narrow domestic and international economic adjustment problems, the existence of a large domestic supply makes the U.S. economy more inflation prone as world oil prices rise and give us a much larger oil import elasticity of demand as compared with other industrial countries.

(See Heywood Fleisig, "How OPEC Oil Pricing Affects GNP, Prices and Exchange Rates in the Industrial Countries", Congressional Budget Office, 1980.)

These structural characteristics to the oil and energy problem should not be ignored in both the economic analysis and consideration of policy options.

With respect to the link between oil-price increases and inflation, the U.S. GNP deflator and consumer prices will rise more in response to a given OPEC price hike than will prices in other consuming countries for the following reasons: The direct consumption of energy products is a larger fraction of total U.S. private consumption than is true in other countries. In addition, because U.S. gasoline excise taxes are generally lower than in Europe, for example, percentage increases in U.S. gasoline prices are larger than in other countries after a given rise in oil prices. Further, the U.S. GNP deflator will rise more than in other countries because this country produces half its oil consumption at home, so that any sympathetic rises in domestic oil prices enter into domestically produced value added in the GNP accounts. In a rather ironic contrast, price increases on *imported* oil do not enter into domestic value added—imports are subtracted out of GNP. Therefore, the rise in world crude oil prices does not have a direct impact on the GNP deflators of countries such as Germany and Japan which import virtually all their petroleum needs (See Fleisig).

The structural nature of the U.S. oil problem becomes more transparent when the oil equation linking domestic consumption, production and imports is considered as a framework for examining the impact of price changes. The structural aspect of the problem means the composition of our international commodity trade must change and domestic resources must shift into energy production and out of other sectors. This will be reflected eventually in the structure of U.S. GNP between consumption, investment and exports, as well as between energy producing sectors and other economic sectors. These structural shifts are made all the more painful because the United States is a highly energy-intensive socio-economic system.

Oil, in this system, is not simply one among several alternative fuels. Rather, it is specific and unique to a wide range of critical uses, particularly air, private automobile and truck transportation. Substantial changes in the mode and network of public and private transportation and its relative fuel efficiency can occur only with the passage of time. But such a long-term adjustment seems essential in achieving a socio-economic system that relies less intensively on conventional liquid fuels.

*The Realities of U.S. Oil Production, Consumption, and Imports*

The U.S. oil crisis hit the public mind with the 1973 oil embargo and the fourfold price hikes in 1974. Knowledgeable observers recognized ominous signs much earlier. Indeed, U.S. crude petroleum output peaked in 1970 (table 1) at 9.6 mbd., even as domestic consumption continued to grow rapidly. During the 1970's, domestic production continued to sag, despite the new supplies coming on stream from Alaska. By the end of the decade, the downtrend appeared to be leveling out, but production during the first half of 1979—estimated at 8.5 mbd.—still remained substantially below the peak set when the decade had begun.

*Production Depends on New Reserves*

A sustained increase in the production of crude petroleum in the United States faces the limiting constraint imposed by the discovery of new oil fields. Additions to U.S. oil reserves until the late 1960's exceeded production generally with a comfortable margin, according to a U.S. Senate Energy Committee study.<sup>1</sup> Since 1967, however, reserve additions in the lower 48 states have been less than production. Still, by drawing on these earlier discoveries of new fields, output in the continental U.S. continued to increase until the peak year of 1970. Since 1971, additions to petroleum reserves averaged only 1.7 billion barrels per year, and it seems unlikely that the downtrend could be reversed in the lower 48 states.

TABLE 1.—CRUDE OIL PRODUCTION<sup>1</sup>  
(In thousands of barrels per day)

	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979
OECD <sup>2</sup> .....	7,860	9,010	11,500	11,700	11,200	10,700	10,700	11,300	12,100	NA
United States.....	7,055	7,804	9,648	9,210	8,770	8,375	8,130	8,180	8,700	8,500
Canada.....	526	793	1,305	1,800	1,695	1,460	1,300	1,320	1,315	1,490
European Community.....	221	309	264	209	197	204	431	954	1,260	NA

<sup>1</sup> Unless otherwise indicated, data are for crude oil and exclude natural gas liquids, shale oil, natural gasoline, and synthetic crude oil.

<sup>2</sup> Including shale oil.

Source: Central Intelligence Agency, National Foreign Assessment Center.

The reader may find these figures more meaningful if they are related to President Carter's national energy plan, which calls for oil production at some 10.6 mbd. in 1985, or nearly 4 billion barrels per year. To achieve this production rate, according to some experts, the Nation will have to discover some 3 to 4 billion barrels of additional reserves each year until 1985. Such reserve discoveries in the lower 48 states are highly unlikely, so that achievement of the 1985 target would depend on one or more "giant discoveries" in Alaska, or offshore areas. (Source U.S. Senate study, p. 58)

Production of oil from existing fields will likely decline from current levels, concludes another major study on the oil future,<sup>2</sup> even if price controls are completely eliminated. In the late 1980s, only

<sup>1</sup> "Energy: An Uncertain Future," An Analysis of U.S. and World Energy Projections Through 1990, Committee on Energy and Natural Resources, U.S. Senate, December 1978.

<sup>2</sup> "Energy Future: Report of the Energy Project at the Harvard Business School," Stobaugh, Robert and Vergin, Daniel, eds., pp. 42-43.

5 mbd are likely to come from reserves that were known to exist in 1978, including Alaska. "It is unlikely that U.S. production in the late 1980s will include more than 4 mbd of oil from new fields found between 1978 and the late 1980s. The prospects of finding a big field onshore or offshore in the Gulf of Mexico (in U.S. waters) are quite small because these territories have already been intensively searched."<sup>3</sup> Equally sober assessments of the oil future founded on conventional supplies of relatively inexpensive petroleum are echoed in other official and private research studies. The superficial conclusions presented here are intended only to provide a rough sketch of severe supply limitations which the U.S. must face with respect to inexpensive oil. The interested reader is referred to the comprehensive analysis provided in the energy area of the SSEC.

New sources of oil derived from *unconventional* means, however, offer potentially huge quantities of petroleum through enhanced recovery from conventional wells and from other new technologies over the long-term future. By the late 1980's, many analysts indicate that little more than 1 mbd is likely to be recovered from unconventional means, because of long lead times required to develop the sophisticated technology and to put in place the huge capital investments necessary. The question is not whether the U.S., or the world for that matter, is running out of petroleum from conventional supplies, but rather what is the price consumers are willing to bear to obtain oil from much more costly unconventional sources.

### *Consumption of Crude: Economic Growth and Energy Efficiency*

The end of an era of cheap oil leaves the U.S. unusually exposed, particularly when its consumption over time is compared with other countries, both before and after 1970. U.S. crude oil consumption, excluding natural gas liquids and other products, increased by roughly 50 percent from 1960 to 1970, while consumption of other countries soared: Japan, *sevenfold*; Germany, quadrupled; Western Europe as a whole, tripled (table 2). The industrial countries appeared, like lemmings, to be rushing self-destructively into socio-economic systems based on highly energy-intensive technologies.

TABLE 2.—CRUDE OIL CONSUMPTION  
[In thousands of barrels per day.]

	1960	1965	1970	1973	1974	1975	1976	1977	1978	1979
United States.....	9,797	11,513	14,697	16,855	16,175	15,860	16,985	17,895	18,350	18,025
Japan.....	590	1,750	4,000	5,390	5,250	4,965	5,160	5,375	5,420	5,550
Canada.....	837	1,115	1,484	1,755	1,690	1,765	1,770	1,765	1,810	1,890
Western Europe.....	4,007	7,661	12,402	14,690	13,775	12,970	13,860	13,645	14,060	14,600
Belgium-Luxembourg-										
Netherlands.....	420	835	1,290	1,470	1,280	1,225	1,335	1,280	1,350	1,480
France.....	579	1,117	1,949	2,485	2,370	2,145	2,330	2,265	2,370	2,460
Italy.....	475	1,042	1,760	2,080	2,050	1,905	1,970	1,925	1,710	1,980
Spain <sup>1</sup> .....	121	253	540	760	805	895	995	955	975	1,000
United Kingdom.....	975	1,473	2,030	2,270	2,120	1,840	1,850	1,865	1,870	1,930
West Germany.....	659	1,569	2,572	2,985	2,700	2,555	2,775	2,730	2,860	2,940
Other.....	778	1,372	2,261	2,635	2,455	2,405	2,600	2,625	2,705	2,810

<sup>1</sup> Including the Canary Islands.

Source: Central Intelligence Agency, National Foreign Assessment Center.

<sup>3</sup>Ibid

With the onset of the oil price revolution, consumption in all countries peaked in 1973 (U.S., 16.9 mbd; Japan, 5.4 mbd; Germany 3.0 mbd) and then dropped significantly in the 1974-75 recession. In the subsequent recovery, crude consumption patterns diverged: In the United States, oil consumption in 1976 surpassed the 1973 level and continued to rise to 18.2 mbd in 1978 before leveling off. In contrast, West European consumption in 1979 (14.6 mbd) approached the 1973 peak. This undoubtedly reflected not only Europe's generally poor post-recession recovery, but also the positive bite of energy policies which restrained energy consumption. Japanese consumption also grew slowly from the recession trough, but did exceed somewhat the 1973 level to 5.6 mbd in 1979.

### *The Widening Import Gap*

The crude production and consumption data clearly show the widening gap in the last two decades which had to be filled by a rapid rise in imports. Thus, even if the OPEC cartel had not catapulted the world into an oil price revolution in 1973-74, the U.S. would still have faced an adjustment. The striking increase in U.S. dependence on imported oil is depicted in the petroleum statistics for production, consumption and imports including natural gas liquids (table 3).

TABLE 3.—U.S. PETROLEUM CONSUMPTION, PRODUCTION, AND IMPORT DEPENDENCE

Year	Millions of barrels a day			Imports (as a percentage of consumption)
	Consumption	Production	Imports	
1960.....	9.8	8.0	1.8	18
1962.....	10.4	8.4	2.1	20
1964.....	11.0	8.8	2.3	21
1966.....	12.2	9.6	2.6	21
1968.....	13.4	10.6	2.8	21
1970.....	14.7	11.3	3.4	23
1972.....	16.0	11.2	4.7	29
1973.....	17.2	10.9	6.3	37
1974.....	16.6	10.5	6.1	37
1976.....	17.1	9.7	7.3	43
1978.....	19.0	10.3	8.2	43
1979.....	19.0	10.2	8.2	43

Source: American Petroleum Institute, "Basic Petroleum Data Book" and API "Monthly Statistical Report."

While imports of petroleum and gas liquids almost doubled during the decade of the 1960's, they more than doubled during the 1970's (table 3). As a result, imports as a percentage of U.S. consumption rose from 18 percent in 1960 to 23 percent in 1970 and then almost doubled to some 43 percent in 1979. While U.S. imports rose some 30 percent from 1973 to 1978, by contrast, the quantity of oil imports into Japan and the major European Community countries in 1978 still remained below the peak levels of 1973. (Central Intelligence Agency, *Statistical Data Book*).

The real story from table 3 is about the extraordinary widening of the oil import gap, measured in millions of barrels per day and what this holds for the future. The rise in oil imports covered both the decline in domestic production and the net gains in domestic demand. On the surface, U.S. oil imports appear to be more sensitively linked to changes in U.S. GNP—that is the U.S. income elasticity of demand for

oil imports is higher than for other countries. Yet, more careful analysis attributes the rapid rise of imports entirely to the structure of U.S. energy supply and the fact that this country is more self-sufficient in oil than were other countries at the onset of the energy crisis (see Fleisig, cited above). In analyzing the factors which contributed most to the differences in oil import patterns among the United States, OECD Europe and Japan during 1973-77, Fleisig concludes that two-thirds (or 19.6 percentage points) of the 30.7 percent rise in overall *energy* imports resulted from the growth of U.S. energy demand and about one-third (or 11.1 percentage points) derived from the decline in U.S. energy output. During the same period, OECD Europe experienced an 11.6 percent *drop* in energy import volume allocated as follows: rising income in OECD Europe should have caused energy imports to rise by 2.6 percentage points, while rising energy output (largely in the U.K.) caused energy imports to *decline* by 14.2 percentage points.

In order to demonstrate how much U.S. self-sufficiency in energy contributed to the growth of energy imports, Fleisig ran an experiment simulating the U.S. energy equation, but using OECD Europe weights to incorporate that region's much greater reliance on imported energy into the U.S. energy equation. Under these hypothetical conditions, U.S. oil import volume would have grown by only 6.5 percent, of which 5.1 percentage points were associated with domestic income growth and 1.3 percentage points linked to the decline in domestic production. Fleisig's detailed analysis (chapter V) goes on to show that if both the U.S. and OECD Europe had identical structures of domestic energy supply, then U.S. energy imports would be no more sensitive to changes in domestic income than Europe's and that our import sensitivity in response to conservation and other non-income factors affecting imports would be quite similar to Europe's. With respect to policy, then, slowing U.S. GNP growth in order to slow down oil imports would not be a very effective strategy, even if one disregarded the huge economic costs of unemployed labor and productive capacity. The problem should be attacked structurally not via macroeconomic restraints. Conservation efforts and consumer response to higher prices in the United States should produce positive responses that would slow down energy imports comparable to the results obtained in OECD Europe. Evidence supporting those conclusions seems to be appearing in U.S. oil consumption and imports during 1978-80.

### *Growing Import Gap, the Price of Oil and Energy Choices*

The U.S. oil equation linking production, consumption and imports, is important not just to an understanding of the implications for our balance of payments. The growing import gap emerging from this equation has critical importance for the price of oil. Because of the size of U.S. oil imports relative to world oil output (imports of crude and refined products are roughly 12 percent of global crude production), U.S. policy with respect to oil imports has a direct impact on the world price of oil. Oil experts are quick to stress, however, that no close correlation exists between U.S. oil import demand and world prices. Further, no simplistic market theories explain very well the extremely complicated workings of the world oil market.

Even though economists cannot tell us anything precise about the relation between the U.S. oil import gap and world oil prices over time, it seems clear nonetheless, that higher U.S. import demand contributes to a tighter world oil market. To this degree our growing imports add to upward pressure on oil prices over the long term. In periods of market tightness, the OPEC cartel can more easily engineer price increases than during periods of slack demand, particularly during a U.S. recession. This reasoning leads to the conclusion that over the longer term, the marginal import cost of oil to the United States is significantly higher than the average price per barrel, i.e., \$23.67 as cited by the Commerce Department for the fourth quarter, 1979.

This distinction between the average unit value of oil imports and the cost of the "last 1 million barrels per day"—the marginal import cost—is important as a concept at least for two reasons, even if it cannot be precisely quantified. The *marginal* oil import cost provides policymakers with a more appropriate index, or signal, for alternative energy choices on the margin. It measures the cost which society should be willing to meet in purchasing alternative energy resources—nuclear, coal, solar, conservation.

The concept is useful for a second reason: It makes explicit the link between U.S. imports and world prices of oil. Therefore, as oil imports grow, they tend to put upward pressure on world prices; as U.S. oil imports contract, world oil prices tend to sag. While this relationship is not precise, the tendency is observable in pricing behavior since 1973. The point is that U.S. energy policy in general and a policy on oil imports in particular, not only have an impact on the quantity of oil imports and our balance of payments position, but also influence the movement of world prices.

A hypothetical example may help to illustrate the point: Suppose that the growth of imports rises from 9 to 10 million barrels per day. Assume that this widening of the import gap is associated with a \$1 increase in the price per barrel from \$24 to \$25. (Once again, economists cannot isolate the causal relationship between changes in imports and changes in world prices.) The oil import bill has increased from \$216 million ( $9 \times \$24$ ) per day to \$250 million per day ( $10 \times \$25$ ). The increase in oil imports of 1 million barrels per day has added \$34 million to the daily oil import bill. Therefore, the marginal import cost (i.e., the *increase* in the total oil import bill divided by the *increase* in barrels imported) is \$34 per barrel, a resource cost substantially higher than the \$25 average price per barrel imported. Looked at conversely, if the Government were to introduce an import policy which would reduce oil imports by 1 mbd, then the tendency for prices to weaken would be expected.

The marginal import cost per barrel cited in this hypothetical example (\$34) is the appropriate guide, not the average import price (\$25), in evaluating costs of developing alternative domestic sources of energy. Using this guide, policymakers should be willing to allocate resources to new energy investments until the marginal cost of such alternatives (nuclear, coal, solar, conservation) approach the marginal import cost of oil (making the appropriate adjustment to energy equivalent units). Quite clearly, some alternative energy investments

which are not economical at a cost equivalent to \$24 per barrel of oil, might well be economical at the \$34 level.

Eventually, alternative energy sources may enable a reduction in oil imports. This favorable adjustment may lead to a temporary leveling off in the long-run price uptrend, if not an actual temporary dip. Investors in energy alternatives should be cushioned against a significant shortrun dip in marginal oil import costs to avoid a choking off of investment in energy alternatives. An excise or tariff on oil imports could be temporarily applied to sustain the level necessary to achieve the desired investment in alternative energy sources.

The policy influence on world prices poses something of a dilemma, since U.S. domestic adjustment on energy problems is fostered or impeded depending on how rapidly world oil prices rise. To the extent that the U.S. is successful in developing alternative non-oil sources of energy, or in slowing consumption of oil, we tend to decrease the growth of oil imports or even to cut oil imports. This result of favorable energy adjustment then tends to slow the rise in (or possibly even to decrease) real oil prices in world markets. That development tends to slow the domestic adjustment. Thus the dilemma: The more successful we are in adjustment away from oil imports, the more oil prices tend to sag and the adjustment (new energy investment, for example) tends to be discouraged. Thus, our policies with respect to oil imports and domestic energy adjustment (including investment in alternative energy resources and conservation) may have to include explicit floors under oil prices to prevent periodic price reductions which may disrupt a continuous adjustment process.

The possibility that world market prices would weaken in response to joint consumption and import policies of major oil-consuming countries may prove to be unlikely. The low-absorbing OPEC countries (particularly Saudi Arabia and the United Arab Emirates) have learned to adjust their production to influence world prices. Thus, in the short run at least, their supply policies may very well prevent any actual decline in real oil prices in the future. Events in the Middle East in recent years underscore the many uncertainties in the production and pricing policies of OPEC, so that predictions are extremely hard to make.

### III. WORLDWIDE INDUSTRIALIZATION AND CHANGING U.S. COMPARATIVE ADVANTAGE AND COMPETITIVENESS

#### *Structural Change in Global Production and the U.S. Response*

Apart from the oil price revolution, a second fundamental transformation of the global economy became apparent in the 1970's. The accelerated pace of industrialization around the globe has added a new dynamic dimension to the world economy. The locus of industrial production, which in the post-war period integrated the manufacturing centers of Europe, Japan and the United States, has now linked into many developing countries. Spreading industrialization, coupled with much greater interdependence among developed and developing countries in the last decade, has set loose powerful economic, social and political forces which the United States and other industrial countries will have to address in the remainder of this



century. For the United States, the emergence of efficient industries in many developing countries raises a variety of old issues with a new geographic focus: (1) Free international trade and protection; (2) international investment and free movement of capital; (3) exchange rate policy with respect to developing countries; (4) structural adjustment in the U.S. economy and our changing competitiveness and comparative advantage; and (5) the role of multinational banks and nonfinancial corporations.

The process of worldwide industrialization progressed apace with, and in large part enabled by, the global integration of markets for manufactured goods, and raw materials. Furthermore, the decade of the 1970s brought a full unification of money and capital markets that financed direct investment around the world, as well as the growth of international trade. The increasing economic interdependence among the United States, Europe, and Japan in the 1960s soon embraced emerging manufacturing centers in Asia, Latin America, and Eastern Europe. Other embryonic industries in the Middle East and elsewhere will come on stream in the 1980's. This increasing economic integration and interdependence was facilitated by innovations in productive technology, in communications and transportation and in business organization and management. Multinational corporations and banks were the innovative institutions which transmitted new technology and management skills and entrepreneurial abilities. This process of innovative and dynamic change, described by Joseph Schumpeter 50 years ago as the essential contribution of entrepreneurial ingenuity to the capitalist system, is the driving force of economic growth.

*"Dynamic" change* has a specific meaning in the economist's mind that goes beyond Webster's "energetic, vigorous, forceful" change. It denotes more than rapidity. Dynamic change involves transformations of social and market organization and of business enterprise, as well as the basic parameters of industrial technology. In combination, these changes often lead to quantum leaps in productivity and profitability. Thus, dynamic economic progress is replete with discontinuities and departures from conventional modes of economic activity. In contrast, static change, even if rapid, simply duplicates existing technologies in production, and applies conventional methods of business practice and organization. For example, investment in new steel capacity using conventional technology adds to aggregate demand and expands aggregate supply, but is essentially a continuation of well-established economic processes. The same investment in the latest oxygen-electric processes can generate a comparable addition to output, but with new and more efficient input mixes and a new impetus to productivity growth, greater profitability and improved competitiveness in world markets. Dynamic change involves "entrepreneurial creativity" which employs existing resources in a uniquely new way, irrespective of whether those resources increase or not. Clusters of technological innovations in the past—the automobile, airplanes, electronic communications, for example—generated a process of creative destruction and surges of economic growth. New technologies supplanted the outmoded, new industries displaced the old.

Implicit in the process of dynamic growth in both industrial and developing economies is structural change in the GNP and commodity

trade. Simply because economic growth over the long term proceeds unevenly among countries, as it does unevenly across economic sectors within one country, compositional changes occur in the national output, in trade flows and in investment, changing in turn the composition of demand for factors of production. Resources have in the past typically shifted out of industries employing labor-intensive technologies, using unskilled labor, to industries employing high degrees of human capital with sophisticated technology and into service sectors as technology change led to higher productivity growth and machines were substituted for man. (Anne Krueger: "LDC Manufacturing Production and Implications for OECD Comparative Advantage.")

The rapid spread of manufacturing from mature industrial countries to developing areas of the world resulted in a return flow of manufactured exports to the mature economies in the 1970s. This expanding supply of standardized manufactures such as steel, textiles and other consumer goods can be expected to continue in the future, tending to exert downward pressure on prices of these goods in world markets. At the same time, spreading industrialization will augment the demand for raw material inputs into manufacturing processes and energy—oil in particular—and contribute to upward pressure on import prices. Thus, for the long term, the mature industrial countries face the prospect of deteriorating terms of trade resulting from both the export side—sagging export prices of key manufactures—and the import side—particularly oil imports. The tilting of relative prices against the mature industrial countries will contribute to longer-term problems of stagnating domestic growth and persistent inflation. Put another way, the necessary imported inputs into domestic production and consumption can be purchased on world markets only by giving up larger quantities of domestically produced manufactures (and agricultural goods in the U.S. case) for each unit of imports.

### *Changing Comparative Advantage and Competitiveness*

These global economic forces had an impact on the American economy in a variety of ways. The statistics on U.S. international trade, in particular, seemed to crystallize these developments quite apart from the oil problem. The deteriorating trade performance in manufactures raised questions both about the competitiveness of the U.S. economy and our comparative advantage. The extraordinary cross-currents of economic forces affecting U.S. trade performance in the 1970s—unsynchronized cyclical developments, external oil price shocks and wide swings in exchange rates—made it difficult to disentangle the contributions of changing competitiveness and shifting comparative advantage. Nevertheless, it is important to distinguish these two factors, especially in a world of rapid, dynamic change and increasing economic interdependence. The choice among policy options differs depending on the economic problem—deteriorating competitiveness or shifting comparative advantage.

A deterioration in competitiveness is a macro-economic problem best approached with appropriate macro-policies. These can aim toward bringing into better balance aggregate spending and aggregate income or toward allowing exchange rate movements which reflect more accurately the relative cost and price structures between the

United States and its major trading partners. Shifts in comparative advantage, by contrast, result from micro-economic developments—changes in the productive efficiency of specific industries relative to newly emerging and expanding, or contracting and dying, industries within the domestic economy. Corrective policies are micro in the sense of fostering adjustment through inter-industry shifts in resources. (Many countries have established government agencies to analyze shifts in comparative advantage and formulate and implement so-called “industrial policy” to deal with such changes in productive efficiency across the domestic industry structure.)

Both a loss of general competitiveness and an adverse shift in comparative advantage, it is true, could lead to a rising trade deficit. While exchange depreciation, coupled with appropriate macro-economic restraints, could alleviate a deterioration in price or cost competitiveness, say caused by a general monetary or wage inflation, depreciation may do little to correct the adverse shift in comparative advantage, which comes to the surface as a change in relative costs or prices between industries within the same economy. Depreciation, on the other hand, may very well increase in the short run the number of industry sectors which can compete successfully in world export markets.

### *Comparative Advantage and the Structure of Production and Trade*

A country's comparative advantage in international trade is derived from its structure of production and related human and natural resources. These economic characteristics determine the structure of costs of production and relative efficiency across industries and economic sectors. Comparative advantage in international trade is based not on absolute cost levels, but relative costs, as compared with other trading nations.

The United States, according to studies of disaggregated commodity categories, has a comparative advantage in high-technology, capital-intensive lines of production. Accordingly, this country earns net export surpluses in manufactures embodying a high research-and-development and human-capital content, including for example, computers, aircraft, certain chemicals and other machinery and capital goods. In addition, the United States is unique among industrial countries in that agricultural crops are an important part of our comparative advantage. U.S. agricultural output, too, is grounded on high-technology, capital-intensive production techniques that resulted from decades of research and development efforts. Much of this agricultural progress resulted from a long American history of deliberate government policy dating back to the Morrill Land Grant Act of 1863.

The United States, on the other hand, appears to have a comparative disadvantage in many standardized consumer goods and industrial supplies and materials; trade in these commodity categories has registered deficits for many years. (The paper discusses details of commodity and geographic composition of U.S. trade below.)

The comparative advantage of the United States in a dynamically changing global economy cannot be expected to remain fixed. The extraordinary growth since the Second World War has generated fundamental structural changes both in the world economy and in

the United States. Resources have shifted from agriculture to industry and from industry to services, until industry (manufacturing, construction and mining) comprises less than a third of U.S. aggregate output, measured by GNP. While the structure of GNP and industrial production changed, labor acquired more and better skills and machinery embodied more sophisticated technology.

Both U.S. comparative advantage and trade structure have responded to the repercussions of rapid international dissemination of productive technology and managerial and entrepreneurial skills. Indeed, researchers have documented rather well the so-called "product cycle phenomenon," apparently at work over the past 50 years. According to this phenomenon, a U.S. producer creates a new idea, a product or technology and then enjoys at least temporarily a monopoly position in the domestic market. The innovation is subsequently refined, production is standardized for large scale operations and the output claims a dominant share in export markets after satisfying home demand. High domestic wages motivate locating the production abroad, so that foreign output soon displaces U.S. exports abroad, and ultimately returns to penetrate the home market as imports. Prominent examples of such product cycles include man-made fibers, electrical household appliances, synthetic rubber and business and office machines.

In recent years multinational firms have transferred technology abroad not only through direct investment in productive facilities, but also by licensing and leasing arrangements for fixed fees and royalties. Consequently, developing countries have in the 1970s emerged as efficient producers of a wide range of standardized manufactured goods, including consumer electronics products, textiles, clothing, shoes and industrial goods. At the same time, capital-intensive production of automobiles, steel and certain chemicals has spread widely among developing as well as industrial countries. What emerges from this picture of rapid flux is the critical importance the United States should attach to maintaining and accelerating its rate of domestic innovation in order to continue feeding the product cycle.

### *U.S. and Global Production Structures*

That the international position of U.S. manufacturing is changing is borne out in Pugel's evidence in his SSEC study: "The Changing Position of U.S. Industries in the Global Pattern of Industrial Production". Manufacturing sectors in foreign countries are becoming more similar to the structure of U.S. manufacturing. In this process of structural change, Japan and certain developing countries are catching up with the U.S., with the latter still in earlier stages of this process. In identifying links between the changing industry structure and certain economic characteristics of those industries, Pugel finds that U.S. industries more intensive in the use of skilled labor and in the creation and use of advanced technology were generally growing faster than U.S. industries depending mainly on unskilled labor and less sophisticated technology. Nevertheless, the manufacturing sectors in other areas of the world were becoming more similar in structure to U.S. manufacturing, because comparable industries in other countries were growing even more rapidly than in the United States.

Industries in Japan and developing countries which are intensive in the creation and use of high technology and in the use of skilled labor tended to grow more rapidly than in the United States, providing a basis for the shift in our comparative advantage vis-a-vis the others. Pugel believes, however, that the trend in changing U.S. comparative advantage with Japan is slowing, since Japan has largely "completed its catch-up process." The shift continues vis-a-vis the developing countries, however, as they continue the catching-up process.

Pugel makes the interesting point that developing countries are not exploiting fully their comparative advantage in manufactures intensive in unskilled labor, because their exports of such products are meeting increasing protection in the industrial countries. Consequently, these developing countries are reaching into the skill-intensive industries for future expansion, a move that generates even greater competition for the industrial countries and also accelerates their catching up process.

This theme of shifting comparative advantage is central to several other SSEC studies: Robert Lawrence, in "The United States Current Account: Trends and Prospects," stresses the long-term, ongoing nature of such shifts which underly long-term trends in trade surpluses and deficits in particular commodity categories: Surpluses in capital goods and agricultural products versus deficits in consumer goods and manufactures. Charles Pearson's study—"Adjusting to Imports of Manufactures from Developing Countries"—highlights the theme of shifting comparative advantage, although he approaches the issue from an analysis of trade flows and U.S. adjustment rather than from the production statistics. James Riedel, too, stresses the catching up of Europe, Japan and the developing world in manufacturing production that underlies the disturbing U.S. trade performance in the 1970s. His "The Symptoms of Declining U.S. Competitiveness" concludes that the process of catching up itself may very well indicate the high degree of success of our long-term international economic policy since World War II, resulting in the full recovery of Japan and Europe and the transfer of resources from rich to poor countries.

From the industrial experience of Europe, Japan and the United States in the 1970s, one can envision a progression of stages of comparative advantage in the future. The Koreas, Taiwans, Hong Kongs, Singapores and Brazils will pick up the technologies and comparative advantage held previously by the United States and Europe. In time they can be expected to pass on their recently acquired comparative advantage in labor intensive production to other developing countries at lower states of development. Consequently, in the future we can expect an impressive growth in the number of manufacturing LDC's which will yield a diverse range of consumer goods, capital equipment and partially finished manufactured inputs with imaginative differentiation and varying quality. In the process, growth in output and incomes will continue and these LDCs whether more or less advanced, will not only become sources of exports which will find their way to the markets of mature industrial countries, but will also become expanding markets for the exports of agricultural and capital goods of the United States.

As the catching-up process develops, according to some analysts, the United States may benefit by a reversal of the investment and technology outflow (Riedel). As foreign multinationals begin produc-

ing in the United States, they may well bring in their versions of new technology and innovations. Indeed, the popular press already reports such developments as a contract in which Nippon Steel Corporation agrees to provide a U.S. steel corporation technical advice on increasing blast-furnace efficiency.

### *U.S. International Competitive Position*

The deteriorating trade balance in manufactures in particular has naturally raised questions about our competitive position in the world economy. This country's international competitiveness is broadly relevant to both our exports and imports. Those economic characteristics which enable U.S. goods to penetrate and maintain their position in foreign markets are also important in holding our markets at home against encroachment by foreign imports.

U.S. production costs and prices relative to those in other countries are an obvious economic factor underlying our competitive position. Other more intangible characteristics include product quality and reliability, the availability of service and maintenance, delivery time, product adaptability to foreign uses, and government programs for export promotion and financing. The capital- and technology-intensive quality of many U.S. manufactures are clearly a firm foundation for this country's competitiveness in recent years, as evidenced by our export performance in aircraft, computers, and certain chemicals and machinery.

There are two aspects to the U.S. competitive position. On the export side, U.S. producers strive to maintain their shares in the markets of our major competitors—Germany and Japan, for example—and in third countries, such as in the developing world. On the import side U.S. producers, even if they sell only to the American market, confront competition from foreign imports whether they are from developed or developing countries. If the economy loses productive efficiency, it risks losing not only our share of foreign markets, but import-competing industries become more vulnerable to imports from abroad. Changes in dollar exchange rates, and real economic adjustments to them, may come too late to prevent at least a short-term deterioration in our international competitiveness. Moreover, in a highly inflationary environment, if rising domestic production costs squeeze profits and depress the rate of return on capital, U.S. firms may choose to locate production abroad and perhaps serve the U.S. market with imports produced by their foreign affiliates.

### *Price Competitiveness: Do the Numbers Tell a True Story?*

In addressing the questions about U.S. competitiveness, government analysts and private researchers have responded with apparently contradictory conclusions. Such evaluations are difficult and sometimes ambiguous because a nation's competitiveness can be defined narrowly or broadly and quantitative measures vary accordingly. A commonly used, but narrow, definition focuses on changes in U.S. prices and costs, adjusted for fluctuations in dollar exchange rates. Such an approach usually compares movements in U.S. export prices, unit labor costs, and consumer and wholesale prices with corresponding

movements in indexes of our major international competitors, such as Japan, Germany, and other European countries.

The pattern of relative price trends that emerges is usually dominated by fluctuations in dollar exchange rates. According to this conventional approach, the U.S. has gained a notable competitive advantage in terms of relative price performance since 1970 (see chart). Our competitiveness improved from 1970 to 1973, then deteriorated somewhat from late 1974 to mid-1976, and has improved since mid 1976. It is noteworthy, that despite the dollar's wide short-term swings, U.S. price competitiveness at the present is little changed from that in 1973.

These time periods correspond roughly to the dollar's broad swings in the foreign exchange markets, beginning with the two devaluations of 1971 and 1973, that were partly negated by a sizable appreciation in 1975 and early 1976. Resuming its decline in mid-1976, the dollar continued to depreciate thereafter, falling sharply in 1977 to late-1979 on balance, even despite the temporary rebound following President Carter's announcement in October 1979, of measures to defend the U.S. currency. With the dollar still vulnerable in the foreign exchange markets, the dollar's cumulative depreciation from 1970 through late-1979 amounted to almost 40 percent against the Japanese yen and over 50 percent against the German mark. In that time, the dollar lost nearly 30 percent on a weighted average basis, according to the Federal Reserve Board's index of the dollar's exchange value against the currencies of 10 major industrial countries.

#### *U.S. Price Competitiveness and the LDC's*

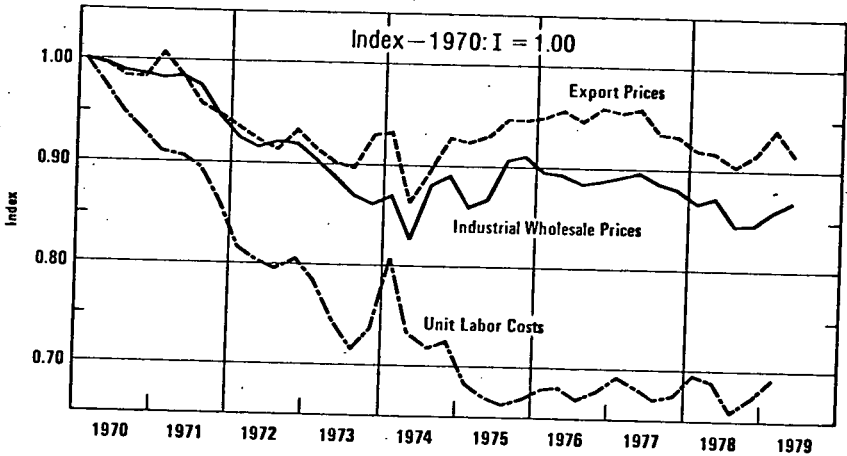
Conclusions about the gains in U.S. price competitiveness relative to other major industrial countries, however valid they may be, still neglect the changing position of the manufacturing LDCs. The latter's price statistics rarely appear in the competitiveness indexes. Even if movements of relative prices and costs of LDCs had been incorporated into these indexes, the conclusions may still not accurately depict changes in competitiveness over time for the following reasons. The absolute levels of costs and prices among industrial countries are roughly similar, so that relative movements in their indexes (adjusted for exchange rate fluctuations) may be a useful guide to changes in relative price competitiveness, particularly for standardized manufactures.

For the LDCs, however, absolute production costs and wages (converted at current exchange rates) usually lie substantially below corresponding levels in industrial countries. Even though the LDCs have experienced rapid increases in costs and prices during the 1970s, the *levels* still lie substantially below those in industrial countries. The problem of competitiveness faced by the U.S. and other industrial countries is more one of absolute cost advantages enjoyed by the LDCs rather than a deterioration caused by differential rates of cost and price inflation. Besides, the LDCs lie outside the international adjustment process to the extent that they peg their exchange rates to the U.S. dollar. Consequently, dollar exchange rates vis-a-vis the currencies of manufacturing LDCs have not adjusted to reflect their recently increasing absolute cost advantages, whereas the dollar/yen rate has adjusted to correspond better to the changing real cost and trade relationships between the U.S. and Japan.

*Pricing Dualism and Competitiveness*

The three indices of price competitiveness (chart) showing overall improvement in U.S. price competitiveness since 1970 to date may leave the reader troubled, since during the same period, the U.S. surplus on manufactures was steadily eroded. Can the apparently incompatible price and trade performance be reconciled? One approach to resolve this problem investigates the possible duality in major exporting economies: Do costs and prices in the export sectors move differently from the overall national indicators? Lawrence's Research in this area concluded that Japan in particular, and Germany to a lesser extent, is characterized by such duality—unit labor costs in the export sector declined substantially more than for manufacturing in the aggregate. For the United States a differential path in the costs of export and import competing sectors is discernible, but the differences are extremely small.

Some Measures of U.S. International Competitiveness by Quarters, 1970-1979 (Seasonally Adjusted)



Nonetheless, the finding that costs in some export sectors of some countries decline more rapidly than costs in aggregate manufacturing in those countries—though this is apparently not the case for the United States—leads to an important conclusion: If U.S. manufactured exports are to match the price competitiveness of foreign export industries, costs in U.S. manufacturing as a whole must rise less rapidly than costs in foreign manufacturing (Lawrence). Even by this refinement of economic analysis and statistical technique, Lawrence still comes to the conclusion that since 1970, prices of U.S. exports relative to prices of foreign exports declined, i.e. meaning the U.S. experienced an overall improvement in price competitiveness since 1970. The deterioration in our trade performance, then, cannot be attributed to changes in price competitiveness. If relative competitiveness played a role, it must have been in unmeasured, non-price aspects—perhaps quality, service related to merchandise purchases, financing, and products not well adapted to foreign use.

Another important conclusion emerges from this discussion of competitiveness: The floating dollar has been primarily responsible for this



favorable relative outcome since 1970. This suggests that in the future exchange rate adjustments may be essential in assuring that U.S. exporters do not lose their competitive position in periods when U.S. cost and price inflation exceeds that of our major competitors. One other important point should be underscored here: The dualism that Lawrence exposed in the Japanese economy is an even more dramatic characteristic of developing economies. Yet virtually all measures of price competitiveness fail to include price performance of developing countries when these areas are becoming increasingly larger competitors of the United States and other industrial countries. The policy emphasis here is that the exchange rate is an appropriate macroeconomic instrument to correct for a general loss of price competitiveness. That is not to suggest that exchange depreciation can correct for structural problems that result from changing comparative advantage. This latter problem is more appropriately tackled with micro- or industry-specific policy measures.

It is important for formulating policy to sort out the reasons underlying the loss of U.S. export competitiveness. The conventional focus on import demand and management of aggregate demand would lead to slower U.S. growth to dampen domestic inflation and to improve the current account. The Lawrence evidence suggests a better alternative approach: if differences in productivity growth are related to technology change, economies of scale, new products and new markets, the policy should address the supply side and bring more resources into investment, research and development and innovation, rather than slow down growth and/or impose wage and price controls.

#### IV. THE U.S. CURRENT ACCOUNT IN STRUCTURAL CHANGE

The United States current account has undergone striking structural changes since the early 1960s. The collapse of the U.S. trade surplus and its plunge into deep deficit in recent years have been partly offset by a burgeoning surplus on investment income. Until 1971, the United States had registered a merchandise trade surplus throughout this century. Then, in the 1970s, rising trade deficits displaced the solid surpluses of the previous decade. Indeed, the trade deficit soared to an unprecedented \$34 billion in 1978. Meanwhile, the balance on invisible transactions, which in the past had been a relatively stable and modest part of our balance of payments, has now become a positive factor which generated a surplus of over \$25 billion in 1978.

In response to cyclical developments emerging in 1979, the trade deficit has narrowed to under \$30 billion, while the services balance had grown further to over \$34 billion. In short, the United States has become a net importer of merchandise and a substantial net exporter of services.

This structural change in the current account has been shaped by powerful economic crosscurrents in the global economy. Some of these changes are transitory and cyclical in nature, others are permanent mutations and secular.

The most obvious transformations include: (1) the oil price increases since 1972 and the increasing U.S. dependence on oil imports as an energy source; (2) extraordinary shifts in the constellation of dollar

exchange rates during the decade; (3) severe cyclical fluctuations; (4) divergent longer-run growth rates and disparate price performance among major trading partners; and (5) the emergency of less developed countries (LDC's) as exporters of manufactured goods and their impact on U.S. comparative advantage and competitiveness. To obtain a clearer picture of how these forces have affected the U.S. current account, this chapter examines the geographic distribution and commodity composition of U.S. trade flows and the key service transactions. The experience of the 1970's give important insights into the problems policymakers must confront in the coming decade.

### *The Current Account, Useful Indicator for Policymakers*

The current account is only one among several alternative balances which the analyst can strike to study a country's international economic transactions. Each balance has by definition a different scope and is useful and informative for different reasons. The current account conveniently summarizes receipts and payments on goods, services and transfers which can be related to the Gross National Product (GNP). The balance on current account indicates how a country allocates economic resources with respect to the rest of the world.

A deficit signals that the United States is absorbing more economic resources than it is producing at home; that is, we are consuming resources from the rest of the world. A surplus implies the opposite; domestically absorbed resources are less than current output, and resources are freed to the rest of the world. From the standpoint of short-run economic developments and stabilization policy, the current account can be used as a macroeconomic indicator showing the link-up between economic activity in the United States and other nations. *Short-term* economic downswings and recoveries—the target of domestic demand management policies—are clearly reflected in U.S. trade performance and our external position.

From a *long-term* perspective, the current account balance indicates the role our country plays in international investment and finance. The current account balance shows the size and direction of both official and private capital flows between the U.S. and the rest of the world. A deficit signals that this country is a net borrower (surplus corresponds to a net lender) and how the resultant capital transactions affect our overall international investment position. The longer-term perspective is particularly important in analyzing the impact of secular growth and dynamic change on the international position of a country.

### *U.S. Trade Performance*

The dramatic deterioration of the U.S. trade position in recent years has riveted the focus of policymakers and the popular press alike. Not only has U.S. trade moved into deep deficit, but our trade structure has changed. The transformation has affected both the commodity composition and geographic distribution of U.S. trade flows. Moreover, alterations can be traced in the interplay between transactions involving commodity trade, various services and international investment. Analysis of the geographic distribution and commodity composition

of U.S. exports and imports reveals how trade structure has responded to the powerful forces dominating international economic activity in the 1970's.

The impact of the worldwide economic transformations is clearly evident in the U.S. current account (summarized in table 4). Comparing U.S. international transactions on goods and services in the 1960's with experience in the 1970's brings out the striking shift in these two major components of the current account: trade and services. From the merchandise trade data, exports exceed imports by an average \$4 billion per year in the 1960's, standing in sharp contrast to the astonishing trade deficit of over \$30 billion in 1978-79. Consequently, the balance on goods and services swung from an average annual *surplus* of \$6 billion in the preceding decade to a *deficit* approaching \$9 billion in 1978. The balance on current account displayed a similar reversal from a modest surplus of some \$3 billion in the 1960's to a deficit of nearly \$14 billion in 1978. The small surplus on current account appearing in 1979 may be quickly wiped out following that year's oil price hikes.

*Merchandise imports* stand out among the diverse current account transactions and exhibit an extraordinary growth in the 1970's as compared with the previous decade. Separating fuel from non-fuel imports (table 4) shows how fuel imports have soared in value from about \$2 billion per year on average in the 1960's to almost \$46 billion in 1978 and \$64 billion in 1979. This jump resulted not merely from the seven-fold hike in oil import unit values from 1972 to 1979 but reflected a substantial rise in U.S. dependence on imported oil. Domestic oil consumption continued to rise with the long-run expansion of our economy, albeit interrupted by the 1974-75 recession. Consequently, the volume of oil imports rose by about 35 percent in the five years through 1977, when it peaked out, while imports as a ratio of total U.S. oil consumption climbed from about 40 percent to nearly 50 percent and then eased back. In contrast to the extraordinary surge in the value of oil imports, non-fuel imports rose about sevenfold from the average levels in the 1960's to the present.

*Merchandise exports*, meanwhile, grew more slowly than total imports over most of this period at least until 1978, when export growth accelerated sharply. Once again, it is useful to distinguish two broad export categories—agricultural and non-agricultural exports—since fairly different sets of economic variables affect their movements over time. This distinction underscores the importance of agricultural goods—about a fifth of total exports—in our overall trade performance. Thus, the United States as an exporter of agricultural commodities stands unique among other major industrial countries, in that we share some common economic interests with other primary producing countries. Agricultural exports recently have grown more rapidly, much as in the early 1970s, when receipts were inflated both by steep rises in world commodity prices and heavy demand stemming from poor harvests elsewhere.

The value of non-agricultural exports, including a wide range of processed and finished manufactures, consumer and capital goods, grew somewhat more rapidly than agricultural exports from the 1960s to the present. One important recent development is masked by this

TABLE 4.—CHANGING STRUCTURE OF THE U.S. CURRENT ACCOUNT

[Balance of payments basis; billions of dollars]

	Average, 1960-69	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979
Merchandise trade balance.....	4.1	2.6	-2.3	-6.4	0.9	-5.3	9.0	-9.3	-30.9	-33.8	-29.5
Exports.....	26.5	42.5	43.3	49.4	71.4	98.3	107.1	114.7	120.8	142.1	182.1
Agricultural.....	5.9	7.4	7.8	9.5	18.0	22.4	22.2	23.4	24.3	29.9	35.4
Nonagricultural.....	20.6	35.1	35.5	39.9	53.4	75.9	84.9	91.3	96.5	112.2	146.7
Imports.....	-22.4	-39.9	-45.6	-55.8	-70.5	-103.6	-98.0	-124.0	-151.6	-175.8	-211.5
Fuel.....	-2.1	-3.2	-4.0	-5.1	-9.0	-27.5	-28.5	-37.1	-47.7	-45.6	-64.1
Nonfuel.....	-20.3	-36.7	-41.6	-50.7	-61.5	-76.1	-69.5	-86.9	-103.8	-130.2	-147.4
Balance on services, net.....	2.1	3.1	4.6	4.4	10.1	14.7	14.0	18.9	21.5	25.4	34.8
Military, net.....	-2.7	-3.4	-2.9	-3.4	-2.1	-1.7	-.7	.7	1.7	.5	-1.2
Investment income, net:											
Private.....	4.8	6.3	8.2	10.0	15.1	18.7	16.2	19.2	21.9	28.5	41.2
Government.....	.1	-.1	-1.0	-1.9	-3.0	-3.2	-3.4	-3.2	-3.9	-6.8	-8.9
Travel and transportation, net.....	-1.3	-2.0	-2.3	-3.0	-3.1	-3.1	-2.7	-2.5	-3.2	-3.0	-2.7
Other, net.....	1.2	2.2	2.5	2.9	3.2	4.0	4.6	4.7	5.0	6.2	6.4
Balance on goods and services.....	6.1	5.6	2.3	-1.9	11.0	9.3	23.0	9.6	-9.4	-8.4	5.3
Unilateral transfers: Remittances pension, and government grants.....	-2.8	-3.3	-3.7	-3.9	-3.9	-7.2	-4.6	-5.0	-4.7	-5.1	-5.6
Balance on current account.....	3.3	2.3	-1.4	-5.7	7.1	2.1	18.3	4.6	-14.1	-13.5	-7.3

Source: U.S. Department of Commerce, "Survey of Current Business," June 1979, March 1980.

Note: Subtotals may not add because of rounding.

apparent growth, however. Nonagricultural exports by *volume* remained essentially flat between 1974 and 1977; the increase, according to Department of Commerce data, being attributed entirely to price increases. That picture changed drastically in the next two years, as real activity picked up in our major export markets and dollar depreciation made our manufactures more competitive abroad. In 1979, for example, nonagricultural exports grew 31 percent—nearly twice the 1978 increase—and about a third of the rise was in volume.

Viewing U.S. merchandise trade in long-term perspective leads to some conclusions about our trade performance over the past 15 years or so. The remarkable deterioration in our trade deficit is in large part attributable to surging oil imports, but oil is only part of the story. Transactions in nonagricultural exports and nonfuel imports, roughly balanced in the 1960's, registered a growing deficit in 1977, which seemed to be disappearing by 1980.

### *"Invisibles": The Mounting Surplus*

Service items in the U.S. international accounts, or "invisibles," are yielding a mounting surplus which in 1978 exceed \$25 billion (table 4) and rose to some \$34 billion during 1979. The strong upswing in net services receipts, since it appears to be a significant change from the modest surpluses recorded in the 1960's, adds an important positive aspect in the current account to the otherwise worrisome trade position. Furthermore, the growth in net services receipts more than offset the deterioration in the U.S. trade accounts.

The most prominent factor underlying the rise in net service receipts is the rapid expansion of *private investment income* (net) that began to appear even before the onset of the oil crisis. Net private investment receipts—interest, dividends and branch earnings from the cumulative stock of our foreign assets—tripled from an annual average of nearly \$5 billion during 1960–69 to about \$15 billion in 1973. Net investment income then fluctuated erratically higher in general response to global cyclical developments.

*Fees and royalties* are an increasingly important source of net income in recent years, generating over \$6 billion net in 1979. Fees and royalty income, which make up by far the largest part of "other net" receipts in table 4, originate from rentals, from the use of patents and from professional and management services. Our foreign investment and capital goods exports often affect the kind of technology transfer abroad which in turn generates demand for U.S. technological and managerial expertise. Although Europe is a major source of this income, fees and royalties flow in from all geographic regions.

Offsetting to a modest extent the income from U.S. private investment abroad are the U.S. Government interest payments to foreign holders of Treasury securities and of special deposits with the Treasury Department. The growth of these interest payments in the 1970's largely reflects the rise in dollar holdings by foreign official institutions resulting from foreign central bank intervention in the exchange markets and from OPEC investments in U.S. securities. Most of our

net interest payments to foreigners are made to Western Europe and Japan.

Among other service items, travel and transportation transactions have consistently registered net payments, which have trended upward over the longer term. The deficit averaged over \$1 billion in the 1960's and has fluctuated around \$3 billion more recently. Payments on travel and passenger fares behave much like consumer goods imports, responding to rising U.S. per capita income and to changes in relative prices and exchange rates. Payments on freight tend to follow the long-run uptrend in merchandise imports.

Finally, United States military transactions have swung around from a net deficit in the 1960's to a growing surplus in the last several years. This shift developed as U.S. military spending in Vietnam wound down, while exports of military goods and services, mostly destined for the Middle East, expanded. These receipts are in large part offset by ongoing military payments to Western Europe.

### *Geographic Distribution and Commodity Composition of U.S. Trade*

Disaggregating U.S. trade into bilateral flows between major markets and into commodity components reveals much about the changing structure of trade over the 1970's and gives insights into the directions of change in the coming decade. The data tell something about longer-term developments bearing on U.S. comparative advantage, the rapidly emerging supplies of manufactures in developing countries and the impact of short-run business cycles and longer-run growth on the outlook for exports and imports.

#### GEOGRAPHIC DISTRIBUTION OF U.S. TRADE

One noteworthy observation from the regional trade flows and trade balances is the fact that in recent years, most of the global U.S. trade deficit was incurred with developing countries including OPEC. Underlying the widening trade deficit to \$34 billion (table 5) in 1978 was a growing shortfall with the developed economies of almost \$12 billion and a narrowing deficit with the developing world (amounting to \$24 billion). The narrowing deficit with OPEC reflected an absolute decline in the value of oil imports from 1977 to 1978. Indeed, the volume of U.S. oil imports peaked out in early 1977 and the average price per barrel failed to rise.

The somewhat narrower trade deficit in 1979 masks important changes in the composition of U.S. trade performance with developed and developing countries. The value of oil imports from OPEC rose in response to higher oil prices, while U.S. exports to that bloc changed little. Although imports from non-oil developing countries also rose appreciably, the rise was more than covered by growth in U.S. exports. Trade performance with developed economies, reflected appropriate responses to changing cyclical conditions and movements in exchange rates. Strong European currencies and more rapid growth by 1979 aided rapid expansion of U.S. exports to Europe that far exceed the growth in imports; consequently the U.S. trade surplus with Western Europe climbed sharply to over \$12 billion.

TABLE 5.—U.S. MERCHANDISE EXPORTS, IMPORTS, AND TRADE BALANCE BY SELECTED REGIONS, 1971 AND 1974-79

	[In billions of U.S. dollars]						
	1971	1974	1975	1976	1977	1978	1979
U.S. global trade balance.....	-2.3	-5.3	9.0	-9.3	-30.9	-33.8	-29.5
Developed countries, total.....	-3.2	3.4	10.5	4.8	-2.3	-11.4	1.3
Canada.....	-1.3	-6	1.8	-1	-1.1	-2.3	-2.4
Western Europe.....	.8	3.9	9.1	8.9	5.9	2.7	12.4
Japan.....	-3.2	-1.7	-1.7	-5.3	-8.0	-11.6	-8.6
Developing countries, total.....	.8	-9.5	-3.9	-17.0	-29.7	-24.1	-33.5
OPEC.....	-.1	-11.0	-8.9	-15.8	-22.9	-18.4	-30.5
Other.....	.9	1.5	5.0	-1.2	-6.8	-5.7	-3.0
Eastern Europe.....	.2	.8	2.5	3.2	1.8	2.6	4.0
Total, U.S. exports to world.....	43.3	98.3	107.1	114.7	120.8	142.1	182.1
Developed countries, total.....	30.3	64.5	66.5	72.3	77.0	87.8	113.6
Canada.....	10.9	21.8	23.5	26.3	28.5	31.2	36.3
Western Europe.....	13.6	28.2	29.9	31.9	34.1	39.4	54.2
Japan.....	4.1	10.7	9.6	10.2	10.6	13.0	17.6
Developing countries, total.....	12.6	32.1	37.4	38.3	41.0	50.2	62.6
OPEC.....	2.1	6.2	10.0	11.6	12.9	14.8	14.5
Other.....	10.5	25.9	27.4	26.7	28.1	35.4	48.1
Eastern Europe.....	.4	1.7	3.2	4.1	2.9	4.1	5.9
Total, U.S. imports from world.....	45.6	103.6	98.0	124.1	151.7	175.8	211.5
Developed countries, total.....	33.5	61.1	56.0	67.5	79.2	99.2	112.3
Canada.....	12.2	22.4	21.7	26.5	29.6	33.6	38.7
Western Europe.....	12.8	24.3	20.8	23.0	28.2	36.6	41.8
Japan.....	7.3	12.4	11.3	15.5	18.6	24.5	26.3
Developing countries, total.....	11.9	41.5	41.3	55.4	70.7	74.4	96.1
OPEC.....	2.3	17.2	18.9	27.4	35.8	33.3	45.0
Other.....	9.6	24.3	22.4	28.0	34.9	41.1	51.0
Eastern Europe.....	.2	1.0	.7	.9	1.1	1.5	1.9

Source: U.S. Department of Commerce, "Survey of Current Business", June 1979, March 1980. Data expressed on f.a.s. transaction basis, excluding military transactions and adjusted to balance of payments basis.

#### COMMODITY COMPOSITION OF U.S. TRADE

Trade flows, disaggregated according to "end-use commodity categories" (table 6) show how traded goods end up being used in the Nation's economy. "Industrial supplies and materials," including fuel, are in general used for current production and respond sensitively to changes in industrial production. "Capital goods," such as machinery and trucks, are used in business investment and construction, with sales depending on changes in the investment climate. "Consumer goods"—household products, appliances, clothing, and automobiles—satisfy the final demands of the household sector, and purchases follow fluctuations in disposable personal income.

Looking at the commodity composition of the U.S. deficit in 1979 gives a broad picture of where our comparative advantage lies. The strength of our international trading position is solidly founded on exports of capital goods and "foods and feeds," where the U.S. earned surpluses of over \$33 billion and \$12 billion, respectively. These net earnings on merchandise exports, however, were insufficient to pur-

TABLE 6.—U.S. EXPORTS, IMPORTS, AND TRADE BALANCE BY SELECTED END-USE COMMODITY CATEGORIES

[In billions of dollars]

	1971	1974	1975	1976	1977	1978	1979
U.S. global trade balance.....	-2.3	-5.3	9.0	-9.3	-30.9	-33.8	-29.5
Foods, feeds, and beverages.....	-0.3	8.0	9.5	8.2	5.7	9.8	12.4
Industrial supplies and materials.....	-4.8	-24.3	-21.1	-32.2	-46.2	-45.7	-52.2
Fuels and lubricants.....	-2.3	-23.9	-23.8	-32.4	-42.9	-41.1	-57.4
Capital goods, including trucks and buses.....	10.9	20.9	26.4	26.8	25.7	27.3	33.5
Automobiles, including parts and engines.....	-2.7	-3.5	-1.2	-4.1	-5.2	-8.6	-8.2
Consumer goods, excluding autos and food.....	-5.5	-8.0	-6.6	-9.2	-12.9	-18.5	-18.0
Total exports to world.....	43.3	98.3	107.1	114.7	120.8	142.1	182.1
Foods, feeds, and beverages.....	6.1	18.6	19.2	19.8	19.7	25.2	29.8
Industrial supplies and materials.....	12.7	30.1	29.9	32.1	34.5	39.2	57.7
Fuels and lubricants.....	1.7	3.6	4.7	4.7	4.8	4.5	6.7
Capital goods, including trucks and buses.....	15.4	30.9	36.6	39.1	39.8	46.5	58.1
Automobiles, including parts and engines.....	4.7	8.6	10.6	12.1	13.4	15.6	17.4
Consumer goods, excluding autos and food.....	2.9	6.4	6.6	8.0	8.9	10.4	12.6
Total imports from world.....	45.6	103.6	98.0	124.1	151.7	175.8	211.5
Foods, feeds, and beverages.....	6.4	10.6	9.6	11.5	14.0	15.4	17.4
Industrial supplies and materials.....	17.4	54.4	51.0	64.3	80.7	84.9	109.9
Fuels and lubricants.....	4.0	27.5	28.5	37.0	47.7	45.6	64.1
Capital goods, including trucks and buses.....	4.4	9.9	10.2	12.3	14.0	19.2	24.6
Automobiles, including parts and engines.....	7.4	12.0	11.7	16.2	18.6	24.2	25.6
Consumer goods, excluding autos and food.....	8.4	14.4	13.2	17.2	21.8	28.9	30.6

Source: U.S. Department of Commerce. "Survey of Current Business," June 1979, March 1980. Data expressed on f.a.s. transaction basis, excluding military transactions and adjusted to balance-of-payments basis.

chase all the consumer goods and industrial supplies and materials desired by the American economy. Consequently, deficits on consumer goods and automobiles (\$26 billion) and fuel (\$57 billion) resulted in an overall trade deficit of almost \$30 billion.

### *The Impact of Business Cycles on Exports and Imports*

Economic booms and recessions are clearly discernible in U.S. exports and imports in the last decade and in erratic year-to-year swings between deficits and surpluses. This behavior gives some insight into the kinds of trade swings we can expect from the 1980 recession and subsequent recovery. The trade balance fluctuated in response to the worldwide business cycle defined by peaks in economic activity in major industrial countries in late 1973 and 1974, deep recession troughs in 1975, and subsequent recoveries to 1978.

Economic activity among our trading partners revived with varying strength and progressed along different time paths. Those differences affected bilateral trade balances with major trading partners, particularly the slowdown in the developing world that lagged the recessions in industrial countries. At the peak of the global business cycle in 1974, the overall U.S. trade balance showed a \$5.3 billion deficit and then swung to a \$9 billion surplus during the steep 1975 slide into recession. A deficit reappeared thereafter and widened sharply to \$34 billion in 1978. A good part of the overall trade deterioration has been attributed to the more rapid economic recovery in the U.S. than in other industrial countries and to the lagged slowdown in investment in many developing countries.

Income-sensitive imports were largely responsible for the wide swings in trade balances during the last cycle and will probably be the prominent feature in the 1980 downswing and recovery. Total imports



dropped from almost \$104 billion (table 6) in 1974 to \$98 billion in the recession year, 1975, and then rebounded in the cyclical upswing to attain almost \$176 billion in 1978. The recession dip in imports hit mainly the major industrial countries, whereas imports from OPEC—indeed mostly oil—continued to rise despite the U.S. recession, and purchases from non-OPEC LDCs dropped only slightly. During the 1975–78 upswing, roughly two-fifths of the \$78 billion rise in imports came from developing countries, including a \$14 billion increase from OPEC and a \$19 billion rise from non-oil LDCs. These LDCs supplied larger purchases of manufactured goods, as well as raw materials and industrial supplies needed for our recovering industrial production. The remainder of the \$78 billion rise in imports—some \$43 billion—came from developed countries, with shares roughly equally distributed among Canada, Western Europe and Japan.

In contrast to the marked cyclical profile of U.S. imports the value of our exports continued to grow steadily, if slowly, even during the 1975 recession. One reason is that the recession in most of our trading partners was not as severe as that in the U.S. Moreover, when activity in industrial countries slumped in 1975, developing countries continued to expand their economies. Exports to developing countries even showed considerable strength in 1975, making up for noticeably sluggish sales to Canada and Western Europe and absolute declines in deliveries to Japan. In 1976, however, exports to developed countries picked up; sales to OPEC slowed; and deliveries to non-oil LDCs actually declined. Non-oil LDCs had cut back their economic growth in the face of worsening external positions. With the passing of the initial impetus of economic recovery, U.S. exports grew only sluggishly. During 1976–77, total exports rose by \$13.5 billion, of which \$10 billion went to developed countries, mostly to Canada and Western Europe, and nearly \$3 billion went to OPEC. The value of our exports to Japan increased by \$1 billion in that two-year recovery and sales to non-oil LDCs rose by somewhat more. Despite this nominal growth in export values, export volume in 1977 still failed to rise above the 1974 level. This disappointing export performance over several years, despite the dollar's deep depreciation, has caused some observers to doubt the role of flexible exchange rates in the adjustment process. In 1978, however, U.S. exports recovered strongly as growth in both developed and developing economies picked up and the dollar's earlier depreciation began to improve the price competitiveness of U.S. manufactures.

TABLE 7.—U.S. TRADE WITH 7 LDC'S  
[In millions of dollars]

	Exports			Imports			Trade balance		
	1970	1977	1978	1970	1977	1978	1970	1977	1978
Singapore.....	240	1,172	1,462	81	875	1,103	159	297	359
Philippines.....	373	876	1,040	472	1,103	1,207	-99	-227	-167
Korea.....	643	2,371	3,160	370	2,895	3,747	273	-524	-587
Hong Kong.....	406	1,292	1,625	944	2,916	3,474	-538	-1,624	-1,849
Taiwan.....	527	1,798	2,340	549	3,681	5,171	-22	-1,883	-2,831
Subtotal (a).....	2,189	7,509	9,627	2,416	11,470	14,702	-227	-3,961	-5,075
Mexico.....	1,704	4,806	6,681	1,219	4,685	6,093	485	121	588
Brazil.....	841	2,482	2,978	670	2,246	2,831	171	236	147
Subtotal (b).....	2,545	7,288	9,659	1,889	6,931	8,924	656	357	735
Total, (a)+(b).....	4,734	14,797	19,286	4,305	18,401	23,626	429	-3,604	-4,340
Japan.....	4,652	10,522	12,885	5,875	18,623	24,458	-1,226	-8,101	-11,573

*The Developing World: Market for Exports and Supply of Manufactures*

In the geographic breakdown of U.S. trade above, both OPEC and non-oil LDCs loom large as growing suppliers of our imports and markets for our exports. The two groups of countries together were the supplier of over two-fifths of U.S. imports and the destination of over a third of U.S. exports. As an indication of the growing relative size of these economies, five Asian LDCs alone represent an expanding market that rapidly approaches the size of Japan in terms of the value of U.S. exports in recent years (table 7). In fact, adding our exports to Brazil and Mexico, these seven LDCs purchased more U.S. goods than did Japan. Further, these seven countries supplied the same value of imports into the United States in 1977-78 as did Japan. One of the most dynamic developments in the world economy in the 1970's is the emergence of the non-oil LDCs as efficient producers of capital equipment, chemicals, finished metals, consumer durables and nondurables and textiles. With the development of their manufacturing capabilities they have become a significant importer of manufactured goods. Still, it is astonishing to realize that in 1977-78, U.S. exports of manufactures (excluding agricultural and fuel trade) to non-OPEC developing countries alone were 3½ to 4 times our manufactured exports to Japan and equal to manufactured exports to all of OECD Europe. Thus, in a world of dynamic change, sustained growth in the developing world may be of greater longer-run significance for U.S. manufactured exports than growth among the major OECD countries. Viewed from the perspective of the geography and commodity structure of U.S. exports, our foreign economic policy should not underestimate the importance of the developing world when we look to correct our trade deficit.

*Divergent Growth and the Elasticities Controversy*

During the 1970's, the United States and its trading partners confronted the policy issues evolving around the problem of divergent growth rates. Even if the United States and its important partners were to grow at the same rates, according to some economists, the U.S. trade balance may still tend to move toward deficit, because of the relationship between import and export elasticities among the trading partners. For example, the U.S. import elasticity with respect to domestic GNP growth is *greater* than the export elasticity with respect to foreign income growth, while Japan's import elasticity with respect to domestic GNP growth is *less* than its export elasticity with respect to foreign growth. Thus, to get balance or a surplus in U.S. trade requires foreign growth to be more rapid than U.S. growth.

The measured import elasticity, according to Lawrence, reflects both the change in domestic demand and the *declining* growth of domestic supply. Lawrence's analysis provides important evidence that sluggish growth of domestic supply actually contributes to the sensitivity of import growth over time.

*Conclusions*

What can we conclude from this overview of U.S. trade performance in the past two decades? First, the structural change we highlighted

shows the U.S. to have become a net importer of merchandise and a net exporter of services. This is a departure from earlier experiences in the 1960's with important implications for our commercial policy in the future. So long as the United States runs a significant net surplus on invisible transactions, a trade surplus is not essential to achieve the desired current account position whether near balance or a surplus. Related to this conclusion is the belief that the positive balance on invisibles is a secular, not a transitory, development which will persist for some years at least because of the huge stock of U.S. assets built up abroad. This development suggests that the U.S. has achieved maturity as a net creditor nation.

Second, this chapter has illustrated the sensitivity of U.S. trade flows to income and relative price changes. U.S. imports especially are sensitive to fluctuations in domestic income and secular growth over time. This sensitivity reflects as much the inadequate growth of domestic supply in certain key industries, as well as the emergence of new supplies abroad, as it does a classic import elasticity relationship. Exports, in contrast, respond less sensitively to changes in foreign income and to growth abroad than do imports to changes in domestic income. This suggests another structural problem in U.S. trade performance over the long term: Even if the United States were to grow at rates equal to the growth of our major trading partners, the U.S. would tend to run a persistent trade deficit. As mentioned above, that is not necessarily an unmanageable situation, providing the services accounts continue to generate adequate surpluses to cover the trade deficit.

Third, SSEC research confirms what other economists have observed, namely that U.S. trade volumes are indeed responsive to relative price changes, but that it takes at least a year to two years before significant volume effects occur. That is, following a devaluation of the dollar, it takes a year to two years before the volume of imports begins to decline and the volume of exports to rise, bringing about a narrowing of the trade deficit in volume terms. In the short run, however, perverse effects—the so-called J-curve—may well cause the trade deficit to widen, as the price effects outweigh the volume effects of devaluation.

Fourth, the geographic structure of U.S. trade has shifted in the 1970's, so that non-oil-developing countries have become an important source of imports as well as an important market for U.S. exports. The developing world, including OPEC, represents the most dynamic market for future manufactures exports which are becoming increasingly important as a source of American jobs. Foreign economic policy in general and trade policy in particular should give increasing attention to U.S. relations with the developing world.

Fifth, the end-use commodity categories for exports and imports clearly indicate that our strength as measured by trade surpluses is founded on capital goods and agricultural exports based on high technology and highly skilled labor inputs. Major classes of net imports include standardized manufactured consumer goods, automobiles and raw materials and petroleum. The inferences for policy to be drawn here suggest that appropriate investment and innovations could substitute efficient domestic production for imports in the case of automobiles and petroleum. Reductions in imports of both these

commodities would contribute not only to a reduction in a persistent trade deficit, but help reduce the Nation's dependence on imported energy.

## V. THE INTERNATIONAL ROLE OF THE DOLLAR

The demise of Bretton Woods and the rapidly changing position of the United States in the world economy has eroded the dollar's central position in the international monetary system. Under the Bretton Woods System, the dollar had been universally acceptable as the key official reserve asset in addition to gold, and as the central transaction, or "vehicle", currency for private business. Private banks, firms and individuals used the dollar for working balances to conduct international trade, services and capital transactions. It was the universal international unit of account and store of value. The international role of the dollar ultimately hinges on the vitality of the American economy and confidence in our political and economic institutions to sustain our economic growth and stability. Events of the 1970s have clearly undermined that confidence. As a result, the international monetary system is evolving toward a multi-asset reserve system in which the dollar's role is gradual y being supplemented by other key national currencies and the SDR.

### *U.S. Current Account and the Dollar as a Reserve Asset*

The structure of U.S. international payments, in the final analysis, underpins the dollar's role and the extent to which it remains a central reserve asset. Over the long term, it is the surplus or deficit on current account, together with long-term capital flows, which will determine the dollar's international value as an official reserve asset and transaction currency.<sup>4</sup> The link between this country's balance of payments and the creation of dollar reserves and their exchange value has been succinctly expressed as the so-called "Triffin Dilemma." Evolving from that link are the issues surrounding: (1) the adequacy of reserves relative to the growth of world trade and investment; (2) confidence in the value of accumulated dollar holdings; and (3) the reliability of the dollar as a unit of account and transaction vehicle. Specifically, the two horns of Triffin's dilemma can be set out as:

(a) The growth of world reserves in a dollar-exchange system depended on U.S. deficits on current account and long-term capital flows to generate financial assets which foreign official agencies and the private sector willingly held. Yet, the cumulation of U.S. dollar liabilities to foreigners eventually raised doubts about our ability to convert them into gold (under Bretton Woods, until official suspension of redemption in 1971). Later in the 1970's, doubts about their exchange value led to recurrent dollar crises and periodic devaluations and depreciation. Thus cumulative deficits ultimately undermined universal acceptability and led to diversification out of the dollar to other assets by the end of the decade.

(b) Elimination of the current account deficits, on the other hand, and cumulative surpluses would choke off the supply of

<sup>4</sup> This long-term view is not inconsistent with the prevalent belief that capital flows, and the efforts of portfolio managers to seek the optimal composition of their asset holdings, determines dollar exchange rates in the short term (see Branson, Willett studies in the SSEC).

dollar reserves. The constricted supply of dollars would make them more desirable as an official or private reserve holding, but the international system as a whole, under the circumstances, would risk inadequate growth in reserves to finance the expansion of world trade and investment. Gold production under Bretton Woods failed to fill the gap, giving rise eventually to the creation under international auspices of a supplementary medium, the IMF's SDR.

*"Benefits" and "Costs" Accruing to Reserve Currency Country*

The Europeans especially have been quick to stress the advantages accruing to the United States as the key reserve currency country. The United States, they argue, has in the past used its reserve currency status to absorb real resources from the rest of the world through a persistent payments deficit and by depreciating in real purchasing power its net dollar liabilities to the rest of the world. In the late 1960's the United States persuaded foreign central banks to refrain from converting their dollar balances into gold. At least since the Washington Agreements on gold transactions in March 1968, the gold window was only reluctantly held open and of course after August 1971 was officially closed. Thus, foreign official institutions were forced, in effect, to acquire U.S. government dollar liabilities in financing the American payments deficit. This deficit enabled a larger absorption of world resources than if gold convertibility had remained in effect.

The second advantage derived from the U.S. ability to depreciate the stock of foreign-held dollar assets in a general inflation, thereby reducing the real purchasing power of these assets over time. American banks shared a third set of benefits related to large transactions associated with the dollar's role as a key reserve asset and major transaction currency for financing international trade and investment. The depreciation in real terms of the stock of net dollar liabilities to foreigners, in addition to a persistent payments deficit (i.e., flows into the stock), are benefits accruing to the United States which in the light of the experience in the 1970's, seem to be limited in time. The continued cumulation of dollar reserve assets led eventually to a loss in confidence in the dollar as a reserve currency—the Triffin dilemma becomes operative. Indeed, a series of dollar crises followed, ultimately causing a reluctant use of dollars as a reserve.

Critics of U.S. reserve currency status neglect the real costs incurred by the domestic economy in efforts to sustain a stable monetary reserve. To the extent this country eliminates current account deficits and runs a surplus, the supply of new dollar assets is diminished and the real purchasing power of foreign dollar holdings is preserved. But this implies domestic costs measured by slower real economic growth, lost real income and wealth over time. The welfare loss from slower growth may be partly offset by gains stemming from the higher purchasing power of the dollar and the improved terms of trade resulting from policy restraints and the external surplus. Moreover, in this scenario, the second part of the Triffin dilemma becomes operative: The U.S. current account surplus (providing it exceeds long-term capital outflows) stops the creation of dollar reserve assets and acts as a drag on the growth of international trade and investment without some alternative reserve asset to supplement the role of the dollar.

*U.S. Policy Conflict: Engine for World Growth Versus Stable Reserve Currency*

During the post-war period American economic policy pursued a variety of international objectives, but two were particularly important for the viability of Bretton Woods. At home and abroad, the United States grappled with sustaining economic growth, while simultaneously fostering a stable international monetary system with the dollar established as the key reserve currency. High rates of domestic growth, it was argued, spilled over to the rest of the world economy via multiplier effects through the U.S. current account. Put simply, U.S. imports stimulated expanding production and employment abroad. As a result, the old Triffin dilemma haunted policymakers, as cumulating dollar liabilities to foreigners were eyed with growing suspicion by the late 1960's. Because of the self-destructing link between the U.S. role as an engine for growth and as a central reserve currency country, the Bretton Woods System eventually cracked and collapsed.

The struggle for freedom to pursue both domestic growth and a stable international monetary system culminated in the early 1970's in two major switches from past policy: (1) The adjustable pegged system of Bretton Woods was displaced in 1973 with an evolving managed float system; and (2) the dollar's role as the key international reserve was supplemented by the creation of SDRs. The first objective was to help the United States to escape the domestic policy constraints imposed by the dollar's reserve role, while permitting appropriate adjustments in the structure of exchange rates to reflect better the changing structure of production costs and prices among major trading countries. The second policy switch was intended to provide alternative reserve media which were independent of any issuing country's current account deficit. The link between the mutually conflicting roles of the dollar had been weakened, but a clean break still remained for the 1980's.

*Reasonable Expectations for Flexible Rates?*

Many economists and policymakers alike had great expectations for more flexible dollar exchange rates (See Branson, Willett). A floating exchange rate would free monetary policy to pursue domestic full employment. Or an economy could aim at an inflation rate different from that of the rest of the world and the exchange rate would automatically and smoothly move to offset the differential. This expectation for independent policy action was based on the belief that exchange rates moved fairly smoothly, following a purchasing power parity path on which differentials in national inflation rates would be fully offset by compensating movements in floating exchange rates. Further, a floating exchange rate was expected to insulate the domestic economy from international disturbances. The domestic price level would not have to adjust to foreign price disturbances, because the floating dollar rate would adjust.

The lessons learned from floating since 1973, as compared with pegged rates before 1971, taught that expectations for floating were partly misinterpretations of economic theory on flexible exchange rates and partly correct within a much broader timeframe. First,

experience with managed floats had created a fairly broad consensus about how exchange rates are determined. Over a longer sweep of time—at least one year and more—exchange rates do seem to move in ways broadly consistent with purchasing power parity theory. Just as domestic monetarism and the relationship between the rise of domestic price levels and the growth of monetary aggregates holds in the long term, exchange rates over the long term seem to offset differential rates of national price inflation. In the short run, however, purchasing power parity holds little explanatory power (Branson, Willet).

A widely accepted, new theory of exchange rate determination persuasively argues that rates are determined in the short run by short-term capital flows and the process by which market participants achieve optimal portfolios of financial assets. A whole host of expectational factors acquire importance in this framework as portfolio managers relate expected and actual changes in monetary policy, interest rate structures and exchange rate movements to their profit-optimizing objectives for financial portfolios. In this short-term world of animal spirits and mercurial psychology, experience since 1973 shows how exchange rates overshoot purchasing power parity paths by extraordinary margins.

Second, the expectation that flexible rates would insulate the domestic economy from external disturbances is generally true for *monetary* phenomena. If one country allows excessive monetary expansion to generate a monetary inflation, a second country can avoid importing the inflation by allowing its currency to appreciate. Advocates of flexible exchange rates, however, have not suggested that flexibility will prevent changes in relative prices—oil price increases relative to other goods for example—from being transmitted to the domestic economy with an impact on the domestic price level.

Finally, the expectation that domestic authorities may pursue policy independently from that of neighboring countries holds some truth. No country under flexible rates is compelled to import inflation generated by a neighbor. The domestic price level can be held stable, but the currency must appreciate. The problem, as some Europeans complain, is that appreciation bears a cost in terms of eroding export competitiveness. The shift from pegged exchange rates before 1971 to managed floats after 1973 has shifted the nature of the policy constraint. The balance of payments and the gain or loss of reserves constrained domestic policy in the pegged system, while exchange appreciation or depreciation constitutes the constraint on domestic policies in a flexible rate system. The managed float operating at present falls somewhere between the polar extremes of ideally pegged and perfectly flexible to combine both balance-of-payments and reserve constraints of the former with exchange appreciation and depreciation of the latter.

The lessons of the 1970s mark important progress both in the understanding of economic theory and the explanation of real-world behavior and in our ability to formulate more rational policy in a complex and changing world. These lessons have taught policymakers that international coordination of monetary policy is as essential under a managed float as in a pegged rate system. The last decade marks important progress in the development of institutional frameworks to carry out such coordination: Regular summit meetings of heads of

state and finance ministers, monthly sessions of central bankers at the Bank for International Settlements, Working Party meetings within the OECD, ongoing negotiations through the IMF all attest to the growing commitment to concerted action not only in monetary policy but in other broad areas such as energy.

### *Stress on Adjustment*

Apart from international policy coordination, there is a reinforced awareness that greater stress should be placed on real adjustment in the future. Real adjustment here means that domestic price structures will be allowed to change, that export and import volumes will be free to respond to changes in prices and that labor and capital will be encouraged to move between industries, economic sectors and geographic regions. Experience of the 1970s teaches that movements in *real* exchange rates—nominal exchange rates adjusted for price inflation—have contributed importantly to international adjustment (Branson, Willett, Fleisig), but the time lags are long (at least one to three years for the initial and full effects of exchange rate changes to have an impact on export and import volumes). Willett in particular argues persuasively that the most promising way to improve the operation of the international monetary aspects of the world economy is to focus on the process of international and domestic adjustment. Flexible exchange rates, he concludes, should be coupled with strengthened surveillance of national policies to promote *adjustment* not simply surveillance of central bank foreign exchange intervention.

Indeed the renewed stress on adjustment is embodied in the thrust of Federal Reserve policy during 1978–79. The extraordinary policy shifts of November 1978 and October 1979 have virtually returned U.S. foreign economic policy full circle. Once again, as in the days of the pegged Bretton Woods system, the monetary authorities have explicitly given higher priority to the dollar's external position and a domestic anti-inflationary policy that is consistent with a reserve currency country. The efforts to slow the growth of the monetary aggregates, to create positive real interest rates in the American economy, and to discourage flight from the dollar have produced positive results. It reflects again the lesson of the 1970s that central bank exchange intervention alone cannot achieve exchange stability. That objective depends on appropriate monetary policy and real adjustment.

### *Adjustment Costs*

We should not lose sight of the real costs of this policy switch, even as other countries applaud the Federal Reserve policy to strengthen the dollar. It may yield lower economic growth at least for the near term which may very well spur renewed criticism from the Europeans when a recession cuts back American imports and worsens the trade performance of other countries, particularly the developing countries, which are already hard pressed by the rise in oil prices. It will be difficult for the United States to function both as the world's engine for growth and as the exclusive key reserve currency country. The major surplus countries could share in the responsibility for one role (growth engine) or the other (key reserve center). Certainly, while



Germany, Japan and Switzerland, among others, ran domestic growth policies and current account surpluses which were consistent with reserve currency countries, they persistently set up obstacles against the use of marks, yen and Swiss francs as official assets. Fortunately, as the 1980s begin, those policy positions may be softening.

### *Outlook for the Dollar as Reserve Currency*

What is the outlook for the dollar as a reserve currency? The dollar will undoubtedly remain the most important reserve asset in the 1980s. Nonetheless, a multi-reserve asset system is clearly evolving. Other currencies, including the mark, yen, Swiss franc (and perhaps even the pound sterling in the short run), the SDR and the ECU of the European Monetary System will gradually assume larger roles as reserve assets. This multi-reserve asset system is likely to bring certain inherent instabilities, simply because asset holders will have greater opportunities to shift the composition of their reserve holdings. Portfolio diversification will contribute to periodic swings in exchange rates that may often be inconsistent with economic fundamentals underlying the long-run strength of the U.S. and other economies. Thus the problem of overshooting appropriate paths for key exchange rates will very likely persist in the 1980s.

The certainty for the dollar remaining the key reserve currency for the 1980s derives largely from the probable outlook for the U.S. payments deficit and OPEC's investable surplus. The 1979-80 round of OPEC oil price increases will set loose an extraordinary surge in OPEC net investable revenues. Alternatives to dollar assets are simply too few and too small in magnitude at the present to meet the huge coming demand for OPEC investment outlets. Some numbers help to give the rough size of these investment requirements for the near term. (These are presented here only to indicate what some experts expect and are *not* to be taken as independent forecasts of this author.) The OPEC net investable surplus may climb to roughly \$115 billion in 1980, up from \$68 billion in 1979 and \$5 billion in 1978 (IMF *World Economic Outlook*).

This burgeoning flow of new OPEC funds seeking investment outlets could push their public- and private-sector net external assets from an estimated \$160 billion at the end of 1978 to over \$300 billion by the end of 1980. Moreover, more than half of the total will probably be concentrated in the portfolios of Saudi Arabia and Kuwait. These figures illustrate the large potential for exchange rate instability resulting from even relatively small shifts in the portfolio composition of the major OPEC investors to achieve their diversification objectives. The multi-asset reserve system apparently evolving now and into the 1980s may well contribute to increased diversification opportunities and add to capital mobility between them. It is the increasing capital mobility which, according to Willett, in the 1970s has contributed most to wide swings in exchange rates. The best way to dampen wide swings in exchange rates is to reduce the inducements to switch. That means dampening erratic changes in interest rate differentials, narrowing divergent movements in price levels and reducing disparities in real economic performance and in the conduct of stabilization and monetary policies across countries.

There are alternatives which fall in the category of exchange controls and/or regulation of the international capital flows and the Euro-markets. European countries have had some success in achieving these ends, including at various times, the U.K. (oldest exponent of controls), Germany (Bardepot, and domestic capital market restrictions), Switzerland (negative interest charges and domestic capital market restraints), France and Belgium (two-tiered foreign exchange market) among others. The European countries and Japan have had a long tradition of controls over international capital movements and exchange controls and over time have developed the institutions and expertise to implement them. Still they have learned such controls are not effective for very long. Market participants quickly find loopholes and evasive techniques. To underscore that point, the emergence and growth of the Euro-currency market itself was spurred by the U.S. Government's introduction of restraints on capital flows and investment in 1965 (Sammons study in the SSEC). New controls now are not likely to be any more effective; they will probably only hasten new evasive financial techniques.

### *The Euro-Currency Markets, Their Growth and Stability*

Closely linked to the issues of the role and stability of reserve currencies is the growth of the Euro-currency markets during the 1970s. The interactive development of the Euro-currency markets, multinational corporations and international banks resulted in an electronic communications network spanning the globe and functioning virtually 24 hours a day. The locus of decisions concerning a multitude of economic transactions shifted from the national to a global level that affected all manner of operations on a worldwide scale. The multinational banks were the instruments which changed the structure of global banking and finance, just as the global nonfinancial enterprises altered the structure of global production (Pugel, Hawkins and Walter). This institutional and market network has greatly enhanced capital mobility and broadened opportunities for placing and borrowing funds at the most advantageous rates.

The gross size of the Euro-currency markets—including liabilities to nonbanks, central banks and other banks—rose fourfold from 1970 to some \$460 billion in 1975 and more than doubled to about \$1,235 billion in early 1980. Netting out interbank transactions, the growth picture remains the same, although the absolute size is smaller: Net claims quadrupled from 1970 to \$250 billion in 1975, and then rose to \$630 billion by early 1980. Euro-dollars constituted roughly 75 percent of total Euro-currency liabilities.

The Euro-currency markets have become a source of borrowed reserves for deficit countries, as well as an investment outlet for the central bank reserves of smaller countries and the investable surplus of OPEC countries. Thus these markets and the multinational banks in the last decade have become increasingly involved in financial and foreign exchange operations which were traditionally the province of central banks and international financial institutions, such as the IMF. This is a significant development quite apart from the extraordinary growth of the Euro-currency markets and their increasingly central role in financing private trade and investment transactions around the world.

The implications for national economic policy are cloudy but of potentially great importance. Many of the conventional instruments of economic stabilization, taxation, and regulatory oversight cannot reach some of the operations of global banks and non-financial corporations. Indeed, they often choose the multinational route as much to evade regulation and policy restraints as to enhance their corporate efficiency (Hawkins and Walter). There is simply the lack of evidence with which to understand the impact of multinationals' operations on various aspects of government policy effectiveness. With respect to the Euro-currency markets, the lines between private and official transactions become increasingly blurred.

The integration of national money and capital markets into a global network adds to the complexities of central bank operations and policy strategies. It raises new concerns for bank regulation and regulatory oversight, while contributing at the same time to more efficient allocation of money and capital worldwide. Policymakers have grown increasingly concerned that the Euro-currency markets pose potential problems for the effectiveness of monetary policy and for the prudential position of commercial banks and the stability of the banking system.

With respect to *monetary policy*, the unbridled growth of Euro-dollar liabilities diminishes the precision of domestic monetary control. It is difficult, however, to gauge accurately how much the growth in Euro-dollar markets affects spending in the United States, since such Euro-balances are used to finance transactions in other countries. Further, the effects of restrictive monetary policy are distributed unevenly across domestic and Euro-currency markets. To achieve a desired degree of monetary restraint would require a disproportionate share of the burden to fall on smaller banks and other economic sectors which usually suffer from periods of tight money. The Federal Reserve, recognizing the leakage of control, responded in the October 6, 1979 package by imposing an 8 percentage marginal reserve requirement on the growth in managed liabilities, including bank liabilities to their foreign branches. (That requirement was subsequently eliminated in July 1980.) Nevertheless, the Euro-dollar liabilities of foreign branches still are free from reserve requirements, so that some leakage remains. To get a better handle on the growth of transactions balances, the Federal Reserve has considered inclusion in new definitions of the monetary aggregates as policy targets a portion of Euro-currency liabilities to non-banks. An alternative approach to this leakage proposes reserve requirements levied on the liabilities of foreign branches to eliminate the asymmetrical treatment of domestic and Euro-bank reserve requirements.

With respect to the *prudential problem* of banks and the commercial banking system, both public regulatory authorities and the commercial banks themselves are carefully examining the use of prudential limits applied to "credit risk" and "country risk." Statutory limits on the volume of credit which banks may extend to a single borrower vary widely. National banks, for example, may not lend to a *single borrower* an amount exceeding 10 percent of capital, but under this restriction, it is possible for aggregate customer loans within a single *country* to exceed total capital. State banks operate under similar regulatory restraints, but they vary widely with individual state laws. At present

individual banks are free to limit their exposure in a given country as they deem prudent. In a world of growing risks associated with political and social, as well as economic, instabilities, especially in the developing world, country risk becomes an important problem for individual banks and policymakers alike.

### *Policy Proposals for the 1980's*

Looking ahead to the 1980s, the United States should play a big role in shaping the international monetary system. In that evolutionary process the dollar may not escape as the key reserve currency, but other supplementary reserve units should be encouraged. Since the United States must achieve sufficient domestic growth to provide jobs for a growing labor force in the next two decades, this country's contribution to world economic welfare is heavily weighted as an engine for growth. As this paper has argued, the growth role may be constrained by the role as a reserve currency country. In all probability, the United States will continue to face deteriorating external terms of trade for much of the 1980s, largely because of our energy and raw materials situations. We need flexible exchange rates in periods of substantial structural adjustment, and the dollar therefore will in all likelihood be subject to periodic weakness. Consequently, the United States should reinforce the move toward a multi-reserve asset system over the long term, and reinforce the reserve role of the SDR in particular.

In this scenario, the International Monetary Fund would play an increasingly growing role as: (1) An issuer of reserve assets; (2) a regulator of global liquidity to prevent inflationary excesses; (3) a lender for financing balance-of-payments problems; and (4) an overseer of national policies for economic adjustment and exchange intervention. Under the present weighting system for voting such policy, the United States undoubtedly could continue to dominate the ultimate shape and implementation of the strengthened role for the IMF. This larger role implies a sacrifice of some national sovereignty, which for some countries may be more difficult than for the United States. Yet, if we are to gain greater freedom for domestic policy objectives we must give up some of the constraints imposed by an exclusive reserve currency status.

Toward the enhanced role of the IMF, the United States should give continued support to the supplemental financing facilities: (1) Oil Facility; (2) Supplementary Financing Facility; (3) Trust Fund (operating on gains from gold sales); (4) Compensatory Financing Facility; and the (5) Extended Facility. These five funding arrangements have an extra quota cumulative value equal to approximately half the cumulative tranche drawings from the IMF. In addition, the Congress should actively support the 50 percent increase in IMF quotas under the Seventh General Review of Quotas, effective 1980, that would greatly enhance the IMF's position in financing the current account deficits of oil importing countries in the near future. Such legislation is already before the Congress, and given the urgency of financing needs, should be expedited.

Proposals for implementing a Substitution Account are essential to promote the SDR as a prominent reserve asset. This arrangement

would enable the IMF to exchange SDR-denominated securities for foreign exchange holdings of national currencies (mostly dollars). The Substitution Account would not only provide an alternative reserve unit, but would contribute to more rational control of Euro-dollars held as reserve assets. Smaller central banks and OPEC countries could hold SDR securities as reserves rather than dollars.

The Substitution Account can be implemented only gradually, even after the considerable time required to iron out the technical details. In the interim, central banks can do much to provide new types of non-dollar assets to meet the huge forthcoming demand. Securities denominated in non-dollar, hard currencies can be "sold" offmarket for dollar balances to the smaller central banks and OPEC authorities to satisfy some of their diversification requirements. The process of mopping up central bank reserves in the Euro-dollar market could actually result in a multiple contraction of Euro-dollar liabilities, analogous to a Federal Reserve sale of Treasury Securities to the non-bank public. Some foreign central banks will balk at the prospect of acquiring U.S. dollars for their own securities, leaving them vulnerable to exchange loss in the event of dollar depreciation. Here the United States may have to assume part of the exchange risk as an economic cost which is necessary to achieve a reduction in the dollar's reserve role.

A final point should be made concerning the huge recycling problem confronting private banks and markets, international institutions and governments in the early 1980s. The financing scenario of 1975-76 will probably not be repeated in the next few years. Private banks are not in the favorable position they enjoyed earlier in the 1970s, while the IMF has greatly enlarged resources. Therefore, the recycling process must increasingly be accomplished through international institutions and governments. In the process the country risk associated with this borrowing should be shifted as much as possible directly to the OPEC surplus countries or to multilateral institutions. At present the risk is disproportionately borne by private banks holding short-term liabilities which are backed by long-term credits. Whether by design or not, U.S. banks have decelerated their lending to non-OPEC LDCs in the last two years, in contrast to the accelerated lending by foreign banks. Given the integration of international banking operations, problems with foreign banks—like Herstatt—can threaten American banks as much as trouble with one of our own institutions. Thus, U.S. efforts to shift the ultimate country risk to OPEC should be organized with the close support of other major banking centers.

## VI. POLICY STRATEGIES AND OPTIONS IN A DYNAMICALLY CHANGING WORLD

This paper has focused on two fundamental transformations in the global economic environment which challenge U.S. policymakers in the 1980's and beyond—the oil and energy revolution and the adverse shift in comparative advantage accompanying the rapid industrialization of the developing world. The discussion of policy alternatives that follows emphasizes these transformations as permanent mutations in the global environment which pose structural problems requiring real adjustment over the long term.

Further, in evaluating the effectiveness of policy alternatives, it is critical to recognize that the American economy's response to policy instruments is quite different today than under the Bretton Woods system. The United States has become an *open economy* operating in a *flexible exchange rate* system with financial institutions and markets that enable an unusual degree of international *capital mobility*. Each of those characteristics—open economy, flexible exchange rates and capital mobility—reflects significant changes in the U.S. economic environment emerging in the 1970's. That poses new policy constraints. As a result, the effectiveness of macroeconomic policy, trade measures or a new industrial strategy depends on their induced effects on dollar exchange rates and the subsequent repercussions of changing exchange rates on the domestic economy.

The stress in the following discussion is on a policy thrust that promotes real adjustment to overcome the loss of American economic vitality and overall competitiveness resulting from the oil crisis and the adverse shift in comparative advantage, both of which are ongoing developments into the longrun future. Three broad areas are discussed below: (1) Macroeconomic policy mixes; (2) commercial policy with emphasis on overcoming an ongoing adverse shift in U.S. comparative advantage; and (3) long-term industrial strategy to promote intersectoral and inter-industry resource movements.

### *1. Macroeconomic Policy Mix, External Balance, and U.S. Real Adjustment*

The deterioration of the U.S. trade and current accounts during the 1970's gives warning about the global competitiveness of the American economy. As summarized earlier in this essay, the SSEC studies have contributed substantially to a clearer picture of the various causes of the balance-of-payments problem, as well as discussing corrective measures. This section examines major policy issues along with policy alternatives and recommendations, drawing from the relevant SSEC international studies. One note of caution to the reader is important: While the discussion often alludes to the current account—mainly because of the detailed discussion in section IV above—it should be pointed out that a more appropriate external target for long-term policy would include long-term capital flows, together with transactions on merchandise trade and invisibles. This is particularly important for the United States, since this country's position as a foreign investor looms large in the world economy. As indicated in section V, the structure of the current account, long-term capital flows and their combined balance are critical in determining the dollar's role in the international monetary system.

Our receipts from U.S. sales of goods and services not only go for payments of imported goods and services, but sustain the outflow of capital for long-term investment. In the final analysis, foreign economic policy should at least consider what responsibilities the United States should assume in international finance as well as the longer-term outlook for the structure of the current account. The following discussion, however, abstracts from the role of the dollar and the United States as net lender.

## MACROECONOMIC POLICY MIX

Economic experience from the 1970s persuaded many economists that the appropriate analytical framework for macro-economic policy was one of an open economy, operating in a flexible exchange rate system with a high degree of capital mobility (Dornbusch in Federal Finance Area). In this environment, not only do external shocks have a direct and speedy impact on the domestic economy through the current account, via income changes, exchange-rate fluctuations and relative price changes, but changes in domestic policy have similar repercussions on foreign economies via the same transmission mechanisms. A change in domestic fiscal policy, for example, not only affects incomes and prices at home, but also affects the levels of exports and imports and, in a floating exchange system, dollar exchange rates. In addition, actual and expected changes in interest rates generate short-term capital flows which also cause substantial near-term swings in dollar rates.

An example, setting out two polar cases (Dornbusch), helps to illustrate the choices and issues when policymakers in an open economy confront high capital mobility and flexible exchange rates. Suppose the United States attempts to move toward full employment, using stimulative fiscal expansion, combined with monetary restraint aimed at external balance.

*In the first polar case*, the monetary authorities hold the money stock constant and allow interest rates to rise as the government budget deficit places demand on the capital markets. Since the monetary authorities resist buying government bonds, capital flows in from abroad in response to the rise in domestic rates, and foreign funds finance the government deficit. This capital inflow can cause a substantial appreciation of the dollar in a very short time. Meanwhile, the fiscal stimulus affects domestic income, stimulus imports and causes a deterioration in the trade balance. The latter tends to depreciate the dollar and improve the competitive position of American exports (the effects of which occur with substantial 1 to 2 year time lags). The dollar appreciation (induced by the capital inflow) tends to decrease export competitiveness while the dollar depreciation (induced by the trade deterioration and the income expansion) tends to raise export competitiveness. The net effect is by no means certain. The greater the degree of capital mobility—hence the greater the initial dollar appreciation—the more likely will the decline in export competitiveness prevail. One clear result, however, is that this policy of borrowing abroad to finance the trade deficit cannot continue indefinitely. The accumulation of foreign debt will eventually create crises of confidence and an eventual flight from the dollar. (These problems were discussed in detail in section V.)

The *second polar case* assumes the monetary authorities hold the level of interest rates fixed, so that capital flows are not induced by rising interest differentials. To the extent that the central bank is able to achieve this objective, the rising government deficit under the fiscal stimulus program would be financed by domestic monetary expansion and/or crowding out the private sector in domestic capital markets. In this extreme case with no capital inflows, the dollar does not appreciate as in the first case above. Dollar depreciation does

occur in response to the deterioration of the trade balance (induced by fiscal stimulus and expanding income). With the public sector deficit financed domestically, in large part by monetary expansion, the clear result of this polar case is accelerated domestic inflation and dollar depreciation. It should be stressed particularly in this case that exchange market expectations will play a very important role. Recognition by the market that the central bank is undertaking monetary expansion will probably induce capital flight, even if interest rate differentials do not change initially. The contribution of expectations is to amplify fluctuations of exchange rates and accelerate the whole adjustment process.

In reality, policymakers find themselves operating somewhere between the two polar extremes. A major conclusion from these examples is that for the long-term strategy, the United States cannot heavily weight its policy mix with foreign finance of the public sector deficit (case one).

That policy mix is appropriate for transitory or cyclical economic disturbances which are turned around in a relatively short time. Since our economic problems are far more deeply rooted in structural and secular difficulties related to dynamic change, a long-term macroeconomic policy mix would be more heavily weighted by the case two scenario. The logical thrust of that argument is that dollar exchange rates will have to be a more deliberate policy instrument in the long-run future to assist the process of structural and dynamic adjustment. A major conclusion emerging from the SSEC authors (Branson, Willett, Dornbusch) is that moving from a fixed- to a flexible-rate system in general improves the effectiveness of monetary policy. The effect of the shift to a managed float is to weaken the effectiveness of fiscal policy, however. Fiscal policy's impact is uncertain and depends basically on the sensitivity of capital movements to interest rates, on the one hand, weighed against the sensitivity of the current account to income and exchange rate changes on the other.

Finally, a policy mix aimed at long-term adjustment will have to incorporate both interest rate and fiscal measures to affect the composition of aggregate demand between consumption (including government spending), investment, and net exports, while bringing appropriate balance between the public and private sectors. This implies over the longer term that first domestic aggregate demand must be maintained within the constraints of aggregate supply to prevent excess demand inflation. Secondly, a policy that deliberately uses a real dollar depreciation in the adjustment process will have to restrain domestic consumption (by households and government) and transfer resources into the investment and export sectors. This basic macroeconomic strategy for long-term adjustment is by no means simple or easy to achieve. Therefore, such a program will have to be supplemented by industry-specific policies to overcome particular supply bottlenecks and other rigidities inhibiting inter-sectoral and inter-industry resource shifts. Before addressing these problems of micro-economic policy with a supply-side thrust, we turn first to the issues of commercial policy.

One final note of qualification is important. An increase in employment achieved through fiscal stimulus and a real dollar depreciation is not costless. The Nation's real income clearly rises by the amount of



additional output derived from additional resources employed. That welfare gain must be weighed against the loss of purchasing power of domestic goods relative to foreign goods. A deterioration of the terms of trade implied by real dollar depreciation reduces the real income of all workers employed originally, and in principle the sum of those losses should be weighed against the employment gains.

## *2. Commercial Policy in a Managed Float World*

The conduct of commercial policy in a world of managed, but highly flexible, exchange rates adds an element of uncertainty that didn't confront policymakers in the Bretton Woods System. Any change in general, across-the-board trade measures will have an impact on prevailing dollar exchange rates and induce short-term capital flows that can reinforce or offset the desired objective of the trade measures. For example, a general import surcharge (which E.M. Bernstein has suggested in testimony before Congress), or an export subsidy, will affect the short- and long-run views of exchange market participants toward the dollar's prospects. Exchange market participants invariably crank new policy measures into their computer models for a revised forecast of the U.S. current account and dollar rates. Some conclude that a uniform import surcharge will improve the trade balance and the current account and strengthen the dollar in the near and long term.

Other exchange traders may conclude that the policy change is simply an indicator of the Government's desperation in trying to turn around the deteriorating external position. Both traders alter their dollar/foreign currency positions accordingly. Depending on the weight of market opinion, several outcomes in the foreign exchange markets are possible. If the balance swings in the positive direction for the dollar, the U.S. currency is marked up, capital flows in and the effect of the import surcharge to raise the price of U.S. imports is at least partially eroded by an appreciation of the dollar which makes U.S. imports less expensive. On the other hand, if the weight of market opinion reinforces a pessimistic outlook, the dollar weakens as capital flows out, the foreign exchange market response reinforces the import surcharge. The depreciating dollar makes imports even more expensive, in addition to the surcharge itself. Thus in both cases, the exchange market evaluation of the policy change is important, because market expectations will generate short-run capital flows that may reinforce or undermine the effects of the policy decision.

In a world in which capital is far more mobile, and exchange rates far more flexible than under the Bretton Woods System, these induced exchange rate changes and accompanying capital flows cannot be ignored. A new set of risks and uncertainties must be recognized. In one extreme, the policy change could be completely offset by contrary exchange rate movement. In the other extreme, the effects of the policy change on trade flows would be reinforced by exchange rate movements with the possibility that short-run exchange fluctuations would have wider amplitudes than in the absence of the policy change and contribute to destabilizing speculation. In addition, deep, short-run depreciations of the dollar bring inflationary repercussions in their wake, as the higher price of imports feeds back to the consumer price index.

*Industry-specific* trade measures applied to selected commodities or certain industries appear to be preferable to general, across-the-board policies applied within a managed float exchange system. This follows from the fact that most individual commodities or industries comprise a relatively small weight in a country's total trade. Therefore, the induced reaction in the exchange markets and accompanying capital flows are likely to be of less consequence than if a general measure had been used. The specific measure, while avoiding some of the adverse effects of an across-the-board measure, may well achieve the intended policy objectives in the industry to which it is applied. There is still the danger, however, that if industry-specific measures—tariffs, quotas, orderly marketing arrangements—proliferate, the collective and cumulative effects on exchange market expectations will be the same as if an across-the-board measure had been applied. To recognize that selective import restraints are more appropriate than general measures within a flexible rate system is not to recommend their widespread use. Furthermore, the greater the efforts focused on specific measures, the more likely that political interest groups for and against these measures will become increasingly polarized and strengthened. This complicates not only a rational formulation of policy, but its fair and effective implementation and enforcement.

#### BASIC STRATEGY FOR LONG-TERM COMMERCIAL POLICY

As the Government plans commercial policy for the 1980s, a choice will be made falling between two extremes—either consciously with some courage, or by default as a result of collective and cumulative *ad hoc* decisions. In one extreme, labeled a “defensive” strategy, the alternatives are heavily weighted by import restraints coupled with export subsidies, both applied with near-term objectives in mind. The other extreme is a posture with a dynamic thrust emphasizing real long-term adjustment to global structural changes. In reality some mix of the two extremes will prove most practical and palatable. Based on conclusions and recommendations of SSEC research in the international area, heavy weight is attached to the need for adjustment to global structural changes and the rebuilding of the American economy to make our most dynamic industries fully competitive in world markets. SSEC research clearly spells out how the collapse of Bretton Woods and the emergence of a flexible rate system—despite heavy periodic “management”—was a major step toward real adjustment. From the experience in the 1970s, exchange rate adjustments in the long run are a powerful mechanism for changing trade patterns, despite the one- to two-year lags it takes for trade volumes to respond. The 1979 surge in U.S. exports is in substantial part (roughly a third according to CBO and other analyses) attributed to real depreciation of the dollar in the preceding two years.

The response of trade flows to real exchange rate changes is only the first stage of the adjustment process. The second involves the response of domestic industries to the change in dollar rates and their impact on demand for goods in the domestic economy. Export industries should be encouraged to expand without bottlenecks in the availability of finance capital, skilled labor and new technology. Government

agencies should work to coordinate the flow of such resources and encourage their movement. Import-competing industries should get the message that over the long run, adjustment requires either substantial improvements in productivity and efficiency or contraction. To the extent that government allows commercial policy to be dominated by defensive import restraints, the favorable effects of a flexible exchange rate system for long-run adjustment will be undermined. If trade restraints are applied widely to postpone or halt the real movement of labor and capital from import-competing to export industries, this means the burden of adjustment will be borne by a smaller segment of the industrial economy than otherwise would be the case. Further, the smaller the part of the domestic economy that is actually adjusting to exchange rate changes and shifting relative prices, the larger are the necessary exchange rate changes and domestic price movements likely to be in order to achieve the desired adjustments both in the external position and in domestic growth and employment. To the extent that movements in relative prices across economic sectors are suppressed, the adjustment process will cause larger unemployment than if prices were allowed to move freely. The message rings clear; the larger the price changes, the smaller the quantity changes and *vice versa*. If we desire to maintain levels of employment and sustainable rates of growth over the long run, more of the economy should be exposed to foreign exchange rate adjustments and resultant adjustments in the domestic price structure. One of the major causes for the structural problems of the United States in the 1970s is the failure of the domestic price structure to reflect fully the changing relative prices in a world economy which itself is undergoing rapid and fundamental structural change.

#### NEW INSTITUTIONS AND PRINCIPLES FOR FUTURE CONDUCT OF TRADE POLICY

The conclusion of the Tokyo Round of multilateral trade negotiations marked the culmination of three decades of efforts to wring ever greater benefits from more efficient global resources allocation accompanying freer international trade. The issues in the Tokyo Round made clear, however, how drastically the world trade environment of the 1970s had changed from earlier decades. Some of the fundamental principles governing international trade under the GATT had been eroded: Nondiscriminatory treatment was tarnished with the formation of the European Common Market—a precedent for preferential trading blocs in other areas of the world. Multilateralism was undermined by the proliferation of bilateral orderly marketing agreements, particularly between industrial countries and LDCs. The GATT had established guides to govern the conduct of trade in world markets which were presumably disciplined by atomistic competition. That competitive model of the world proved to be little more than a textbook artifact by the 1970s, as government traders and multinational enterprises increasingly dominated the market place and nations resorted to cartels and bilateral “orderly marketing arrangements” to organize trade. Yet the competitive model for world markets underlay international trade theory, giving it an internal logical force and providing a conceptual basis for analyzing the gains from trade and other trade issues.

Whether the world of the 1950s and the 1960s conformed to the textbook pictures, successive tariff reductions under the Dillon and Kennedy Rounds within the GATT did contribute immeasurably to the extraordinary expansion of trade among industrial countries in the 1950's and 1960's. International trade in the 1970s, however, was increasingly conducted directly or indirectly by governments—China and Soviet bloc nations, socialist democracies, government agencies and government-owned corporations in capitalist countries—and by huge multinational corporations whose output sometimes exceeded the national products of whole industrial nations.

The Tokyo Round underscored the need to integrate the developing world into the GATT organizational framework, particularly since the LDCs appeared on stage as successful exporters of manufactures. The Tokyo Round, while shifting the focus of negotiations from tariff to non-tariff barriers, marked a successful conclusion of new codes of conduct. Six codes cover government procurement—subsidies and countervailing duties, product standards, licensing, customs valuation and agricultural trade (Cline)—and represents an important beginning to even larger efforts on non-tariff barriers in the future. These GATT codes constitute significant expansion of that institution's future role in guiding the development of international trade and adjudicating disputes. Indeed, Cline suggests the codes could become a foundation for a "common law of international trade" built upon case by case adjudication by multilateral panels for settling disputes.

Because of the interaction between trade policy measures and exchange rate fluctuations, the shift from Bretton Woods to a flexible rate system introduced a new dimension to trade policy questions. The float created difficulties for defining the bases for trade complaints, as, for example, in dumping cases. (In comparing the dollar price of an imported good in the U.S. with the corresponding foreign domestic price, the former when translated into appreciated yen or marks was found to lie below domestic prices prevailing in Japan and Germany.) Policymakers in the future will have to determine whether countries are using exchange controls and/or exchange intervention to obtain competitive advantages, much as they might have used tariffs and subsidies under the Bretton Woods System. Thus, exchange policy itself has become an instrument of commercial policy in a broad sense and should be reviewed in the context of future trade negotiations.

Finally, with the greatly enhanced role of government in international trade, there are the issues of explicit and implicit subsidies by government to state-owned enterprises and to private corporations, whether in socialist or capitalist economies. For example, it is extremely difficult for a U.S. aircraft producer without subsidies to compete with a European manufacturer which benefits from a consortia of national government subsidies and export promotion. Many such examples raise serious questions not only about subsidies, but about government procurement and even U.S. anti-trust laws which may prevent such joint ventures by a number of domestic manufacturers. Some of the issues would be addressed within the new codes set up under GATT. Effective analysis of such problems and adjudication of disputes will depend on how much support is given to GATT as an institution and whether its secretariat is adequate and sufficiently impartial to the tasks of administering a new trade order.

## TRADE MEASURES TO ALTER COMPOSITION OF IMPORTS AND EXPORTS

The composition of trade flows can be influenced by a variety of policies on both the export and import sides of the trade equation. The depletion of U.S. oil reserves, according to Lawrence's major conclusion, "dominates" the outlook for both the trade and current account in the foreseeable future. Therefore, U.S. policy with respect to oil imports is probably the *single* most important policy change with near-term effects on our external position. That policy could include quantitative restraints on oil imports, or significant oil import taxes which could gradually reduce the quantity of oil imports over the coming decade. Meanwhile, new sources of domestic oil and alternative energy sources could be developed. Still on the import side, and related also to the energy problem, is the possibility for encouraging import substitution. If domestically produced autos satisfied consumer preferences for fuel efficiency and economy they could displace imports. Auto imports from all countries *other than Canada* approached \$14 billion in 1978—more than double the levels of either 1974 or 1975—and probably reached \$16 billion in 1979. This expansion, despite the slowing of domestic income growth, reflects the apparent inability or unwillingness of domestic automakers to provide the quality of car that domestic consumers increasingly demand in the face of rapidly rising gasoline prices and maintenance costs. This is not a problem of deteriorating price competitiveness. Any government program that could accelerate the essential technology changes to hasten the switchover by domestic producer to small-size fuel-efficient automobiles would not only cut significantly in a relatively short time our oil imports, but our foreign car imports as well.

By the mid-1980's, it appears that Japanese producers will join German and French auto manufacturers to produce in the United States. That will increase domestic competition for the Big Three and force them to produce the cars the public demands. Policies with respect to oil and auto imports are examples of industry-specific trade measures which are discussed below in the context of commercial policy effectiveness in a managed-flexible exchange system.

To change the composition of exports may be necessary as U.S. comparative advantage shifts over time. Export composition should gradually change to reflect alterations in the structure of production as competitively weak industries contract and drop out of the export race, while new and expanding industries capture shares of world markets. Policies to promote exports would assist new industries to penetrate world markets. In this activity, Federal government agencies could play a more aggressive role in aiding firms to adapt their products for foreign use, to provide marketing information and outlets abroad and to assist in general export financing. The time is ripe, according to Cline's recommendation, for a thorough review of U.S. Export-Import Bank financing policies, and particularly an increase in that institution's lending volume to stimulate exports. Marketing assistance seems to be one area in which the U.S. government can learn much from the experience of our trading partners. According to a recent study by the U.S. Chamber of Commerce, the private sector has little input into the operations of U.S. government marketing assistance programs. In major competitor countries, by contrast, the

private sector has direct participation in such programs, or received government subsidies to carry out such activity.

### 3. *Industrial Strategy for Intersectoral and Interindustry Adjustment*

The SSEC authors in the international area have typically stressed the long-term structural nature of American economic problems, deeply rooted in the oil and energy crisis and in adverse changes in U.S. comparative advantage. These economic problems require corrective policies that foster changes in relative prices and in the composition of GNP, and the distribution of national resources between regions and industries. Moreover, since growth over the long term is generally dynamic in quality, it inevitably generates structural change, which should be fostered not suppressed. Wherever government intervenes, whether through conventional macroeconomic policy, or industry-specific regulation or assistance, it should support the process of adaptation to changing structures of production, international trade and prices.

#### ECONOMIC EFFICIENCY, EQUITY, AND STRUCTURAL CHANGE

One of the most difficult problems for the policymaker in addressing structural change is to distinguish between issues of economic efficiency and equity. First a definition of the terms: By *efficiency*, the economist means getting the most output from a given mix of inputs in some production process. Efficiency in consumption means the householder is getting the most satisfaction from goods and services with a given income. The process of achieving optimal efficiency in the economy involves shifting productive resources from the least-to most-productive industries, or shifting resources to regions or sectors which add more output on the margin. *Equity* is a much more difficult concept because it eludes measurement and involves social and ethical judgments about what is a "fair" or "just" distribution of income and wealth in the economy. The economist is no better equipped to make such a judgment than any other social scientist, or any other citizen for that matter.

Every change in macro- or microeconomic policy, has an impact on both the equity among firms, individuals and regions of the economy and on the efficiency of the production, distribution and consumption activities of the economy. It is precisely the confusions over issues of equity and efficiency, which were a major obstacle to achieving a comprehensive energy policy in the 1970s. For the economist, the policy issue concerns how to optimize economic efficiency while achieving those social-economic values which the body politic decides with respect to a "just" or "fair" distribution of resources, income and wealth.

There are many options to achieve more efficiency and/or more equity in the results of changes in public policy. In theory and in practice, a free enterprise economy has relied on flexibly adjusting market prices in a competitive market environment to move the economy toward a more efficient, more productive, allocation of national economic resources in the long run. Two centuries of American economic history provide ample evidence of shifting market prices

as an allocating mechanism. Particularly since the collapse of the 1930s, however, breakdowns in the market mechanism have undermined economic efficiency and government has substituted micro- or macro-economic measures. Consequently, there are few areas of economic life in which the government has not intervened to constrain the movement of prices in commodity markets, wages in labor markets, costs of money and capital in financial markets. The thrust of such policy in Europe as well as in America has generally been to soften the harsh edges of modern capitalism, to mold a more equitable, just socioeconomic system. But this improvement in economic justice has been achieved at a loss of optimal economic efficiency. European countries and Japan were quick to introduce specific institutions to supplement the allocating role of the market mechanism; indeed, the process was accelerated by post-World War II reconstruction. In the United States, however, while government steadily narrowed the scope of the price mechanism in allocating resources, it failed to provide any other allocative device or framework which could facilitate the shift in economic resources to their most productive uses.

#### CHANGING INDUSTRIAL STRUCTURE; EFFICIENCY AND EQUITY

Changing industrial structure is one of the most prominent areas in which government policy affects national economic efficiency and equity. Most industrial countries have for decades viewed changing industrial structure explicitly as a policy target. Indeed, Marshall Plan aid to European economies in the post-war reconstruction motivated interest in formulating economic policy aimed at structural change. Some countries, notably Austria and Japan, explicitly designed and deliberately reshaped their economic structures to achieve a desired industrial and trading position in the world economy. The policymakers, following their economic teachers, saw trade fitted to industrial structure like glove to hand. Resource-poor economies had no other choice, but consciously to plan what could be produced efficiently at home in order to import the necessary resources from abroad. Industrial structure in European countries and in Japan is viewed in terms of specific goals which the public and private sectors should move toward in the long run. These structural goals often evolved from a country's perspective on the direction of economic development of the world at large and the conception of how the national economy could fit into and prosper within the global framework.

In the United States, by contrast, thinking on economic policy both within the government and academic circles has neglected this longer view of dynamically changing industrial structure until recent years. Here, industrial structure is viewed as the end product of myriads of economic decisions, rather than a set of objectives toward which policy should move us. In this view, American industries see themselves as permanent features of the economic landscape, while their counterparts in Japan and Europe recognize various stages in the life of an industry. In Japan, the government joins with industrial management, for example, to map out stages of industrial development. Infant industries are nurtured to become effective competitors on the world scene. Maturing and aging industries are made cognizant of a senescent

stage in their development at which some thought is given to prepare either for revitalization or for contraction and eventual demise.

#### INDUSTRIAL POLICY FOR AN OPEN ECONOMY

The need for a comprehensive industrial strategy for the future grows more pressing, especially as U.S. manufacturing becomes more integrated into the world scheme of production. Reflecting that integration, American trade has become an increasingly large share of aggregate output over the 1970s: Exports comprise roughly one-sixth and imports nearly one-fifth of goods output in the GNP, underscoring how important is trade to manufacturing industries and employment.

The adverse shift in U.S. comparative advantage, partly reflected in the rapid rise of manufactured exports from LDCs, has intensified concern for adjustment problems in domestic industries. The growth in U.S. manufactured imports represents partly a shift in source of supply from other industrial to developing countries, partly a shift from domestic supplies to the LDCs, partly a response to trade liberalization and partly an autonomous rise in trade with the growth of world markets and consumer incomes. While developing country manufactured goods should not present a serious macro-economic adjustment burden, either in terms of the trade balance or aggregate employment, they do seriously challenge specific industries (Pearson). Consequently, the appropriate U.S. policy response involves industry-specific or micro- rather than macroeconomic measures.

LDCs are heavily weighted in U.S. escape clauses, countervailing duty and adjustment assistance cases in industries characterized by low wages, low productivity, low capitalization, high labor intensity, high import penetration and high current protection. Moreover, in the future more advanced developing countries will continue to diversify their exports, particularly since industrial countries are erecting barriers to their manufactures. Therefore, a new group of U.S. industries with higher technology and skill levels, producing more sophisticated products such as steel, machines, tools and chemicals will confront import competition. Yet, despite these prospects, there is no U.S. government agency at present undertaking research on the structure of global industry and the U.S. response to the changing pattern of worldwide production and consumption of basic industrial and consumer manufactured goods. National policy for adjustment, protection and adjustment assistance simply cannot be formulated or effectively carried out without comprehensive research on the problem to define its nature and magnitude.

The case for a comprehensive, national industrial policy rests only partly on a defensive response to rising manufactured imports from developing countries. The aging U.S. capital stock, the decline in productivity and innovation and inter-regional resource shifts describe the broader scope of adjustment problems within which a policy response to rising imports should be cast.

#### RECOMMENDATIONS FOR INDUSTRY POLICY

Industrial policy depends first of all on a body—congressional committee or agency department—charged with the responsibility



to analyze changes in U.S. industry structure relative to the shifting composition of world demand and global industrial structure. An analytical system should be established for evaluating stages of industry development and long-term performance. Industries should be examined with respect to their importance in achieving national defense goals, or some other critical national need such as energy or raw material supplies. There are probably limits beyond which the process of international specialization can be permitted to go because of strategic needs. Those limits ought to be defined and established in some process of rational economic analysis.

In other cases of less critical manufacturing industries there are ways of adjusting without contraction through "intra-industry" as opposed to "inter-industry" specialization. In consumer goods, such as textiles, there is a broad scope for specialization in a narrow range of products within a broad spectrum of possible outputs. European economic integration resulted in many examples of intra-industry specialization which reduced the extent of economic dislocation during the EC's transition period. Government oversight of industry adjustments could facilitate the survival of an industry under competitive pressure by encouraging intra-industry consolidation and specialization rather than contraction.

One can imagine at least three kinds of policy strategy with respect to specific adjustment policies. *Passive adjustment* would simply allow economic developments to take their course, despite the inflexibilities of prices as signals for resource shifts. Another strategy is essentially a defensive, brush-fire approach—the *seige economy*—in which the national government imposes widespread import restraints and provides subsidies to the level of employment, wages and profits in hard-pressed industries. Britain has pursued a similar policy with little evidence of success in overcoming the underlying secular decline of manufacturing. The opposite polar extreme might be labeled *Active dynamic adjustment*. The Government, together with industry and labor participation, would determine which industries are essential to long-term national economic development and which will eventually be allowed to stagnate and contract. The latter would be provided development assistance which would stress capital formation, technology change and innovation in order to bring industry performance on a par with standards of international competitiveness.

The decade of the 1970s has left us with a series of precedents for Federal response to industry difficulties including the Lockheed, Penn Central, New York and Chrysler cases, each considered on an *ad hoc* basis. A rational set of standards, guidelines or economic principles should be established for addressing such industry problems in the future. Decisions taken with respect to the steel, auto and textile industries ought to be consistent with longer term design for the industrial structure of the national economy. It should be clear that failure to establish a formal framework within which to consider each special case as it develops constitutes an industrial policy by default.

The dynamic industrial strategy suggested here is less costly to implement, if overall macro-economic policies aim toward capital formation, and higher productivity growth, while generally strengthening the elasticity of the supply side of the economy. Resource shifts always occur less painfully in a growing economy than in a stagnating

environment. Macroeconomic policy in this context should be conceived as three categories of instruments: (1) Monetary policy aimed at maintaining at least positive *real* interest rates, as during the 1960s when economic growth was high and inflation low; (2) budgetary discipline to insure that the public sector is not contributing to excess aggregate demand; and (3) tax revision to provide positive, real after-tax rates of return on new capital formation. The last category of macroeconomic instruments should be designed specifically to tie in with strategies of industrial policy.

# THE CHANGING POSITION OF U.S. INDUSTRIES IN THE GLOBAL PATTERN OF INDUSTRIAL PRODUCTION

By Thomas A. Pugel\*

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## SUMMARY

The structural patterns of global industry are undergoing fundamental transformations. The comparative advantage of Japan and the developing countries relative to the United States and other developed countries is shifting. Shifting comparative advantage implies that the international competitive position of U.S. manufacturing industries is inevitably changing. This paper analyzes the changing position by computing and comparing the growth rates of output for 12 manufacturing industries in the United States, Japan, and five areas of the world, from 1962 to 1974 and two subperiods 1962-68 and 1968-74. The analysis seeks relationships between the variations in the growth rates and a number of characteristics of the industries.

In general the manufacturing sectors of other areas of the world are becoming more similar in structure to U.S. manufacturing. The increasing similarity reflects a changing pattern of U.S. comparative

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advantage, due in large part to a process of catching up. That process, in many aspects, is nearing completion for Japan, but it is just beginning for many of the developing countries.

The catching up process for Japan is reflected in the relatively slow growth of U.S. manufacturing industries compared to Japanese industries which are intensive in research and development, intensive in the use of skilled labor, or intensive in the use of capital. In short, the bases of U.S. comparative advantage vis-a-vis Japan shifted dramatically over the period. These trends are likely to be less pronounced in the future, as Japan completes the process of catching up and her rate of aggregate economic growth slows.

The beginning of the catching up process for the developing areas is reflected in the slow growth of U.S. industries intensive in research and development, relative to the growth of these industries in the developing areas, for the period 1968-74. A similar result is not found for the earlier period 1962-68, and only weak trends are found for the relatively slower growth of U.S. industries intensive in the use of skilled labor or capital. The beginning of the catching-up process in the developing areas appears to be based especially on their application of newer and advanced technology to production. The trend is likely to continue as the developing countries accelerate their process of catching up.

In contrast to the relative trends noted, the high-technology, research-intensive industries remain the absolutely fastest growing in the United States. Yet, these industries show relatively higher growth in many other areas, especially during the more recent subperiod used in this paper. Although some of the relative decline is due to increased creation of new technology in other developed countries, a large part is probably due to the acceleration of the acquisition of foreign technology by both developed and developing countries. According to the international product cycle theory, new products and processes invented in the United States are first applied to U.S. production. Only after the product or process matures is the new technology transferred to foreign production sites. The relative decline of U.S. production of high-technology products noted above is in part due to the speed-up of the product cycle. New technology created in the United States may quickly be applied to foreign production, reducing the time during which the United States enjoys a comparative production advantage based on the new technology.

The relative position of the United States as the leader in the application of new technology thus is declining. Two important implications follow from this observation. First, U.S. firms in high-technology industries face increasing competition from foreign firms. In consequence, government policies designed to avoid an overvalued exchange rate take on greater importance in assuring U.S. industry the chance to compete effectively. Maintaining a competitive position generally requires depreciation of the dollar against the currencies of countries that achieve lower inflation rates. Second, the United States should increasingly benefit from the importation of technology created in other developed countries. The market for technology is international, and the U.S. Government should continue its strong support for international technology transfer that is free of government restrictions.

A larger issue is related to the changing position of the United States in high-technology products. Is the global pace of technological advance slowing? The slowing pace would likely result in slower economic growth. Further study of this issue is needed. The research should have a strong international perspective, because new technology is an international good. A slowdown in the rate of technology creation in the United States would not result in a slowdown globally, if other countries, perhaps Germany or Japan, increase their rates. Worldwide and U.S. economic growth would continue, although the United States would increase its importance of technology. Nonetheless, if the pace of technological progress is slowing worldwide, as seems possible, changes in government policies may be needed to increase the incentives to scientific and technical advances. Government policies might include additional tax incentives to research and development or additional direct Government funding of research activities. An internationally coordinated effort among the governments of the developed countries would be appropriate because the benefits of technological progress accrue internationally.

#### INTRODUCTION

The position of U.S. industries in the world economy is changing, most noticeably in relation to Japan, but recently also in relation to a number of developing countries. In large part the changing position reflects shifts in U.S. comparative advantage in relation to these countries, especially in the abilities to create and to apply new technology. A major implication of these changes is an increasing level of international competition facing U.S. high-technology industries.

Differences in growth rates across manufacturing industries within a country indicate that structural change is occurring within the manufacturing sector of the country. For many U.S. industries, however, their growth cannot be viewed in isolation. Linkages of international trade and international investment create an interdependence with industries in other areas of the world. Analyses of the growth of U.S. industries should be international in perspective. The growth of these industries in foreign economies usefully provides a standard by which to view U.S. growth, particularly if the differences in average economic growth rates between the countries are controlled. Within this framework, issues of shifting comparative advantage can be explored, and descriptive analyses of industries exhibiting relatively faster or slower rates of growth can be pursued.

#### *Related Studies*

Several other types of studies are related to the analysis presented here. At a highly aggregated level, studies of differences in national growth rates are available. At a somewhat less aggregated level, in terms of the industries studied, analyses exist of broad structural change within a nation. At a more detailed level, shifting patterns of international trade are explored.

Studies of national growth rates focus on the sources of aggregate growth.<sup>1</sup> The most notable differences are found in contrasting the higher growth rate of Japan with the growth rates of other industrial

<sup>1</sup> See, for instance, Denison and Chung (1976) and Denison (1967).

countries. Recently, several developing countries have also achieved relatively high rates of aggregate growth.

Studies of structural change within an economy usually focus on broadly defined industries, often agriculture, mining, manufacturing, services and government.<sup>2</sup> A major conclusion of recent studies is that the increasing share of services and government in the economies of the advanced industrial countries indicates the transition into a "post-industrial" era.<sup>3</sup>

Studies of the shifting patterns of international trade utilize greater industrial detail. The purpose of these studies is to illuminate the changing patterns of comparative advantage.<sup>4</sup> These studies are closely related to the analysis presented here. Comparative advantage can be viewed not only as a predictor of international trade patterns, but also more basically as a description of the factors influencing decisions about the location of production. Comparative advantage is a summary of the variation in production capabilities and opportunities across nations. As such, comparative advantage cannot itself be measured, but must be inferred from observations of economic activity. Although previous analyses drew inferences from the pattern of international trade, the analysis of shifting patterns of comparative advantage can fruitfully be explored within a framework more general than that which focuses only on the portion of output that is traded internationally.

### *The Scope of the Paper*

The more general framework is provided in comparisons of output growth rates of U.S. manufacturing industries with the growth rates of these industries in other countries or regions of the world. The paper analyzes structural change within the manufacturing sector, as reflected in differing growth rates across manufacturing industries. A comparison of the structural change occurring in the United States with the structural changes occurring in other parts of the world permits inferences about the shifting pattern of comparative advantage. The inferences are based on changes in total production patterns rather than on changes in the pattern of trade. A further study, of course, could attempt to link these two together.

This paper on manufacturing is focused more narrowly than typical studies analyzing structural change at a more aggregate level. Further, the paper views structural change within U.S. manufacturing primarily as compared with structural change occurring in manufacturing in manufacturing in other countries or areas of the world.<sup>5</sup> The international framework is chosen because linkages, especially through international trade, make the growth and structural change of U.S. manufacturing interdependent with developments in manufacturing in other areas of the world. Nonetheless, impediments to trade do exist which isolate to some extent each national economy. An important number of these impediments is created by government policies such as tariffs, quotas, and negotiated marketing agreements. The paper discusses implications of the trends in protectionism, especially in relation to imports from the developing countries.

<sup>2</sup> See Kuznets (1971).

<sup>3</sup> See Bell (1973).

<sup>4</sup> See, for instance, Gilpin (1975), pp. 5-9, for a discussion of the changing position of the United States in world trade in high-technology products. His results are consistent with the results presented here.

<sup>5</sup> Kuznets (1971), chapter 4, discusses structural change within the manufacturing sectors of 10 countries over the long run, but attempts no cross-country comparisons based on industry characteristics.

## THE GROWTH RATES OF MANUFACTURING INDUSTRIES

The methodology of this paper is intended to highlight the differences among countries or regions of the world in the growth rates of various manufacturing industries. This section presents initial results of calculating the growth rates of 12 manufacturing industries for the United States and six other countries or world regions.<sup>6</sup> The paper explores similarities and differences in growth rates and presents a summary measure of relative growth. Analysis of relative growth rates suggests that the structure of manufacturing in other parts of the world, and especially in Japan and the developing countries, has tended to become more similar to the structure of manufacturing in the United States. Later sections of the paper explore the basis for and implications of this result.

*Growth Rates*

Tables 1, 2, and 3 show the compounded annual growth rates of output for 12 manufacturing industries, for the United States and six other countries or regions of the world, from 1962 to 1974 and two subperiods 1962-68 and 1968-74.<sup>7</sup> One difficulty with an analysis of growth rates is that industries in regions with relatively small initial values of output may show large growth rates although the absolute increase in output is small relative, for instance, to total world output in the industry. Thus the results indicating high growth rates in some industries, especially for the developing regions, must be interpreted with caution. Growth rates are computed given the initial situation, and faster growth may still leave a national industry with relatively little importance on world markets.

TABLE 1.—INDUSTRY GROWTH RATE OF OUTPUT, BY COUNTRY OR REGION, 1962-74

Manufacturing industry	[In percent per year]						
	United States	Developed market economies <sup>1</sup>	EEC <sup>2</sup>	Japan	Developing market economies <sup>3</sup>	Latin America	Asia <sup>4</sup>
Food, beverages, and tobacco.....	3.3	4.1	3.6	6.5	6.0	5.1	5.5
Textiles.....	4.8	3.5	1.9	5.6	4.3	5.0	3.5
Wearing apparel and leather products...	1.6	1.9	1.5	5.2	6.1	5.4	7.1
Wood products and furniture.....	3.7	4.4	5.6	2.9	6.6	5.8	6.0
Paper and paper products.....	5.0	5.3	4.7	8.6	7.6	7.7	8.5
Chemicals.....	7.8	8.5	8.8	12.4	10.0	9.8	10.7
Rubber and plastic products.....	9.0	8.0	7.3	11.4	7.8	8.8	6.0
Nonmetallic mineral products.....	4.0	4.8	4.6	8.3	7.7	7.8	7.9
Basic metal industries.....	3.7	5.4	4.1	12.5	8.0	8.9	7.1
Metal products, machinery, and professional goods.....	6.3	6.0	4.1	12.2	9.5	10.0	9.1
Electrical equipment.....	6.3	7.1	7.1	15.4	14.4	11.3	18.0
Transport equipment (including automobiles).....	3.7	4.9	5.0	15.6	11.2	11.8	10.8

The footnotes on geographic areas apply to all tables.

<sup>1</sup> The developed market economies include North America, Europe (excluding the centrally planned economies), Japan, Israel, Australia, New Zealand, and South Africa.

<sup>2</sup> The EEC includes throughout the period all 9 present full members.

<sup>3</sup> The developing market economies include Latin America, Africa (excluding South Africa), and Asia (defined in footnote 4).

<sup>4</sup> Asia includes the Asian Middle East and East and Southeast Asia, excluding Israel and Japan.

<sup>6</sup> Utilization of 12 industries is dictated by the availability of data broken down by geographic region. The industries are rather aggregated and so may not be well defined, in that disparate products and production processes are lumped together. In aggregation, the detailed characteristics of these products and processes are averaged together into the characteristics of the observed industry. A general caveat is that this averaging may obscure certain statistical relationships because of the loss of detail.

<sup>7</sup> The analysis omits three industries typically included as part of the manufacturing sector. Printing and publishing is in large part a service industry. Petroleum and coal products are omitted because the industry is often an outlier statistically and is studied at length elsewhere. Miscellaneous manufactured products are omitted because of the imprecise definition of the industry. Average growth rates of and shares in total manufacturing output are calculated, omitting these industries.

TABLE 2.—INDUSTRY GROWTH RATE OF OUTPUT, BY COUNTRY OR REGION, 1962-68

[In percent per year]

Manufacturing Industry	United States	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asian
Food, beverages, and tobacco.....	3.4	4.2	3.7	8.6	5.8	4.7	5.1
Textiles.....	6.1	4.3	1.7	8.3	4.4	4.4	3.8
Wearing apparel and leather products.....	2.6	2.8	2.0	6.8	6.6	5.6	8.0
Wood products and furniture.....	4.7	4.8	5.5	5.0	8.8	3.3	13.2
Paper and paper products.....	6.2	5.9	5.2	10.0	8.2	8.2	9.5
Chemicals.....	9.6	10.0	9.8	14.2	8.2	8.2	6.9
Rubber and plastic products.....	10.0	9.2	7.8	14.7	7.4	6.8	6.9
Nonmetallic mineral products.....	4.5	5.2	4.8	10.3	6.9	6.4	7.5
Basic metal industries.....	4.8	6.1	4.5	15.6	8.3	8.5	9.4
Metal products, machinery, and professional goods.....	8.1	7.0	3.6	14.8	8.0	7.1	12.3
Electrical equipment.....	7.4	7.8	6.1	17.3	14.2	10.8	14.2
Transport equipment (including automobiles).....	8.0	7.9	4.4	20.4	6.8	7.2	6.4

TABLE 3.—INDUSTRY GROWTH RATE OF OUTPUT, BY COUNTRY OR REGION, 1968-74

[In percent per year]

Manufacturing industry	United States	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
Food, beverages, and tobacco.....	3.3	3.9	3.5	4.5	6.1	5.5	6.0
Textiles.....	3.5	2.7	2.0	3.0	4.2	5.5	3.1
Wearing apparel and leather products.....	.5	1.1	1.0	3.7	5.6	5.2	6.3
Wood products and furniture.....	2.7	4.0	5.7	.7	4.3	8.4	-8
Paper and paper products.....	3.9	4.8	4.1	7.1	7.1	7.2	7.5
Chemicals.....	6.1	6.9	7.8	10.6	11.8	11.5	14.7
Rubber and plastic products.....	8.0	6.9	6.9	8.3	8.2	10.9	5.0
Nonmetallic mineral products.....	3.5	4.4	4.3	6.3	8.5	9.3	8.3
Basic metal industries.....	2.7	4.6	3.7	9.4	7.7	9.3	4.9
Metal products, machinery, and professional goods.....	4.5	5.1	4.6	9.6	10.9	12.9	6.0
Electrical equipment.....	5.2	6.4	8.0	13.6	14.5	11.7	21.9
Transport equipment (including automobiles).....	-.4	2.0	5.5	11.0	15.8	16.5	15.3

In the United States, the wearing apparel and leather products industry was the slowest growing industry over 1962-74, and the rubber and plastic products industry and the chemicals industry were the fastest growing. The growth rates exhibit a considerable variation among the industries, suggesting that, given the overall growth of manufacturing, significant structural change is occurring within the sector.

The growth rates for each industry in the United States are higher over 1962-68 and lower (or the same) over 1968-74, each relative to growth over the entire period. Furthermore, the pattern of growth rates across industries is similar between the two subperiods, exhibiting a simple correlation of .61.<sup>8</sup> The major exception is the transport equipment industry, which was among the faster growing indus-

<sup>8</sup> This paper makes extensive use of correlation analysis to summarize the way in which one set of data varies in relation to another set of data. A correlation coefficient is positive if relatively large values in one set tend to be matched with relatively large values in the other set, indicating a direct relationship. A correlation coefficient is negative if relatively large values in one set tend to be matched with relatively small values in the other set, indicating an inverse relationship. Furthermore, the correlation coefficient is bounded between -1.00 and 1.00, with larger absolute values indicating a closer fit or match between the two sets of data. Statisticians use the measure of closeness of fit to accept the significance of the relationship measured only if it is unlikely to occur by accident. In this study the weakest, typically acceptable significance level (.10) is indicated by correlation coefficients with an absolute value of .50 or larger, a somewhat stronger significance level (.05) by correlation coefficients of absolute value .58 or larger, and an even stronger significance level (.01) by correlation coefficients of absolute value .71 or larger. Thus, the correlation coefficient of .61 mentioned in the text indicates a positive or direct relationship whose closeness of fit is statistically significant (at the .05 level).



tries during 1962-68 but the slowest growing industry during 1968-74. Even if the latter period were 1968-73, to avoid ending the period in 1974, a relatively depressed year for domestic automobile sales in the United States, the transport equipment industry still exhibits an annual growth rate of only 1 percent.

The growth rates of the industries in the developed market economies and the EEC are similar to the growth rates exhibited in the United States (see tables 1, 2, and 3). Table 4 shows the simple correlations for each time period between growth rates in the United States and each of the developed market economies and the EEC. Each is positively correlated and statistically significant at the .05 level. The higher positive correlation between growth rates in the United States and the developed market economies is not surprising since the latter includes the United States.

TABLE 4.—CORRELATIONS BETWEEN GROWTH RATE OF EACH INDUSTRY IN THE U.S. AND GROWTH RATE OF EACH INDUSTRY IN OTHER COUNTRY OR REGION

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	0.91	0.76	0.49	0.39	.49	0.27
1962 to 1968.....	.93	.67	.67	.25	.45	.04
1968 to 1974.....	.90	.59	.29	.04	.07	.08

NOTE.—The correlations are based upon the data shown in tables 1, 2, and 3. For instance, the correlation of 0.91 shown for the Developed Market Economies for 1962-74 indicates that the rankings of the first 2 columns of table 1 are directly related, and that their proportionate variations are similar.

Thus the structural change occurring within manufacturing in the United States is similar to that occurring in the EEC and other developed areas generally. The major exceptions are the relatively slow growth of the textiles industry in the EEC over the whole period, the relatively slow growth of the metal products, machinery, and professional goods industry in the EEC during 1962-68, and the relatively slow growth of the transport equipment industry in the EEC during 1962-68, the latter of which was reversed by relatively faster growth during 1968-74.

The growth rates of each industry in Japan, the other major developed market economy country included in this paper, are also shown in tables 1, 2, and 3. Over the entire period and during each subperiod the Japanese industries generally grew more quickly than industries in either the United States or the EEC. The exceptions are the wood products and furniture industry, which grew at a lower rate in Japan during the entire period and especially during 1968-74, and the textiles and rubber and plastic products industries, whose growth rates were similar across the three regions during 1968-74. As in the United States and the EEC, growth rates were lower in Japan during 1968-74 than during 1962-68. Table 4 shows that the correlation between Japanese and U.S. growth rates was positive during each of the periods, although only the correlation for 1962-68 is statistically significant. Structural change within the Japanese manufacturing sector was somewhat different from that in the United States during 1968-74 and over the entire period. The paper explores this phenomenon in more detail below.

The growth rates of industries in the developing market economies and in the regions of Latin America and the developing market

economies of Asia (hereafter referred to as Asia) are generally faster than growth rates in the United States for all three periods, as shown in tables 1, 2, and 3. Several exceptions to this conclusion are also apparent, the major ones being the textiles and rubber and plastic products industries, which grew more slowly in the developing regions over the entire period and especially during 1962-68, and the chemicals and transport equipment industries, which grew more slowly in the developing areas during 1962-68 but not over the entire period.

The industries in the developing areas generally grew more slowly than Japanese industries during 1962-68 and over the entire period, with the exceptions of the wearing apparel and leather products industry and the wood products and furniture industry. The industries in the developing countries generally grew more quickly than Japanese industries during 1968-74, with the major exception of the basic metals industry. Thus, industries in the developing countries grew more quickly than industries in either the United States or Japan, with one industry an important exception, during 1968-74.

Correlations between growth rates in each of the developing regions and in the United States are shown in table 4 for each time period. The correlations are all positive, and no one is statistically significant even at the 0.10 level. For the period 1968-74 the correlations are essentially zero, indicating that structural changes occurring within the manufacturing sectors of the developing regions were rather dissimilar from the change occurring within the U.S. manufacturing sector during this period. These dissimilarities will be explored in more detail below.

#### *Relative Growth Rates*

Analysis of growth rates of manufacturing industries highlights similarities and differences between the United States and other areas of the world. A summary measure of the relative growth rates can be derived as the arithmetic difference between the growth rates, calculated as the growth rate in the United States minus the growth rate in the foreign country or region. By correcting this measure for the average rate of growth in the manufacturing sector in each country (or region), the analysis develops a measure of the difference between the countries in the advance or decline of the industry compared to other industries in each country. For example, the food, beverages, and tobacco industry grew at a 3.3 percent annual rate in the United States and at a 6.5 percent annual rate in Japan during 1962-74. The manufacturing sector of the United States grew at an average 4.9 percent a year, and the Japanese sector at an average 9.7 percent per year. Thus the food industry in both countries was declining compared to other industries in the country. Although the Japanese food industry grew more quickly than the U.S. industry, its comparative decline was greater in Japan according to the measure described above. The relative growth rate of the industry, corrected for the difference in the average growth rates of the manufacturing sector in each country, is 1.6 percent, calculated as 3.3 percent minus 6.5 percent minus the difference of 4.9 percent minus 9.7 percent ( $3.3 - 6.5(4.9 - 9.7)$ ). Although the food industry was comparatively declining in each country, it declined to a lesser extent in the United States. If the Japanese economy is used as a standard of measure, the growth of the food industry in the United States is relatively strong. As discussed in the introduction, the use of the Japanese economy as a standard by which

to view U.S. growth rates is justified in that international trade links both economies to each other and to the world market for the products of the food industry.

The relative growth for each U.S. industry compared with the same industry in another country or region of the world can be calculated for each period from the data presented in tables 1, 2, and 3. Across all industries the relative growth rates offer a summary measure of the relative structural change occurring within the U.S. manufacturing sector compared to the change occurring in the manufacturing sector of the foreign country or region. The ranking of the industries by relative growth rates, for the United States vis-a-vis Japan and the developing market economies, is shown in table 5 for the period 1962-74. The ranking of industries by their simple (or absolute) growth rate in the United States is also shown. The table demonstrates that the ranking by relative growth rate differs substantially from the ranking by simple growth rate.

In general, the two relatively fastest growing industries in the United States during 1962-74 were the textiles and rubber and plastic products industries, although in two cases the metal products, machinery, and professional goods industry (in relation to the EEC) and the wood products and furniture industry (in relation to Japan) displaced the rubber and plastic products industry to the third fastest position. The two relatively slowest growing industries in the United States were the electrical equipment and the transport equipment industries, although in three cases the basic metals industry (in relation to the developed market economies and to Latin America) and the wood products and furniture industry (in relation to the EEC) displaced the electrical equipment industry. The electrical equipment industry was among the more quickly growing industries absolutely in the United States, but was slowly growing in relation to the growth of this industry in other areas of the world. Also, the wearing apparel and leather products industry was the third among the relatively slow-growing industries in the United States, compared with both the developing market economies and Asia. Thus, the industry which has been the subject of major increases in protection in the United States is not in the worst relative position, perhaps in part due to the (threatened or actual) increases in protection. Indeed, the industry is relatively more quickly growing than the median for U.S. industries if compared to the developed market economies, the EEC, or Japan.

TABLE 5.—RANKING OF INDUSTRIES BY GROWTH RATE OF OUTPUT, 1962-74, FROM FASTEST TO SLOWEST GROWING

Simple U.S. growth rate	Relative growth rate United States to Japan	Relative growth rate United States to developing market economies
Rubber and plastic products.....	Wood products and furniture.....	Rubber and plastic products.
Chemicals.....	Textiles.....	Textiles.
Metal products, machinery, and professional goods.	Rubber and plastic products.....	Chemicals.
Electrical equipment.....	Food, beverages, and tobacco.....	Paper and paper products.
Paper and paper products.....	Paper and paper products.....	Food, beverages, and tobacco.
Textiles.....	Wearing apparel and leather products.....	Wood products and furniture.
Nonmetallic mineral products.....	Nonmetallic mineral products.....	Metal products, machinery, and professional goods.
Basic metals industries.....	Chemicals.....	Nonmetallic mineral products.
Transport equipment (including automobiles).	Metal products, machinery, and professional goods.	Basic metals industries.
Wood products and furniture.....	Basic metals industries.....	Wearing apparel and leather products.
Food, beverages, and tobacco.....	Electrical equipment.....	Transport equipment (including automobiles).
Wearing apparel and leather products.....	Transport equipment (including automobiles).	Electrical equipment.

*The Relationship Between Relative Growth and Initial Shares*

Before analyzing the pattern of relative structural change in relation to characteristics of the industries, one simple hypothesis about its pattern is explored. The hypothesis is based on the observation that over the last few decades the nations of the world have tended to become more similar in many of their characteristics, including culture, tastes, and productive abilities. The technological revolutions in communications and transportation aided this tendency, as did the increasing international mobility of business firms as reflected in the increasing levels of foreign direct investment worldwide. In the industrial countries the tendency to similarity is often striking. Even the developing countries are diversifying their production activities,<sup>9</sup> and in the process their economies are beginning to approach a structure more similar to that of the developed countries, although the gap in per capita income remains large between the two groups.

If the hypothesis of increasing similarity is applicable, we expect that relative growth rates are inversely related to the relative (between the areas) share of each industry in total manufacturing sector output. That is, if an industry in the foreign country (or region) has a smaller initial share of the total value of manufacturing output in that country relative to the initial share of the industry in total U.S. output, we expect that the industry will grow relatively quickly in the foreign country. In the process the shares become more similar. Therefore the structure of the manufacturing sector in each country becomes more similar. Comparative structural change tends to homogenize the manufacturing structures of the economies.

TABLE 6.—CORRELATIONS BETWEEN INITIAL SHARE OF EACH INDUSTRY, U.S. RELATIVE TO OTHER COUNTRY OR REGION, AND RELATIVE GROWTH RATE (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY

Correlation	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
Relative initial share 1962 and relative growth 1962-74.....	-0.37	-0.43	-0.55	-0.69	-0.60	-0.69
Relative initial share 1962 and relative growth 1962-68.....	-.29	-.21	-.47	-.31	-.19	-.31
Relative initial share 1968 and relative growth 1968-74.....	-.20	-.45	-.27	-.72	-.64	-.68

The hypothesis is tested by correlating relative initial shares with relative growth rates between the United States and each foreign country or region. Table 6 presents the results. Each correlation is negative, as predicted by the hypothesis of increasing similarity. The correlations for the developing market economies, Latin America, and Asia during 1962-74 and 1968-74 are statistically significant at the 0.05 level. The diversification of the economies of the developing countries has tended, especially during the late 1960's and into the 1970's, to make the structure of their manufacturing sectors more similar to the structure of the U.S. manufacturing sector. The correlation for Japan over 1962-74 is statistically significant at the 0.10 level, indicating that over the longer period the Japanese structure

<sup>9</sup> See Blackhurt, Marian, and Tumilir (1978), chapter 1.

has also become more similar to the U.S. structure, although this tendency is not significantly evident in either of the shorter subperiods.

In conclusion, the structures of the manufacturing sectors in each of the foreign countries and regions studied are tending to become more similar to the structure of the U.S. manufacturing sector. The Tendency is most pronounced for the developing areas and for Japan, whose manufacturing sectors presumably began the period more dissimilar to the U.S. manufacturing sector than the EEC sector did. In part, we can contribute this tendency to a catching-up process in which Japan and the developing regions relatively rapidly acquired production capabilities which were initially abundant in the United States. These capabilities included technical knowledge and the availability of skilled labor, often cited as the bases of U.S. comparative advantage in manufactured products.

### SHIFTS IN COMPARATIVE ADVANTAGE

A number of factors may be considered as possible causes of the changing position of the United States in world industrial production. The hypotheses largely fall into two groups, those based on changing patterns of comparative advantage and those based on the effects of U.S. Government policies, which presumably differ from policies followed by most foreign governments. This section of the paper discusses the hypotheses of changing patterns of comparative advantage, especially in relation to the extent of research and development (R. & D.) activity and the intensity of use of skilled labor in production. Both of these are often cited as the basis of U.S. comparative advantage in manufactured goods.<sup>10</sup> The paper also discusses another basis for comparative advantage, the relative abundance of capital, although most previous studies fail to find support for a revealed comparative advantage to the United States in capital-intensive products.<sup>11</sup> The discussion of capital-intensity therefore focuses more upon the impact of government policies toward the taxation of capital income. The next section of the paper summarizing largely descriptive results relating industrial characteristics to the pattern of comparative structural change, will briefly discuss the possible effects of one other government policy, environmental protection.

#### *Research and Development as a Basis for Comparative Advantage*

Perhaps the most important issue related to shifts in U.S. comparative advantage is the changing international position of the United States as an innovator and a creator of new technology. Research and development spending as a fraction of GNP has declined in the U.S. since the mid-1960's, due in large part to declining government research spending.<sup>12</sup> A fear exists that the U.S. is losing its position, as the world leader in the creation of technical knowledge to West Germany, Japan, or some combination of these and other countries.

In addition, a more subtle but more important change in the position of the United States in relation to R. & D. may be the speeding up of

<sup>10</sup> See, Pugel (1978) or Branson and Junz (1971).

<sup>11</sup> Early studies found that the United States tends to import capital-intensive products, a result referred to as the Leontief paradox (Leontief 1954). More recent studies often find an insignificant relationship when other influences are controlled (e.g. Pugel 1978).

<sup>12</sup> See McCulloch (1978), chapter 2.

the international product life cycle.<sup>13</sup> According to the original international product life cycle theory, production utilizing newly created technology occurs initially, and for some time thereafter, in the country of origin. Thus the originating country is the primary site of production during the high growth phase following the application of the new technology. Production shifts to foreign sites only after the new product (or production process) has matured and become relatively standardized. In many cases the shift would occur as the originating corporations establish foreign subsidiaries to manufacture the product.

This theory may hold less well in the 1970's (and presumably the 1980's) than it did in the 1950's and 1960's. New technology created in the United States may be applied with a short time lag to production in foreign locations, especially if these locations are lower cost sites. Two influences may contribute to the speeding up of the international product life cycle. First, the multinational corporations now have an established network of subsidiaries, so the internal transfer of technology occurs more quickly and more smoothly. Second, foreign government policies, such as the strong Japanese government backing of the acquisition of foreign technology through licensing agreements, often actively promote the acquisition of foreign technology.

If either or both of these hypotheses about the position of the United States in high-technology industries is applicable, a relative structural change would be occurring in the United States compared to other regions of the world. High-technology industries should be growing less quickly in the United States relative to growth in other regions. To some extent the structural change represents a catching-up process, as industries in other nations apply previously invented technology at an accelerated rate.

Analysis of the data on the growth of output shows that the intensity of research and development activity (or the level of technological sophistication) in an industry is positively correlated with the simple growth rate of the industry in the United States.<sup>14</sup> The direct relationship is statistically significant over the entire period and during 1962-68, but is insignificant during 1968-74. Industries intensive in R. & D. tended to grow at a faster rate in the United States. However, R. & D. intensity is less closely related to industry growth in the United States during the more recent period.

Table 7 shows the correlations between relative growth rates and the R. & D. or technological intensity across industries. The negative correlations for the entire period and during 1968-74 suggest that high-technology industries tended to grow relatively slowly in the United States. The relatively slow growth during 1968-74 reverses the trend of relatively faster growth during 1962-68 in relation to the EEC and the developing areas.

The negative correlations are statistically significant at the .10 level or better for all periods in relation to Japan, for the developing market economies and Asia over the entire time period, and for all areas except the developed market economies as a group during 1968-74.<sup>15</sup>

<sup>13</sup> As first stated in Vernon (1966).

<sup>14</sup> The correlations between R. & D. intensity and U.S. industry growth are .52 during 1962-74, .69 during 1962-68, and .24 during 1968-74.

<sup>15</sup> The correlations for the developed market economies are biased toward a positive or direct relationship throughout this and subsequent analyses of the paper, because the United States is an important component of the developed market economy data. Thus, the significance test for the developed market economies is biased and should be viewed cautiously.

TABLE 7: CORRELATIONS BETWEEN RELATIVE GROWTH RATE (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND RESEARCH AND DEVELOPMENT (OR TECHNOLOGICAL INTENSITY) OF EACH INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.29	-0.27	-0.70	-0.52	-0.46	-0.55
1962 to 1968.....	-.15	.18	-.62	.08	.04	.21
1968 to 1974.....	-.36	-.55	-.75	-.69	-.55	-.77

The analysis shows that industries intensive in R. & D. were growing slowly in the United States in relation to their growth in other areas of the world, especially during 1968-74 and for Japan over the entire period. The leadership position of the United States in production based upon intensive R. & D. has apparently declined. The developing countries have increased their ability to import and apply new technology, perhaps transmitted through multinational corporations. Japanese industry has accomplished a similar result, and indeed may now to a significant degree be pushing outward the frontier of technological knowledge and its application.<sup>16</sup> The EEC, at least during 1968-74, is in a position similar to Japan.

Thus, one way in which national manufacturing industries are becoming more similar is in their ability to apply, and in some cases to create, new technology. The comparative advantage of the United States is shifting. One important implication is that the United States should increasingly benefit from the import of new technologies created elsewhere, or of products embodying these new technologies. Another implication is that U.S. firms in high-technology industries are likely to face increasing competition from foreign firms.

#### *Skilled Labor or Human Capital as a Basis for Comparative Advantage*

A second widely accepted general basis for U.S. comparative advantage within manufacturing is the relative abundance of skilled labor or human capital in the United States.<sup>17</sup> The advantage is especially pronounced in relation to the developing countries. The advantage in relation to Japan has been reduced, perhaps completely, over recent decades, as the Japanese labor force has become increasingly educated and increasingly skilled, and as the pattern of use of more educated labor in more skilled positions has improved.<sup>18</sup> It is less clear that the advantage has been eroded in relation to the developing countries, although a number of these has pursued successful programs to improve education. The achievement of higher levels of education is usually considered to increase directly and indirectly the average levels of human capital and labor skill available to the economy.

Analysis of the data shows that the correlation between the simple growth rate of industry in the United States and its intensity of use of

<sup>16</sup> Jorgenson and Nishimizu (1978) conclude that the gap in the level of technology applied in Japan relative to that in the United States had disappeared by 1973, indicating the completion of the catching-up process in terms of the technology utilized.

<sup>17</sup> See Keesing (1966). For a discussion of the contribution of labor force education to labor skills and macroeconomic growth, see Denison (1967), chapter 8.

<sup>18</sup> Denison and Chung (1976, pp. 59-62) note that Japan began the 1950's with a labor force that was rather highly educated for the general level of economic development achieved. Thus, the high rates of growth of the more skill-intensive industries in Japan may be due in part to an improved pattern of use of the more educated labor force.

skilled labor or human capital is positive, and significant at the 0.05 level, during the entire period and over 1962-68, but positive and insignificant even at the 0.10 level during 1968-74.<sup>19</sup> Industries intensive in the use of skilled labor tend to grow at a faster rate in the United States, although the relationship is weaker during the last decade. The pattern is similar to the pattern shown for R. & D. intensity in relation to U.S. growth, as expected, since the intensity of use of skilled labor within an industry is related to its technological or R. & D. intensity.

Table 8 analyzes the relative structural change for the United States compared to other countries or regions, based upon the correlations between relative growth rates and skilled labor or human capital intensity. As predicted, the correlations are negative and significant for Japan. The increases in average levels of education and the improvement in the sectoral distribution of more educated workers over recent decades in Japan has allowed Japan to expand production relatively rapidly in the human capital intensive industries. The process has transformed the Japanese manufacturing sector into a structure much more similar to that of the United States, as the U.S. comparative advantage in skilled labor is reduced and perhaps eliminated.

The pattern in relation to other areas is less clear. Over the entire period and during 1968-74 the correlations are negative but insignificant, except for the coefficient for Asia during 1968-74, which is barely significant at the 0.10 level. The evidence for any catching-up of the developing countries to the United States in the availability and use of skilled labor is weaker than the evidence for a catching-up in their ability to utilize high-level technology.

TABLE 8.—CORRELATIONS BETWEEN RELATIVE GROWTH RATE (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND SKILLED LABOR (OR HUMAN CAPITAL) INTENSITY OF EACH INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.26	-0.11	-0.65	-0.28	-0.32	-0.29
1962 to 1968.....	-.23	.08	-.62	.18	-.05	.29
1968 to 1974.....	-.24	-.23	-.65	-.47	-.34	-.51

The insignificant results for the EEC are reasonable because the labor skill advantage, if any, of the United States in relation to the EEC countries was initially rather small.

The results for the developing areas deserve further comment. Some observers suggest that the exploitation by developing countries of their comparative advantage in unskilled-labor intensive products creates increasingly more severe structural adjustment problems for the developed countries, and for the United States in particular. Industrial growth in the United States (and other developed countries) relative to the developing areas should then be positively correlated with skilled-labor intensity, as the unskilled-labor intensive industries grew relatively slowly in the United States. The data show this pattern only insignificantly for the developing market economies and for Asia

<sup>19</sup> The correlations between skilled labor intensity and U.S. industry growth are .59 during 1962-74, .65 during 1962-68, and .41 during 1968-74.



during 1962-68. During 1968-74 and over the entire period the correlations are all negative.

Thus other factors may be present. Among them, the threat or occurrence of increased import protection in the developed countries reduces the appeal of development strategies based upon the export of products intensive in unskilled labor. The growth of industries which do not enjoy a comparative advantage may then be fostered by government policies in the developing countries. The threat of protective policies in the developed countries leads the developing countries to alter the structure of their manufacturing sectors somewhat, increasing the rate of growth of industries without comparative advantage. Because of the links through world markets, the growth rates of these industries in the developed countries are reduced. Some of the change occurs as multinational corporations locate facilities in the developing countries.

### *Capital Intensity as a Basis for Comparative Advantage*

A third hypothesized basis for U.S. comparative advantage is the relative abundance of financial or physical capital in the United States. Previous studies of the U.S. pattern of international trade, however, have failed to support this hypothesis, perhaps in large part because financial capital is highly mobile internationally. Capital mobility reduces the importance of capital as a basis for comparative advantage, while increasing the importance of the other factors discussed above. Nonetheless, this section on shifting comparative advantage includes capital intensity, in part to contrast with previous results, and in part to facilitate discussion of government taxation of capital income in an inflationary economy.

The correlations between the measure of capital intensity of an industry, capital per employee, and simple U.S. growth rates of industry are positive but statistically insignificant for all three periods. More capital-intensive industries tended to grow somewhat more quickly in the United States, but the relationship is weak.

Table 9 presents correlations between relative growth and capital per employee. The correlations are negative except for the developing areas during 1962-68. Especially during 1968-74, more capital-intensive industries grew relatively slowly in the United States. The tendency is statistically significant at the .10 level only in relation to Japan over the entire period and during 1968-74, and in relation to the developed market economies over the entire period.

TABLE 9.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND CAPITAL PER EMPLOYEE FOR EACH INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.50	-0.37	-0.51	-0.19	-0.32	-0.14
1962 to 1968.....	-.43	-.16	-.48	.29	.02	.42
1968 to 1974.....	-.47	-.38	-.52	-.43	-.37	-.41

Thus, any comparative advantage of the United States in capital-intensive industries is declining, although as noted above the im-

portance of capital-intensity as a basis for comparative advantage is not clear. In relation to Japan, the significant negative result indicates another aspect of the catching-up process. The Japanese ratio of capital investment to total output accelerated during the 1950's and 1960's, surpassing the United States level in 1956.<sup>20</sup> The gap between the levels of capital-intensity of the two economies began to narrow. The Japanese economy nonetheless has not yet become as capital-intensive as the U.S. economy, so in this dimension the process of catching up continues.

Although the results concerning capital intensity may not be generally pertinent to issues of shifting comparative advantage, they are relevant to current concerns over U.S. Government policy toward business investment. The trend toward relatively slower growth of capital-intensive industries in the United States may reflect in part the net effect of differing Government policies toward capital income across countries. In the United States, the higher rates of inflation experienced recently increase the effective rate of taxation of capital income, due to the lack of inflation adjustment in calculating capital gains and depreciation allowances.<sup>21</sup> Other countries have moved to correct some of these distortions, and to increase economic incentives for new capital formation.

To the extent that the net impact of the various governments' policies falls rather more heavily on the more capital-intensive industries, the policies may explain the weak tendency toward relatively slower growth of these industries in the United States. The location of production, especially in the more capital-intensive industries, shifts at the margin to countries that become less severe in the effective taxation of capital income.

### *Conclusions About the Shifting Pattern of Comparative Advantage*

This section examines the structural changes occurring within U.S. manufacturing in relation to three hypothesized bases for U.S. comparative advantage: New technology created through R. & D. the, abundance of skilled labor, and the abundance of financial or physical capital. Only the first two will be highlighted, because the importance of the third as a basis for comparative advantage is not clearly established.

This section presents a basis for the increasing similarity of the structures of manufacturing in other areas, relative to the structure of U.S. manufacturing, in the shifting pattern of U.S. comparative advantage. The change is most significant in relation to Japan, as the growth rate in Japan of high-technology or skilled-labor intensive industries has been strong. The growth over the last decade of high-technology industries has also been relatively strong in other areas of the world. The U.S. comparative advantage as the leader in the creation and application of new technological knowledge has diminished. The shift has probably been accompanied by a general reduction in the lag between the application of new technology in one country and its application elsewhere in the world.

<sup>20</sup> Jorgenson and Nishimizu (1978).

<sup>21</sup> For a discussion, see Feldstein and Summers (1978). Since most businesses are debtors, the taxation of nominal rather than real interest payments acts to reduce the effective rate of capital taxation, offsetting the other effect to some extent.

The reduction of the United States comparative advantage in skilled-labor intensive industries is less significant statistically. In relation to the developing countries the changing pattern is probably due in part to an inability, due to rising protectionism in the developed countries, to exploit fully their comparative advantage in unskilled-labor intensive products.

#### OTHER INDUSTRY AND LABOR FORCE CHARACTERISTICS

This section of the paper summarizes certain additional descriptive results relating industry characteristics to the relative growth rates of the industries. Appendix 2 presents a detailed discussion of these results. The appendix includes discussion of four industry characteristics: the intensity of outward foreign direct investment, the importance of pollution abatement costs, the four-firm concentration ratio, and the importance of scale economies. The appendix also discusses three labor force characteristics, average annual earnings, the extent of production worker unionization, and the female proportion of the labor force. The correlations between the intensity of outward foreign direct investment and the simple growth rates of U.S. industries are positive and statistically significant at the 0.10 level for all three periods. This positive relationship reflects the facts that growth is directly related to the extent of R. & D. (as noted in the previous section), and that foreign direct investment from the United States is often based upon the exploitation of new technology created by R. & D. performed within the United States.<sup>22</sup>

The correlations between the intensity of outward foreign direct investment and the relative growth rates of U.S. industries are generally negative but statistically insignificant, except in relation to Japan. The hypothesis that outward foreign direct investment contributed to the slower growth of U.S. industries receives at best weak support. Indeed, the significant result in relation to Japan in no way implies a casual relationship, since Japan is a recipient of relatively little foreign direct investment originating from the United States.

The importance of pollution abatement costs to industries in the United States is insignificantly correlated with either simple or relative growth rates in the United States during 1968-74, the period when most environmental protection regulations began to take effect. Thus the analysis shows no obvious trend to locate more pollution-intensive industries in countries that are more lax in enforcing environmental protection.<sup>23</sup>

#### TRENDS AND PROJECTIONS

The preceding sections of the paper demonstrate that the growth rates of U.S. industries are related to a number of characteristics of the industries. These trends are now part of the historical record. In

<sup>22</sup> See Pugel (1978), chapter 4.

<sup>23</sup> For analyses of the macroeconomic effects of pollution abatement, see Leontief et al (1977) and Council on Environmental Quality (1978), Chapter 10. Leontief et al find little impact on projections of world growth due to pollution abatement costs. The Council on Environmental Quality surveys studies which show little current or projected impact on unemployment in the United States, but some reduction in private productive investment, which is likely to reduce future U.S. economic growth. The Council also notes that recent studies fail to isolate any industry-specific effects on international trade, a finding consistent with the results of this study.

contrast, projections into the future require judgment. It is never adequate simply to project past trends into the future, as underlying conditions are continually changing. The paper instead offers comments on projections of the likely future growth of and structural change within the U.S. manufacturing sector.

In viewing the United States without reference to other areas of the world, simple growth rates across U.S. industries were positively related to both R. & D. intensity and the intensity of use of skilled labor. In addition, these relationships weakened in the more recent subperiod 1968-74. Both of these trends seem likely to continue, and the weakening of the closeness of the relationship may not be reversed. Industries intensive in R. & D. or intensive generally in the use of skilled labor will continue to be the more dynamic within the manufacturing sector, but exceptions to the trend will also occur. Also, industries more intensive in outward foreign direct investment tended to grow at faster rates in the United States. This result probably reflects two separate underlying causal relationships, the direct relation between R. & D. intensity and industry growth, and the direct relation between R. & D. and outward foreign investment.

The major focus of the paper is on relative, rather than simple, growth rates of industries. In general, the textiles and rubber and plastic products industries were the fastest growing in the United States relative to other areas of the world, and the electrical equipment and transport equipment industries the relatively slowest growing. The patterns of relative growth are related to a number of industry characteristics. Interpretation of the results must be approached cautiously, as many of the results show a similar pattern across the various characteristics. It is not clear that a single causative agent can be successfully singled out, or that the interrelationships among the characteristics can be ignored. Nonetheless, we argue that the primary characteristics of interest are those related to the bases of U.S. comparative advantage.

In relation to the EEC and to the developing market economies in general, industry characteristics typically were insignificantly related to the relative growth of U.S. industries. One exception is the tendency of the high-technology industries to grow more slowly in the United States relative to the EEC during 1968-74. The lack of significant trends is likely in general to continue because the structure of the manufacturing sectors in these areas and the potential for growth are similar.

The generally faster growth of the Japanese economy was accompanied by a drastic structural change in its manufacturing sector. The structure of the Japanese sector became more similar to that of the U.S. sector. A change in comparative advantage between the two countries is demonstrated by the relatively faster growth of Japanese industries intensive in R. & D. or in the use of skilled labor. The relative structural change is also evident in the finding that more capital-intensive industries tended to grow more slowly in the United States relative to their growth in Japan.

The projection of these trends into the future is not straightforward. As the macroeconomic growth rate of the Japanese economy falls,<sup>24</sup>

<sup>24</sup> See Chung and Denison (1976), chapter 12.

the pace of structural change within the manufacturing sector is also likely to diminish. The historical trends uncovered should continue, but the closeness of the relationships is likely to weaken dramatically. Japan has in large part completed its catch-up process, and its future growth will be more similar to that of the United States or the EEC.

The developing areas also exhibit faster rates of growth than the United States. In addition, the pattern of growth within the manufacturing sector diverged noticeably from the pattern in the United States during the more recent subperiod 1968-74. The beginning of a shift in U.S. comparative advantage in relation to these areas is evident in the relatively slow growth of more R. & D. intensive industries in the United States during 1968-74. The developing areas are beginning the process of catch-up that Japan is completing. The process is likely to continue. The manufactures of the developing areas are likely to offer increasing competition to U.S. industries in the U.S. market and on world markets, although the increase begins from a relatively small base.

One industry characteristic that was found to have little relation to historical trends is likely to be increasingly important in the future. The effects of pollution control regulations are only now beginning to have an impact on the location of production through new investment decisions. Industries most affected by U.S. regulations are likely to seek foreign sites with less stringent requirements. As pollution control is justified economically in that it corrects for an externality, the trend is not necessarily harmful to U.S. interests. Indeed, the trend reflects another gain from international trade, as the United States continues to consume pollution-intensive goods, increasingly supplied by importation, while avoiding the social costs of pollution that would attend the domestic production of these goods.

### CONCLUSIONS AND POLICY IMPLICATIONS

This paper analyzes the growth of manufacturing industries in the United States from the perspective of the growth of these industries in other parts of the world economy. A basic conclusion is that the structures of manufacturing in other areas of the world are becoming more similar to the structure of U.S. manufacturing. The basis for this pattern of relative structural change was explored within the shifting pattern of U.S. comparative advantage.

Viewed in isolation, the faster growing industries in the United States tended to be intensive in research and development and intensive in the use of skilled labor, although the strength of these relationships weakened during 1968-74, the latter part of the period studied. The pattern of growth of U.S. industries is different if viewed from the perspective of growth in other areas of the world, especially Japan and the developing market economy countries.

If compared with growth in Japan, industries intensive in research and development or intensive in the use of skilled labor tended to grow relatively slowly in the United States. The comparative advantage of the United States vis-a-vis Japan shifted dramatically during the period.

The tendency to slower U.S. growth relative to growth in the developing countries for industries intensive in research and develop-

ment was significant during 1968-74. Vis-a-vis the developing countries U.S. comparative advantage is shifting in the sense that these economies are catching up in the use of high-level technology in production, due in large part to a speeding up of the international product life cycle and the concomitant improved ability of the developing economies to acquire and to apply new technology. Also, in part, the shift reflects the increasing use of developing countries as assembly sites and sources of components within the entire production process of the high-technology industries.

The tendency to slower relative growth of U.S. industries intensive in their use of skilled labor was weaker, for areas of the world except Japan, than the tendency for relatively slower U.S. growth in the technology-intensive industries. Thus, the shifting pattern of U.S. comparative advantage is more closely related to shifts in the ability to apply, and, in the case of the industrial countries, to create new technology, and more weakly related to shifts in the general availability and utilization of skilled labor.

The United States is not losing its comparative advantage in skilled labor in relation to the developing countries. However, there is also no evidence that the developing countries are increasingly exploiting their comparative advantage in unskilled labor, perhaps due to rising levels in the United States and other developed countries of protection against unskilled-labor-intensive imports from the developing countries.

An important implication of such trends toward protectionism is clearly seen within the general framework of a paper such as this. The developing countries shift the focus of their development efforts toward growth in other industries, if growth in unskilled-labor intensive industries is constrained by the policies of the developed countries. Directly and indirectly the growth of these more skilled-labor intensive industries in the United States and other developed countries is reduced. Not only are the gains from international specialization and trade foregone, but the growth in the developed countries of industries that tend to be relatively capital intensive and offer higher annual earnings is reduced. The rise in protectionism in the United States and other developed countries indicates that a political decision to follow such a course is being made.

The implications of the shift in and reduction of U.S. comparative advantage in high-technology industries are not necessarily as serious as those of increased protectionism. Although the United States role as the world leader in the creation and application of new technology is declining, the United States at the same time should increasingly benefit from the creation of new technology in other industrial countries. The benefits accrue both through access to foreign technology for application to production in the United States and through imports of products that embody the new technology. Also, the United States is not likely to see its exports of manufactured products become the lower technology products, although U.S. firms are likely to face increased competition from foreign firms in the world markets for high-technology products. Some readjustment of the U.S. balance of payments is likely to occur, and this should proceed smoothly through exchange rate changes in the setting of continued growth of total world trade. In addition to maintaining the competitive position of

U.S. industry by avoiding an overvalued exchange rate, two other issues are worthy of the attention of government policy.

First, the Government may need to assure U.S. business access to foreign technology. The United States has generally followed an open policy in allowing the transfer of technology created in the United States to other market economy countries. The United States should expect and demand a similar policy be followed by other countries, especially as those countries become increasingly important sources of new technology. This issue could become important in the future, but it is not at the present time, as there is little if any evidence that U.S. access to foreign technology is currently in any way restricted.

Second, a larger issue facing the U.S. Government and other governments of the industrialized world concerns the pace of technological advance worldwide. Is the decline of the United States as a leader in the production of high-technology products part of a general global decline in the rate of technological change?

Is the rate of creation of new technology slowing in the United States? If so, are other countries increasing absolutely their contribution to technological progress? If the latter is true, the rate of international advance of technology need not decline, even if the U.S. rate does, and the global rate may be acceptable to most countries. In an interdependent world the pace of technological change must be viewed in an international perspective.

If, however, the relative decline of the United States is part of a general slowing in the overall rate of technological progress, changes in Government policy may be required if the rate is considered too low to be acceptable. At this point, and acknowledging the difficulty of defining and projecting trends, an international slowdown in the rate of technological progress seems possible. Thus, Government policies to increase the economic incentives to scientific and technological advance may be justified, although further study and consideration of the problem and the appropriate policies are needed. The policies adopted should be coordinated on an international level, as an internationally coordinated effort follows logically from the international benefits of technological change.

## APPENDIX 1

### DATA SOURCES

The following entries provide information on variable definitions and data sources. All industry characteristics are measured for the United States, and the characteristics, of course, may be somewhat different in other countries. Many of the industry characteristics are discussed further in Pugel (1978).

Growth Rates and Shares: *Yearbook of International Trade Statistics*, Volume 1, 1974 and 1976 Editions (New York: United Nations), country tables and international tables on index numbers of industrial production.

Research and Development Intensity: Measured by scientists and engineers as a fraction of total employment. *United States Census of Population 1970*, Subject Report 7C (Washington, D.C.: Government Printing Office).

Skilled Labor Intensity: Measured as weighted average of male and female employees' median years of schooling. *United States Census of Population, 1970*, Subject Report 7B.

Capital per Employee: Total assets net of depreciation divided by total employment, each averaged over 1967-1970. *Sourcebook, Statistics of Income, Corporations* (Washington, D.C.: Internal Revenue Service), and *Industry Profiles* (Washington, D.C.: Government Printing Office).

Four-Firm Concentration Ratio: Weighted average by shipments. *Census of Manufactures, 1967* (Washington, D.C.: Government Printing Office).

Importance of Scale Economies: Minimum efficient scale of plant divided by the size of U.S. output. Weighted average by value added. For further discussion of this variable, see Pugel (1979). *Census of Manufactures, 1967*.

Outward Foreign Direct Investment: Importance of foreign profits in total industry profits, averaged over 1967-1970. Weighted average by value added 1967. For further discussion of this variable, see Pugel (1978). *Sourcebook, Statistics of Income, Corporations*.

Importance of Pollution Abatement Costs: Measured as expenditures on pollution abatement investment divided by expenditures on new plant and equipment, 1974. *Survey of Current Business*, July 1976, p. 14.

Fraction of Output Sold to Final Household Consumers: *Input-Output Structure of the U.S. Economy, 1967*, Volume 1 (Washington D.C.: Government Printing Office).

Annual Earnings: Weighted average of male and female employees' median annual earnings. *United States Census of Population 1970*, Subject Report 7B.

Extent of Production Worker Unionization: Employees in plants in which one-half or more of the employees are covered by collective bargaining agreements, as a fraction of total plant employment in the industry. Data provided by Professor James Medoff, as presented in Richard B. Freeman and James L. Medoff, *What Do Unions Do?* (New York: Basic Books, forthcoming.)

Female Fraction of Labor Force: *United States Census of Population, 1970*, Subject Report 7B.

## APPENDIX 2

### DESCRIPTIVE RESULTS CONCERNING OTHER INDUSTRY AND LABOR FORCE CHARACTERISTICS

The appendix presents descriptive results relating industry characteristics to the relative growth rates of the industries. It analyzes five industry characteristics: The intensity of outward foreign direct investment; the four-firm concentration ratio; the importance of scale economies; the importance of pollution abatement costs; and the fraction of sales to final household consumers. It also analyzes three labor force characteristics: Average annual earnings; the extent of production worker unionization; and the female proportion of the work force. All characteristics apply to U.S. industries because the U.S. is the focus of this paper. In many cases the characteristics of the industries in other countries display a pattern similar to that in the United States.

The results should be interpreted cautiously. At this rather aggregated level of industry detail, many of the industry characteristics are closely related, both in a statistical sense and in part at an underlying causative level. The use of the characteristics for description is legitimate, but an attempt to infer causal relationships between the industry characteristics and relative growth rates could be misleading if based only on the results of this paper.

#### *Industry Characteristics*

Table 10 presents correlations between the intensity of outward foreign direct investment from the United States and the relative growth of industries. In all but one instance the correlations are low in absolute value and only those for Japan are statistically significant. The extent of outward foreign direct investment is only weakly related to relative industry growth, but U.S. industries intensive in foreign direct investment are somewhat more slowly growing in the United States relative to other areas of the world.

Table 11 presents correlations between the four-firm concentration ratio and the relative growth rates of industries. The correlations are negative and significant for Japan during each period and for all areas during 1968-74. The latter results may be strongly affected by the poor growth of the transport equipment industry in the United States during 1968-74, since this industry is the most concentrated (by a wide margin) in the sample. The data show that more concentrated industries tended to grow more slowly in the United States, especially in relation to Japan and to the developing areas.

Table 12 presents correlations between the importance of scale economies and the relative growth of the industries. The correlations are lower than those reported for concentration but exhibit a similar pattern. Both the developing market economies and Asia show a significant positive correlation during 1962-68,



indicating relatively faster growth of U.S. industries in which scale economies are more important. During 1968-74 the correlations for Japan, the developing market economies, and Latin America are significantly negative, indicating relatively slower growth of U.S. industries in which scale economies are more important. Thus the pattern reverses itself for the growth of U.S. industries relative to growth in the developing market economies between 1962-68 and 1968-74.

Two other industry characteristics were analyzed in relation to the growth of industries. The importance of pollution abatement costs to industries in the United States was found to be weakly correlated with relative industry growth, especially during 1968-74, when most pollution control regulation began to take effect. Analysis of the correlation between the fraction of output sold to final household consumers and relative growth yielded coefficients of varying signs and low absolute values. Relative growth thus was unrelated to the extent of sales to household consumers.

TABLE 10.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND OUTWARD FOREIGN DIRECT INVESTMENT INTENSITY OF EACH INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.32	-0.14	-0.61	-0.28	-0.28	-0.30
1962 to 1968.....	-.41	-.10	-.64	-.08	-.26	.08
1968 to 1974.....	-.19	-.11	-.55	-.29	-.17	-.40

TABLE 11.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND THE U.S. FOUR-FIRM CONCENTRATION RATIO

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.40	-0.24	-0.86	-0.53	-0.67	-0.42
1962 to 1968.....	-.18	.31	-.84	.24	-.03	.41
1968 to 1974.....	-.51	-.61	-.84	-.82	-.75	-.73

TABLE 12.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND IMPORTANCE OF SCALE ECONOMIES TO THE INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.20	-0.16	-0.49	-0.17	-0.27	-0.10
1962 to 1968.....	-.08	.19	-.43	.51	.36	.55
1968 to 1974.....	-.26	-.39	-.51	-.54	-.52	-.45

### Labor Force Characteristics

The section on shifting comparative advantage analyzed one labor force characteristic, the relative importance of skilled labor. This section discusses three other characteristics of the industrial labor force: Annual earnings; the extent of unionization of production workers; and the female proportion of the labor force.

Table 13 presents correlations between annual earnings and the relative growth of the industries. The correlations are of varying signs during 1962-68 but negative for all areas over the entire period and during 1968-74. The correlations are statistically significant for Japan for all periods and for the developing market economies and Latin America during 1968-74. Industries in the United States offering higher average annual earnings tended to grow more slowly relative to their growth in other areas of the world, especially in relation to Japan over the entire period and to the developing countries during 1968-74. In addition, the pattern of correlations shown in table 12 is similar to the pattern of table 8, in large part because the skill level of the labor force is closely related to its annual earnings.

Table 14 presents correlations between the extent of production worker unionization and the relative growth of the industries. The correlations are negative in

all but one case and statistically significant for the developed market economies and for Japan over all periods, and for the developing market economies and for Latin America over the entire period and during 1968-74.

TABLE 13.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND ANNUAL EARNINGS IN EACH INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.45	-0.26	-0.69	-0.33	-0.48	-0.25
1962 to 1968.....	-.32	.05	-.68	.21	-.01	.24
1968 to 1974.....	-.47	-.41	-.68	-.55	-.54	-.44

TABLE 14.—CORRELATIONS BETWEEN RELATIVE GROWTH (U.S. TO OTHER COUNTRY OR REGION) OF EACH INDUSTRY AND THE EXTENT OF PRODUCTION WORKER UNIONIZATION IN THE INDUSTRY

Period	Developed market economies	EEC	Japan	Developing market economies	Latin America	Asia
1962 to 1974.....	-0.72	-0.44	-0.72	-0.50	-0.68	-0.37
1962 to 1968.....	-.64	-.22	-.74	-.08	-.44	.03
1968 to 1974.....	-.66	-.42	-.68	-.57	-.52	-.44

Thus, the more highly unionized industries tended to be relatively slow growing in the United States, although this tendency was statistically weak vis-a-vis the EEC and Asia.

The paper also analyzed one other labor force characteristic, the fraction of the labor force that was female. The correlations with relative growth rates were generally positive, although none was statistically significant. Industries whose labor force included a higher proportion of females tended to grow relatively more quickly in the United States, although the strength of the relationship is rather weak.

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# SUSTAINING AMERICAN GROWTH IN A COMPETITIVE WORLD ECONOMY—THE CHALLENGE OF THE 1980'S

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## INTRODUCTION

The basic objective of the economic policy of the United States is to maximize the share of world resources available to its citizens. All other governments seek essentially the same end. But the approach to this objective, the means to the end, will sharply differ among governments depending on their political structure, economic institutions, and cultural traditions. Recognizing and dealing with these differences in a practical way is critical to developing an effective American international economic policy in a time of extraordinarily rapid global change.

Profound changes in the world political and economic structure since the end of World War II have significantly altered the perspective of U.S. international economic policy. Through most of our history, the United States has been relatively isolated, less economically involved with the rest of the world. Abundant material resources were rapidly developed in an expanding domestic free market without impediments to the flow of trade and capital. Differences in political and economic institutions in the United States with those abroad were no great problem. We had no significant economic dependence on any country or group of countries. Our limited political and economic international relationships were almost entirely with governments sharing a common historical heritage and a similar attitude toward resolving economic problems. This is no longer true.

The scope of global political and economic change since the end of World War II has no historical precedent in modern times.

The colonial system on which the world economic order was largely based came to a total end. In its place arose a multiplicity of new independent states seeking national identity, with high aspirations for rising living standards and low interest in the economic traditions of the old colonial powers.

International political and financial organizations were established with great hopes, but no clear concept of their actual functions under changing world conditions.

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The great multinational corporations and banks extended their industrial and financial operations in markets throughout the world.

Technical production skills rapidly spread to Second and Third World countries, sharply reducing the traditional comparative advantage of the West.

State ownership and control of industrial enterprises expanded, even in the democracies of the West.

The Bretton Woods system of fixed exchange rates tied to the dollar and gold expired, and was replaced by flexible rates with intermittent intervention based largely on perceived national interests.

Chronic, world-wide inflation increased and approached a critical stage.

After decades of cheap abundance, the soaring cost and restricted supply of oil threatens to drastically limit world economic expansion.

Control over the major reserves of world mineral resources by the Third World sharpened the conflict with consuming countries over the supply and price of basic commodities and stimulated competition among the major powers for access to the resources of the developing countries.

A world slowdown in economic growth following a long period of rapid rise coincided with increased competition in world markets and an escalation of trade restrictions.

The United States greatly expanded its trade deficit and incurred a large official foreign debt for the first time in its history.

The rapid expansion of the Eurocurrency market placed a substantial part of world liquidity outside formal government control.

Changes in the dollar exchange rate created uncertainty over the functional role of the dollar as the world's primary monetary reserve unit.

Changing events of this magnitude have placed great strain on the continuity of traditional American international economic policies, most of which were established in a very different world setting. All of the great international economic and financial institutions—the GATT, the IMF, the World Bank, even the United Nations—were formed in the years immediately after World War II when the economic dominance of the United States was complete. The Bretton Woods Agreements anchored the world monetary system to the dollar and gold at a time when the United States' gross national product was greater than all other countries combined. The United States held virtually all of the world's traditional monetary reserve gold, and was the source for the world's only trading currency—the dollar. The Free World was completely dependent on the United States for credit and aid assistance. The United States was almost totally self-sufficient in basic resources and held an enormous technological advantage over the rest of the world.

Under these conditions, there was no thought of serious economic competition with other countries. On the contrary, the sensible U.S. policy objective was to encourage and, if necessary, finance economic

development and expansion everywhere, if only to reduce the dependence of other countries on the United States for financial aid. A generation of American policymakers became conditioned to accept uneven rules of the game in financial and trading arrangements with the rest of the world, an attitude which in large measure still influences policy judgments. A massive U.S. economic surplus was available and readily expended to influence political objectives in sensitive international situations.

But times have changed. The great economic surplus is no longer there. U.S. production is now a declining portion of world output. An expanding number of advanced developing countries now have a strong capability to produce and sell high technology products in the world market. U.S. per capita real income, which within the past decade was far above any other country, is now exceeded by several. From being a surplus producer, the United States has become the world's largest importer of mineral resources and is now heavily dependent on foreign sources for virtually all important minerals—including oil. Once the major creditor of the world, U.S. foreign-held debt is now larger than that of all other countries combined. And this debt will continue to grow unless the massive U.S. trade deficit is brought under control.

While the economic dominance of the United States has diminished and it has become more dependent on other countries for its basic material needs, the world in which advantageous trade and monetary arrangements must still be sought has become vastly more complex both in political and economic terms. The simple early post-war world in which national economies could be defined as either industrial or developing—with a few in the gray area—is long gone. The industrial economies are now in dynamic, mature, or declining groups, with varying access to material resources.

The original concept of a developing country has become even more complex. The DC's are now in advanced, stable, or basket-case classifications. They include countries with a big national resource potential, either multiple or one commodity, and countries with strong technological capability, some with and others without natural resources.

The political variations are equally complex. The national economies—both industrial and developing—which are active in world trade run the gamut from relatively open to totally state controlled. And the economic intervention by governments in by no means limited to socialist economies. In Western Europe, for example, one half of the 20 largest industrial companies are wholly or predominantly state-owned. The task of developing a consistent U.S. global trade and monetary policy stance which might effectively deal with this complexity simply boggles the mind.

But while the interdependence—the involvement—of the different national economies has increased, world growth has been slowing. This has meant more intense economic competition for world resources and world trade among countries with completely different political institutions and sharply contrasting national economic objectives. United States economic development has been firmly based on a strong adherence to the principle of free and open markets for goods and capital. We have consistently tried to apply this principle in inter-

national dealings. Unfortunately the free market commitment is shared by relatively few of our trading partners. Among the centrally planned economies it is nonexistent.

In this increasingly interdependent world, each country still retains an independent, unique structure of political, cultural, and economic institutions that guides its decisionmaking process, its pursuit of happiness in a global context. Consequently, responses to the same external conditions will differ sharply among governments according to domestic policy priorities and perceived national interest. Reconciling the internal policy differences among countries in a fair and equitable way is the key to restoring prosperity and order to the world economy. But no matter how the United States deals with this problem, a world market for a wide range of manufactured products as well as basic commodities is becoming a practical reality. The implications of this developing trend for Americans as producers and consumers will be a key factor in assessing U.S. economic policies in the years ahead.

United States international policies have been largely based on a global concept of the world economic order in the belief that it is feasible to establish orderly international systems governing trade and capital flows to which all countries—at least those that matter—will in time conform. More to the point is the policy conviction that uniform, comprehensive world trade and monetary arrangements are in every country's interest, particularly the United States. So important is the goal, that it has become a justification for considerable American patience and economic sacrifice in the expectation that things will even up in the future. And finally, there is the underlying policy consideration that as the richest of the world powers, the United States should be generous with others both for moral reasons and out of a continuing practical need to secure political support in a difficult world.

For most of this century the international economic policy of the United States has been based on the conviction that the prosperity and well-being of Americans is inextricably linked to economic progress throughout the world. In this global concept rising production and faster resource development anywhere ultimately accrues to the benefit of peoples everywhere.

In good part, the traditional American faith in an open economic system evolves from our own history where the early avoidance of barriers to the flow of goods and capital among the States made a strong unified economy possible. So Americans tend to view the world economic potential in terms of our own historical experience. If existing barriers to the flow of capital and resources—human and material—among countries could be eliminated, the pace of world economic development would be maximized, raising the living standards of all peoples—including Americans. In the global view, a new steel mill in Korea simply frees labor somewhere else to develop other resources and everyone benefits.

Apart from the obvious uncertainties of achieving universal acceptance of fair rules of the game in an open world economy, the presumed advantages of this concept of the world economy to Americans as a group are based on one important basic premise; i.e., that world physical resources are available for development and use in infinite

supply, or at least in ample quantity within a practical time horizon. Until recent times this assumption was not seriously challenged. A good reason is that the notion of chronic and worsening shortages of physical resources—including the basic minerals—raises almost impossible practical policy problems in democratic societies.

For obvious and understandable political reasons there is always a strong tendency for policymakers to shape the future to conform to current policy directions and avoid serious consideration of possibilities for which there is no readily acceptable political solution. Since the practical range of current policy options is limited, this usually rules out serious consideration of major directional changes in the economic environment which might render established policies—to which there is strong political commitment—obsolete. In a democratic society there is not much that can be done to sharply change ongoing policies until the misdirection, if there is one, brings on a crisis situation. In a practical political sense, the "process," which is immediate, invariably appears more important than the consequences which are in the always uncertain future.

The preference of policymakers to discuss broad economic objectives in platitudinal terms is therefore understandable and probably caused no great harm during the long historical period when the American economy was relatively self-sufficient with no significant dependence on external resources. But that has changed. The United States is now increasingly dependent on foreign trade for economic survival. Americans must compete in the world market with other nationals whose political leaders are not wedded to economic platitudes but rather to a tough assessment of trade objectives in precise quantitative terms. This is the world economy of the 1980's to which American policy must adjust by creating an environment in which industry and labor can effectively compete on fair and equitable terms.

### THE SUPPLY AND DEMAND FOR WORLD RESOURCES

Substantial changes in the supply and cost of material resources will have a major impact on U.S. trade policy over the next decade.

1. Limitations on the total oil supply will restrict world economic growth. Under favorable political conditions, oil production is likely to show little if any increase in the 1980's. Under adverse circumstances, the overall supply could well decline.

2. The world price of oil is expected to rise substantially over the next decade; perhaps more than double the current level in constant dollars.

3. If the United States is to maintain even a modest level of economic growth, energy needs will also rise. Unless there is comparable increase in the domestic energy supply, the volume of oil imports will rise in the years ahead.

4. The volume of U.S. imports of other essential minerals at rapidly rising prices have been increasing steadily in recent years. This trend is likely to accelerate in the 1980's.

An ever expanding supply of cheap and abundant oil has been the key to the rapid growth of the world economy over the past three decades. This happy state of affairs has come to its inevitable end. The oil supply is topping out and new energy sources will be coming



on stream slowly and at high and rising cost. The economic adjustment will be painful, whatever new energy policies are put into effect. For at least the next decade, and probably well beyond, the United States and the other industrial powers will be required to import massive amounts of oil from the surplus producers at rising prices. These imports must ultimately be paid for out of earned income (exports) and/or sale of capital assets.

But dependence on oil imports is by no means the only commodity trading problem for the American economy in the 1980's. The economy will also be heavily dependent on foreign sources for a broad range of other essential and costly minerals. The United States is now the world's largest importer of copper, iron, bauxite, nickel, silver, cobalt, chromium, lead, zinc and other minerals essential to economic survival. Moreover these imports, almost without exception, are steadily increasing both in absolute terms and as a percent of total consumption. Only a decade ago the United States was a net exporter of oil and nonfuel minerals. Now these commodities constitute nearly half of all U.S. imports.

If economic growth is to be sustained at even a reduced level the United States faces an enormous rise in the import cost of mineral resources vital to the functioning of a modern industrial economy. Within the next decade the value in constant dollars of oil and other mineral imports could well be greater than the present value of all U.S. imports. If present trends continue the trade deficit in oil and other minerals may exceed \$200 billion in 1979 dollars within the next decade even assuming the early establishment of a reasonably effective domestic energy program. The oil import deficit is not a short run "crisis" calling for short run sacrifice. It is not even a problem in the sense that a solution can be found to end dependence in oil. It is more fundamental—a chronic condition—a relatively permanent change in our economic environment to which American trade policy must adjust.

An absolute dependence on foreign resources marks a major change in the historical pattern of American economic relationships with the rest of the world. Economic policy has heretofore been based on the assumption that the United States is, or should be, self-sufficient in basic material resources apart from a few exotic commodities—bananas, coffee and the like. Even now policymakers recoil from any quantitative measures of future import dependency, because this leads to quantitative consideration of possible offsetting export targets, an unpleasant business for conventional American trade diplomacy. The instinctive reaction is to assume the condition is temporary and project a return to self-sufficiency which will again allow a relaxed attitude toward free and open markets, an amiable acceptance of whatever mix of imports and exports turns up in the statistical summaries. The notion of trade planning, of a need to set specific targets for imports or exports and to devise policy actions to achieve these targets is foreign to traditional American thinking.

But times have changed. The United States now faces essentially the same trade problem as the other industrial powers—the need, the necessity to produce and sell more in a competitive world market in order to buy the basic commodities essential to maintaining adequate living standards. This is no different from the normal day-to-day

economic problem that every American individual and business understands very well. The difference now is that an increasing volume of the trade must cross national borders with all the problems of changing currency values and uneven trading rules. In domestic commerce, Americans expect to bargain hard for their goods and services under fair rules of the game. They expect no less in their international dealings.

### THE BASIC TRADE PROBLEM

In addition to a continuing heavy dependence on essential commodity imports that is not likely to diminish, Americans begin the decade of the 1980's with a huge overall trade deficit. But the implications of this current policy perspective is that somehow, in some way, the import dependency will diminish and/or exports (undefined) will increase enough to solve our trade problems. The presumed prior conditions are that (1) inflation is brought under control, and (2) dependence on foreign energy is eliminated or greatly reduced within the next few years.

These policy objectives are obviously commendable. Of course policies should work toward reducing the high rate of inflation. And of course, efforts should continue to develop new energy sources and to achieve a more energy efficient economy. But all other countries are working strenuously to the same ends. From a practical standpoint it is unrealistic to expect that the U.S. inflation rate will be reduced significantly below the world average or that energy self-sufficiency will be achieved over the foreseeable future even with the best of intentions and reasonably sound policy measures. In these areas we have to work hard just to stay even—to avoid a worsening of an already serious basic trade and current account problem. Some trends now underway will help, the services account—mainly earnings from U.S. foreign investment—shows a good surplus. Foreign direct investment in the United States is increasing and should be encouraged. But overall, Americans have been increasing their dependency on the rest of the world for resources essential to maintaining accustomed living standards. If nothing is done to alter the fundamental causes of this trend, the balance of payments deficit over the long run will steadily rise, and a declining dollar will push import costs up and ultimately force a painful market adjustment.

### THE POLICY ALTERNATIVES

The fundamental challenge to the United States in the increasingly diverse and competitive international environment is to achieve adequate growth and stability, to earn a fair share of the world's resources, without compromising our historical economic freedom, our political traditions and principles. No argument about the end. The question is how to get there.

Three important negatives are immediately evident. The first is that Americans cannot long continue to import a rising share of world resources by expanding dollar credit. The second is that in an interventionist world the market system does not guarantee an automatic, painless correction of trade imbalances. The third negative is that

projecting the present trend of U.S. trade indicates a gradual long-term worsening of the current account imbalance despite some prospects of temporary improvement in the short run.

In substance, the American standard of living has in part been sustained by borrowed foreign resources. This dependence is likely to grow worse. In the absence of policy actions to correct the adverse trend, the ultimate involuntary, forced adjustment is likely to be extremely disruptive and painful to the American economy. What policy options are available?

A fundamental change in the deteriorating current account situation can be effected by either of two basic approaches.

(1) A prolonged cutback in economic growth, lower consumption, reduced demands on world resources, ultimately a reduced overall standard of living.

(2) A more productive, competitive American economy able to achieve an export surplus in other areas large enough to pay for essential imports including oil.

Expressed this way the preference is of course obvious. But in terms of economic policies actually in effect the choice is not at all obvious. Most of the current policy measures influencing economic activity are broad-based comprehensive actions intended to slow demand and dampen economic activity across the board. Relatively little emphasis has as yet been given to measures directed toward expanding output in the context of a long term viable trading relationship with the rest of the world. We have been gradually drifting, almost by default, into a policy of continuing economic restraint because in the short run it always seems to be the compelling necessity. The difficulty is that a prolonged series of short run policy reactions can extend indefinitely into the future. The American economy can become trapped in a recurring vicious cycle of restrictions on total demand followed by stimulative measures and aborted recovery, with a gradual overall erosion of American living standards.

#### A TRADE PROGRAM FOR THE 1980'S

Americans are dependent on the rest of the world for a substantial portion of their energy and basic commodity needs. If the economy is to continue to grow this dependency will almost certainly increase over the next decade. It is not reassuring that such imports are less than 5 percent of GNP. The important point is that this is a very critical 5 percent and it is growing rapidly. The sensible policy reaction is not to place arbitrary and impractical limits on such essential imports but instead to put policy measures in place which will enable Americans to pay for needed commodities that are in internal short supply by producing and selling those goods and services in markets abroad.

For at least the past decade, U.S. performance in raising productivity and competing with other nations in the international marketplace has been poor. Out trading partners are capturing ever larger shares of our markets; we are losing our shares of theirs. Indeed, large parts of the industrial development plans of our traditional major trading partners and the even more ambitious plans of the newly industrializing countries are premised on increases in exports which are directly competitive with U.S. industry.

A very large expansion in new and innovative exports will be necessary over the next decade to avoid the alternative of chronic and potentially crippling constraints on the American economy. An effective national program to achieve this end would include a range of measures directed toward three interrelated major policy objectives:

- (1) An increase in productivity to make the American economy fully competitive with any in the world in technology, innovative products, and price;
- (2) the development of an efficient institutional structure for international trade that will encourage closer cooperation between government and industry in expanding the production and sale of American products in world markets; and
- (3) the establishment of full parity in the trading relationship of American producers with foreign competitors in the world market.

Specific recommendations for appropriate domestic economic policy are, in the strict sense, outside the scope of this report. But there is, or should be, no conflict between appropriate domestic and international economic policy. A more productive and competitive economy is clearly in the public interest whatever the current or prospective status of our international accounts. The point is that with the prospect of sharply rising energy and commodity import costs it has become a much more compelling policy objective. An increase in U.S. productivity is no longer a matter of a percent or two change in real national income. It is now a *sine qua non* for sustaining any economic growth at all.

So, from the international economic standpoint, there is a need for greater policy emphasis on measures designed to expand supply, particularly in export oriented areas. To encourage higher levels of saving and investment, more R&D outlays leading to better technology and more innovative product development. All with the ultimate objective of a more competitive, energy efficient American economy.

However, a more productive, competitive economy is only one facet of a program designed to expand American exports and earnings. To mobilize the export potential there is a further need for a new institutional structure through which government and industry can work together in the context of established trade objectives and policy.

One of the most important vehicles in helping to meet the international economic challenges which face the United States is the organization of the Federal Government. If the proper institutional framework does not exist, policy formation and implementation will inhibit effective responses to the issues facing the United States in the world economy. This is best understood in the framework of the recently concluded Multilateral Trade Negotiations as well as the Trade Agreements Act of 1979 enacted by Congress to implement U.S. rights and obligations arising from the trade negotiations.

Fortunately a good start has been made by the Executive Branch in the trade reorganization plan submitted to Congress by the President on September 24, 1979. Indeed the context in which the President submitted his reorganization plan is directly related to the concerns of this paper. President Carter said in his message to Congress:

Recent developments, which have raised concern about the vitality of our international trade performance, have focused much attention on the way our

trade machinery is organized. These developments include our negative trade balance, increasing dependence upon foreign oil, and international pressures on the dollar. New challenges, such as implementation of the Multilateral Trade Negotiation (MTN) agreements and trade with non-market economies, will further test our Government trade organization.

The essence of the trade reorganization plan is to focus primary responsibility for policymaking and negotiations in the Trade Representative and for implementation in the Secretary of Commerce. In this process the Secretaries of State and Treasury have lost responsibilities that they had enjoyed for many years. However, criticism of these two Departments' performance by a wide cross-section of the country led to the urgent need to restructure and revamp.

It is not enough simply to devise an organizational structure more in tune with American future trading needs. A major attitudinal change in the traditional adversary relationship between Government and industry is also necessary.

At least part of the cause for our decline in competitiveness lies in the striking difference in business-government relations of the United States compared with our trading partners. Other nations have recognized that the international competitiveness of their industries is a vital national interest. Foreign governments exert themselves to promoting that interest. Some of the more important of the myriad of measures they employ are the sponsorship of research and development consortia in potential export industries, industrial restructuring plans for both declining industries and industries in need of rationalization for maximum export performance, special regulatory treatment of leading export industries, the adoption of antitrust policies attuned to the realities of the international marketplace, the inclusion of industry leaders in the long-range economic planning process, and, perhaps most important, meaningful communication between industry and government officials.

If the Government institutions are restructured properly, including closer cooperation with export industries, and the determination exists from the Chief Executive down that the United States reverse the inexorable tide of its lagging international economic posture, then there is much hope for the future.

But even assuming a fully competitive American economy and the establishment of new institutional procedures to convert this potential into significant improvement in the trade picture, all this can be completely negated if our trading partners maintain or impose new barriers to American exports.

The establishment of practical and mutually beneficial trading arrangements with other countries is complicated by the fact that the United States is the largest open consumer market in the world absorbing nearly half of all world production and a substantial share of all world exports. A growing number of countries—including many LDC's—now have a strong capability to expand exports to the American market, including high technology products which once were a virtual U.S. monopoly. If U.S. industrial production is to continue expanding and jobs and living standards are to continue rising, American industry must be capable of competing aggressively under fair and equitable conditions in the world market—at home as well as abroad.

While there is broad agreement on this policy objective, there are growing differences of view as to how it might most expeditiously be realized. It is recognized that all countries to some extent employ various devices to limit imports and stimulate exports to levels different from those that would be realized in a free and open market. And all countries show a good deal of hypocrisy in comparing their own trade devices with others. Nevertheless, it is evident that the United States in its policies governing imports and exports over the years has more closely approximated the free trade ideal than any of its trading partners.

Successive American negotiators over the last two decades have worked toward a more open world-trading market. At the same time it has been firm U.S. policy to set a good example to the world by adhering both to the letter and the spirit of the General Agreement of Tariffs and Trade. Some progress has been made in converting others but not very much. The difficulty is that such improvement as has been made has been mainly in areas where American trade is increasing at a relatively low rate such as with the Common Market. In other areas where trade with the United States—largely one way—has been rapidly expanding, the commitment to more open trade practices is at best weak. Indeed, with regard to the so-called advanced developing countries, there is little evidence that trade reciprocity has any meaning at all.

In considering future trade policy the United States faces an on-going dilemma. If imports are to continue upward and American living standards are to improve, we need to pay our way through increased exports and/or higher earnings on investments abroad. But the foreign markets are simply not there due to continuing restraints on growth or barriers to trade or both. The special role of the dollar apparently makes further exchange rate flexibility unacceptable. The alternative of a domestic policy geared to shrinking U.S. import demand is intolerable. The hard-ball approach of selective restraints on imports is to some unthinkable.

In short, the United States has a serious economic adjustment problem for which the proposed remedies are either unworkable or unacceptable. In such situations, the usual policy fallback is the Micawber approach—forecast an improvement and hope that it comes about.

Considering the prospective, economic relationship of the United States with the rest of the world, American trade policy and the negotiations required to carry it out must be based on a tougher and more precise awareness of the stakes involved. We can no longer afford the luxury of defining trade policy objectives in vague environmental terms. It is no longer merely a question of the kind of world in which Americans will trade with others. Future trade policy will need to place much greater emphasis on defining trade policy objectives in precise, quantitative terms—what resources the U.S. economy must have from abroad and how these needs can be financed through increased exports. To the extent these aims can be furthered through multi-lateral agreements, well and good. At the same time we must recognize that there are irreconcilable, probably permanent, economic and political differences between countries and regions that need not be a barrier when mutually advantageous trade is possible but can never-

theless serve to distort traditional trade doctrines. We must begin to shift our emphasis from a global approach to a long series of pragmatic, toughly-negotiated trade and monetary arrangements based on a realistic concept of America's economic outlook in a competitive world.

#### THE DOLLAR AND THE INTERNATIONAL PAYMENTS MECHANISM

In the extraordinary setting of World War II and its aftermath, the monetary thinkers of the time gathered at Bretton Woods to devise an international monetary system appropriate for the orderly world anticipated for the rest of the century. Influenced by the hopes and conditions of their time, they established a system in which all currencies were to be linked to gold through the dollar at relatively fixed exchange rates—in concept a single currency world-wide. This system conformed with the world they knew in which the United States was the completely dominant economic power with sufficient resources—including gold—to anchor a world currency far into the future.

The international monetary agencies were also formed in the context of the Bretton Woods world. The International Bank for Reconstruction and Development was set up to enable capital sources in the industrial world to be tapped for use in the developing countries. The International Monetary Fund was established as a pool of currencies available under specified conditions to countries in short-run balance of payments difficulty. It was intended to buttress the fixed exchange rate system by providing an alternative to frequent adjustments in rates due to reversible economic situations.

In the 1950's and 1960's, the unique, ephemeral post-war situation gradually changed and the fixed exchange rate, dollar based system geared to a special set of conditions, came to its inevitable end. But Bretton Woods still strongly influences the attitudes of monetary authorities to this day. They yearn for a world currency of guaranteed value, yet which is available in unlimited quantity, but none will ever again exist. They want a precise system of rules and order in which each member is still free to seek its own ends and this is impossible.

The current world monetary adjustment mechanism parallels the arrangements governing world trade—a complex mixture in which the price of currencies and the volume and direction of capital flows are influenced by an indeterminate combination of market forces and government intervention. There are no hard and fast rules. Each country's monetary policy actions are based on perceived national interest, cooperating with others when the benefits appear to be mutual.

To an increasing extent, multinational corporations—financial and non-financial—determine the distribution of resources and capital throughout the world. In some instances these decisions are independent of any national authority. In others, the actions follow from direct company to government negotiations and agreement. In few instances, has the United States Government significantly influenced any MNC decision governing the international transfer of resources or capital.

In this complex, part-managed, part-free world monetary and trade structure, the role of the dollar has become increasingly ambiguous.

As a carryover from Bretton Woods the dollar is still the primary trading and reserve currency. The U.S. retains in its policy psyche a residual responsibility to stabilize the dollar for international reserve purposes. At the same time, policymakers are uneasily aware that this presumed need sometimes conflicts with domestic economic policy objectives. Torn between these conflicting pressures, official policy decisions have vacillated back and forth depending on short run emergency conditions and political circumstances.

The key issue in the international monetary area now concerns U.S. policy regarding the function of the dollar in a flexible rate system, including the effect on trade and adjustment flows and, most important, the impact on the discretionary use of domestic stabilization policy. A central issue is whether and to what extent a presumed need to stabilize the dollar for international reserve purposes should be taken into account in establishing domestic economic policies. This basic conflict has most directly been reflected in differences over the extent of U.S. intervention in the dollar market. These differences range from belief in a hands-off policy still held by the hard-core purists, through selective intervention to compensate for market "imperfections," to the establishment of zones or limits to dollar change.

Recent revisions in the Articles of the International Monetary Fund attempted to bring some order into the adjustment process by setting forth broad guidelines for economic conditions under which intervention might be appropriate and establishing a surveillance mechanism to audit compliance. But there is no clear idea as yet of either the practical structure or the function of this instrument and it has had little effect on national policies.

The basic purpose of any set of monetary arrangements governing transfers of debt claims, whether national or international, is to facilitate the production and efficient distribution of resources over time, to enable individuals to exchange goods and services to their mutual benefit under acceptable institutional procedures. By this standard, the prevailing more or less flexible, partially managed exchange rate "system" has worked reasonably well. World production and trade have been expanding and there is no clear evidence that the existing international monetary arrangements have hampered this growth. While there are still strong advocates of a return to more tightly structured exchange rates on the one hand and completely free floating rates on the other, the present loosely structured system is a practical, workable compromise which has avoided extreme monetary instability and prevented the problem of internal policy inconsistencies from reaching severe dimensions.

The demise of the fixed exchange rate system has, however, left a residue of problems. The dollar is still the principal international trading and reserve currency which, in the minds of some foreign holders—both official and private—places a special responsibility on American policy makers to do whatever is necessary to maintain the exchange value of the dollar regardless of internal economic problems and needs.

The United States has no special obligation to target any dollar exchange rate beyond a strong internal policy commitment to sound growth and stable prices—the same status claimed by other sovereign



powers. The responsibility for avoiding policies leading to maladjustments in trade or capital flows, and for taking action to correct these imbalances when they occur, should be shared by all countries. Where the responsibility lies in any given circumstances and what corrective actions might best be taken and by whom are the sort of contentious matters that can only be resolved in the future, as in the past, through frequent high level consultation conducted with cooperative and fair-minded attitudes. There is no new overall grand design or system on the drawing board that will obviate this need.

The complex structure of institutions—both government and private—that deal with international flows of resources and capital has, by and large, evolved as a practical response to specific needs. The structure is constantly altered by market forces as underlying needs change. This has been the pattern of the entire post-war period. A few of the more striking developments have stirred some concern and resulted in proposals for government controls or corrective action. Two such developments that come to mind are the expansion of the Eurocurrency market, primarily dollars, and the large transfers of credit in recent years to developing countries through the private banks.

The rapid growth of the Eurocurrency market, currencies deposited outside the originating country, has been a key development of the 1970's. There has been some concern that the expansion of credit in this market has unduly added to the world money supply and inflation. Since operations in the Eurocurrency market are not regulated by any national or international monetary authority, some believe that capital flows in and out of this market have reduced the effectiveness of internal monetary policies. Some authorities have, therefore, advocated joint government action to impose reserve requirements on Eurocurrency holdings to correct the presumed problems.

The large multinational banks (MNB's) understandably oppose an extension of controls over the Eurocurrency market. They point out that the size of this market has been greatly exaggerated and it is not really an add-on to the world money supply since most of the deposits are already included in national statistics. Moreover, the Eurocurrency market has been a useful source of international liquidity and has facilitated the cycling of funds from surplus to deficit areas during some difficult recent years.

Since the 1973 oil price rise, the MNB's have greatly expanded their lending to governments, mainly the developing countries, a function that in earlier years was handled almost entirely by international financial institutions. This credit expansion has created concern that a major default of a borrowing country would impair the solvency of one or more large MNB's and place considerable stress on the international monetary system. The banks respond that these concerns are largely unfounded since their government customers are reasonably credit-worthy and the loans are not unduly concentrated in any one government.

A further problem may be that the lack of conditionality of most private credit has induced some governments to borrow excessively to cover current deficits and thereby avoid or delay the kind of economic adjustment required in the international interest. This could create a serious problem in the next cycle of private loans. Some have, there-

fore, advocated a substantial increase in the credit resources of the IMF and other international financial institutions to enable them to displace at least part of the private lending and meet future official credit needs with appropriate conditions for corrective adjustment.

All of these concerns center on the broad issue of international liquidity—how large it should be and on what terms and conditions it should be available. The world monetarists, like their national counterparts, focus on government reserves, the global supply of money in all forms, believing that this is closely related to world inflation. A different view is that the volume of world money reserves is a less important determinant of inflation than the adjustment process itself—the set of economic measures required of surplus and deficit countries to correct maladjustments in trade and capital flows. In this view, the emphasis should be on closer coordination of adjustment policies both in the surplus and deficit side.

Still, the volume and distribution of world monetary reserves will continue to be an important determinant of national policies. In this context, the recent massive surge in the price of gold has had a particular impact. At current market prices, the value of the 1.1 billion ounces of gold in official reserves has doubled in the past years and now totals over \$400 billion, substantially larger than the value of all officially held currency. Most of the world gold reserves are held by the United States and the European industrial countries. As yet, there is no clear idea of the future role of gold in the overall world monetary arrangements. Obviously, this issue cannot indefinitely remain on the back burner. In the current uncertain economic environment it would seem wise for the United States to hang on to its remaining gold reserves until their prospective function becomes clearer.

Perhaps the one issue that has had, over the years, the most staying power in international monetary discussions has been the future of the dollar as a reserve currency—its changing relationship to other potential reserve currencies and the SDR. The consensus has always been that the structure will gradually evolve from a dollar-based system, to multi-currency reserves, and, in the end, to one possibly based on a primary international currency unit such as the SDR. But no one has any clear idea of the timing of this process or how the changes will occur during any short-run period.

Over a decade ago, the SDR was introduced but has made little progress in the intervening period. The SDR's in existence total only 12 billion, less than 5 percent of all official reserves. A major deterrent to greater use of the SDR is that it is only a quasi-currency, earns little interest, has only a limited official exchange use, and has no function in the private market at all. Among governments, the SDR is accepted more as an obligation than an asset.

So despite its flexible exchange value, the dollar remains the principal international currency because it is available in quantity, is accepted everywhere, and earns a good return when held in reserve. The existing world dollar supply is held not under duress but because the currency is needed and necessary for a functioning world economy. But the existence of a large stock of dollars makes some observers edgy. They worry both over the influence of large foreign dollar holdings on domestic policy and over the possibility of a mass unloading.

As a result, there have been various proposals to accelerate the evolu-

tionary process under which the dollar would cease to be the primary reserve currency. The latest of these proposals is for a substitution account administered by the IMF in which official institutions could deposit dollars and receive in return an SDR dominated instrument of comparable value and with a comparable current return.

There is widespread misunderstanding here and abroad about what the substitution account is expected to achieve. Some of the official dollar holders see the substitution account as a form of exchange guarantee of their currency reserves permitting swaps of currency for SDR's and vice versa. The foreign banks do not want to reduce their dollar holdings per se but simply want a guarantee against devaluation—the perfect monetary reserve.

The U.S. authorities have accepted the idea of a substitution account in principle but from an entirely different standpoint. They agree only to an irreversible exchange of dollars or any other currency for SDR's; in effect a permanent reduction of dollars and addition of SDR's—a small contribution to the slow evolutionary growth of the SDR. Moreover, any gains or losses in the account would be shared by all IMF members. The U.S. concept understandably has very little appeal beyond the IMF permanent staff.

Whatever is done regarding the substitution account, it is important that the United States not agree to any device which can directly or indirectly be used to insulate dollar holders against exchange risk at the American taxpayers cost. The chilling effect on domestic policy would be beyond any influence now exerted by day-to-day concern over the stability of foreign dollar holdings.

In sum, the prevailing evolutionary, jerry-built structure of financial arrangements that is loosely termed an international monetary system works reasonably well. The basic requisite for world stability is for each country to follow sensible domestic economic policies and cooperate in a reasonable way with its neighbors. If this is done, almost any set of monetary arrangements will function properly. If it is not done, any monetary system, however well designed, must one day collapse.

# LONG-TERM CHANGE IN FOREIGN TRADE POLICY OF THE UNITED STATES

By William R. Cline\*

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## I. INTRODUCTION

The unprecedented economic growth of the West in the post-war period owes much to the increasingly open regime of international trade. The concept of economic gain through international specialization according to comparative advantage remains valid today, two centuries after its first exposition by Adam Smith and David Ricardo. Moreover, in the modern mixed economy the open trading system makes other contributions to economic well-being. Imports provide a source of competition for otherwise non-competitive industrial structures. This competition can act as a stimulus to technological change, the acknowledged source of perhaps the bulk of economic growth. Foreign competition similarly restrains domestic price increases, and trade liberalization can help check inflationary pressures, thereby facilitating the pursuit of macroeconomic policies leading to full employment.

The United States and the Western industrial countries stand at a critical juncture in trade policy. They have recently completed the "Tokyo Round" of multilateral trade negotiations (1973-1979). On April 12, 1979, 22 countries including the United States agreed to a package of trade-liberalizing measures, and 18 other countries approved parts of the package. At the same time, the major trading nations must decide whether to slide further in the direction of specific restrictive measures in response to increasing protectionist pressures from particular industries and, increasingly, from organized labor. The

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worst global recession since the 1930's left protectionist forces in the United States and abroad all the stronger, because of heightened fears of unemployment caused by imports. Those advocating protection to preserve jobs forget that eventually protectionism leads to foreign retaliation and a loss of export jobs, causing a global chain reaction of recession (as the experience of the 1930's showed).

This paper surveys the major features of change in the foreign trade policies of the United States. It first reviews the successive dismantling of protective barriers achieved in the series of postwar trade negotiations held under the auspices of the General Agreement on Tariffs and Trade (GATT), as well as the corresponding experience of dynamic post-war growth in international trade. The discussion then turns to trade conditions in the 1970's, when external shocks from the oil-price increase, global inflation, and the shift to flexible exchange rates marked a watershed change from the buoyant, halcyon years through the 1960's. The analysis of trade conditions examines the evolution of U.S. competitiveness, including the seeming lag of U.S. productivity growth in the 1970's. It then addresses the behavior of the U.S. trade balance, tracing its long decline from the days of the "dollar shortage" in the 1950's to the exceptional deficits of 1977 and 1978. This analysis seeks to identify the causal forces in this decline, considering especially the roles of differential growth rates at home and abroad and changes in exchange rates. The analysis then investigates the new regime of flexible exchange rates, focusing on the question of whether the regime provides adequate adjustment of the trade and current account balances, and therefore, whether the regime appears to be working.

The paper then turns to the trade negotiations in the Tokyo Round. After a brief review of the evolution of the negotiations, the discussion summarizes the tariff cutting agreements, their prospective effects on trade, and their economic costs and benefits for the United States. The study then considers the agreements reached on non-tariff barriers (NTB's), probably the most fundamental changes to be achieved through the Tokyo Round. The NTB codes themselves, as well as their trade effects, are examined. These agreements include codes on subsidies and countervailing duties, standards, government procurement, licensing and customs valuation. The paper also reviews the unfinished code on "safeguard protection".

If the Tokyo Round represented a first track of international effort toward liberalization, "ad hoc protectionism" constituted a second track of national restrictive actions in recent years, including protectionist measures in the United States. The paper reviews these protectionist trends here and abroad, including the special themes of measures for selected "sensitive industries" (such as textiles, steel, electronics, footwear, and shipbuilding) and the role of the "newly industrialized countries" in precipitating protective reaction.

The final section of the paper looks ahead to future change in trade policies. It considers the trade implications of an extended period of slower growth in industrial countries, the issue of organized trade, and the longer-run implications for the GATT mechanism in light of agreements in the Tokyo Round and in view of changes desired by the developing countries.

## 2. INTERNATIONAL TRADE IN THE POSTWAR PERIOD

The liberal regime of international trade spurred global growth in the late 19th century and the first decade of the 20th, but then wartime restrictions hobbled trade and the Great Depression of the 1930's crippled the trading system. Country after country raised tariffs and imposed quantitative restrictions during the Depression in the pursuit of higher domestic employment in import-competing industries, only to find unemployment aggravated by the ensuing loss of export jobs as other countries followed suit. Even John Maynard Keynes temporarily advocated protection,<sup>1</sup> before he forcefully supported the classical case for free trade in his later work.<sup>2</sup>

Table 1 shows the historical levels of U.S. tariffs since 1914. The table indicates the rise of tariffs from 1914 to their peak level in the early 1930's under the Haley-Smoot Law. Under the landmark Reciprocal Trade Agreements Act of 1934, Cordell Hull began the long process of winding down prohibitive tariffs through bilateral trade agreements. Inflation provided some degree of automatic liberalization as it eroded "specific" duties (expressed as dollars per physical unit rather than as a percent of value as in ad valorem duties).

The same post-war milieu that gave birth to the International Monetary Fund, the World Bank, and the "Bretton Woods" system of fixed exchange rates, led the General Agreement on Tariffs and Trade, the vehicle for multilateral trade negotiations. Beginning in Geneva in 1947, GATT held four rounds of negotiations before the 1960-61 "Dillon Round" (Geneva) and the crucial Kennedy Round (Geneva, 1964-67), which by itself reduced industrial tariffs by approximately one-third.<sup>3</sup> As a result, from 1945 to 1975 U.S. tariffs on dutiable products fell from 32 percent to 8 percent (table 1). Tariffs abroad declined as well, and the post-Kennedy Round tariffs on all dutiable products averaged 14 percent in Canada, 11 percent in Japan and 9 percent in the EEC, giving a total average tariff of approximately 11 percent for all of the industrial countries.<sup>4</sup>

Two principal economic phenomena set the tone for these rounds of negotiations. The first was the international economic strength of the United States and a seemingly chronic dollar shortage in recovering Europe, in the early rounds. The second was the formation of the free trade areas in the European Common Market (ECM) and the European Free Trade Association (EFTA), in the 1950's and early 1960's. While the United States favored a strengthened Europe and partial trade liberalization through the ECM and EFTA, these free trade areas gave the United States a strong incentive to push tariff reductions in the Kennedy Round to reduce the tariff wall around the European market and to roll back trade diversion that occurred in the formation of the two free trade areas.

<sup>1</sup> John Maynard Keynes, "Proposals for a Revenue Tariff," (March 7, 1931), in *"The Collected Writings of John Maynard Keynes,"* Vol. IX, "Essays in Persuasion," (London: Macmillan, 1972), pp. 231-37.

<sup>2</sup> For example, "The International Clearing Union," speech before the House of Lords, May 18, 1943, reprinted in *The New Economics*, ed. S. E. Harris (New York: Knopf, 1947), p. 365.

<sup>3</sup> GATT: 1948-1973 (Geneva: November 1973), p. 13. The other three initial rounds were in Annecy, France (1949); Torquay, England (1951); and Geneva (1956).

<sup>4</sup> GATT, "Basic Documentation for the Tariff Study: Summary by Industrial Product Categories." (Geneva, March 1974). The GATT figure for the U.S. average tariff on dutiable goods is 8.9 percent for 1973.

TABLE 1.—UNITED STATES: AVERAGE TARIFF LEVELS, 1914-75

Period	Average tariff <sup>1</sup> on—	
	Dutiable items	All Items
1914-22.....	27	9
1923-30.....	39	14
1931-35.....	50	18
1936-40.....	38	15
1941-45.....	32	11
1946-50.....	16	7
1951-55.....	12	5
1956-60.....	11	7
1961-65.....	12	7
1966-70.....	11	7
1971-75.....	8	5

<sup>1</sup> Tariff collections as percentage of import value.

Source: U.S. Department of Commerce, "Statistical Abstract of the United States 1962," p. 890; 1977, p. 876; and Don D. Humphrey, "American Imports" (New York: Twentieth Century Fund, 1955), p. 74.

The salient negotiating issues in the Kennedy Round included agriculture and the nature of tariff cuts. The United States sought but failed to achieve major liberalization in agriculture, for which the Common Market was implementing its new Common Agricultural Policy featuring "variable levies" to provide a protective bridge for the gap between European farm prices and those abroad. The United States did prevail on the nature of tariff cuts: they were linear (a fixed cut of 50 percent) rather than graduated to be deeper for higher tariffs (as the Europeans, with their intermediate integration-equalized tariffs desired). Moreover, the Kennedy Round achieved a breakthrough in negotiating technique: tariffs were cut across the board, instead of on the basis of item by item bargaining.

International trade responded ebulliently to its unfettering through successive GATT negotiations. As table 2 shows, from 1950 through 1965 the foreign trade of industrial countries grew at more than 7 percent annually in real terms, reaching almost 10 percent growth in the late 1960's. This growth far exceeded the high growth rates of real gross domestic product, averaging approximately 4½ percent annually from 1950 through 1970. Indeed, considering the economic benefits flowing from freer trade (as discussed above), it is likely that the dynamism of foreign trade was a strong contributing factor to the achievement of these historically high growth rates for gross domestic product over so long a period. The postwar period was therefore a dramatic contrast to the period from 1913 to 1945 when economic growth was slow (mainly because of the Depression) and the growth of international trade was even slower.<sup>5</sup>

TABLE 2.—GROWTH RATES OF REAL GROSS DOMESTIC PRODUCT AND MERCHANDISE TRADE IN CONSTANT PRICES 1950-75: INDUSTRIAL COUNTRIES

	[Annual average percentage]	
	Real GDP	Real merchandise trade <sup>1</sup>
1950-60.....	4.0	7.2
1960-65.....	5.1	7.9
1965-70.....	4.5	9.5
1970-75.....	2.9	5.0

<sup>1</sup> Dollar-value of imports and exports deflated by respective unit value indices.

<sup>2</sup> Average for 1952-60.

Sources: Organization for Economic Cooperation Development, Economic Outlook 22 (December 1977); Lester B. Pearson, "Partners in Development" (New York: Praeger Publishers, 1969), p. 358; and "International Financial Statistics" 30 (5), May 1977, pp. 56-67.

<sup>5</sup> From 1913 to 1948 world production grew at approximately 2 percent annually and world trade grew by only about one-half of 1 percent annually. Richard Blackhurst, Nicholas Marian, and Jan Jumlir, "Trade Liberalization, Protectionism and Interdependence" (Geneva: GATT, 1977), p. 7.

### 3. TRADE IN THE SEVENTIES

#### *External Shocks*

In the 1970's the extended period of positive economic calm and prosperity gave way to a phase of successive external economic shocks. Beginning in 1972-73 world commodity prices surged upward, led by wheat prices (which were affected by poor crops in 1972 as well as by U.S. grain sales to Russia) and boosted by the coordinated international economic boom of 1973. Commodity prices continued climbing into 1974, and the fourfold rise in the price of oil turned the inflationary squall into a hurricane. For the United States, the inflationary impulse from prices of imported commodities provided a cost push that contributed to historically high rates of inflation. This impulse was already strong from non fuel commodities alone,<sup>6</sup> and the oil price increase greatly worsened the inflationary pressure. The oil price increase caused an immediate transfer of approximately \$65 billion away from the OECD countries to Organization of Petroleum Exporting Countries (OPEC) nations.

At the same time, the Bretton Woods regime of fixed exchange rates collapsed. The United States suspended dollar convertibility into gold and depreciated the dollar in 1971, and after a second attempt at dollar depreciation in early 1973 major currencies shifted to "managed floating."

The remarkable feature of the early 1970s is that the trading regime held together as well as it did. Far from provoking a massive decline in foreign trade as some feared, flexible exchange rates steered the international economy through the exceptionally rough waters of the oil price shock and historically high world inflation.

With respect to commercial policy, the industrial countries showed great judgment in forswearing trade restrictions as a means of dealing with balance of payments pressures caused by higher oil prices. They recognized that the OPEC surplus required a deficit on the part of the rest of the world and, unlike their action in the 1930's, in 1974 and after they resolved to avoid competitive devaluations and other predatory trade practices that would have ensured the failure of all as the result of misguided individual attempts at self-preservation.

Nevertheless, the external shock induced slower growth. Already fighting inflation, many countries did not take expansionary measures to offset the contractive impact of higher oil prices, which acted like a giant excise tax in reducing demand. Worse, as balance of payments problems began to constrain national policies, many countries began to adopt deflationary measures. As a result, in 1974-75 the world economy passed through its worst recession since the 1930's. Growth even for the whole period 1970-1975 fell considerably below the levels of the 1950's and 1960's, and with it fell the growth rate of international trade in real terms (table 1).

From 1974 on, the OPEC trade balance surplus exerted a continuing constraint on the world economy. With recession in the industrial countries in 1974 and 1975, the developing world ran the bulk of the trade deficit mirroring the OPEC surplus, raising the developing world's external debt to precarious levels. By 1976, recovery in

<sup>6</sup> Richard N. Cooper and Robert F. Lawrence, "The 1972-1975 Commodity Boom," *Brookings Papers on Economic Activity* 1975; and Joel Popkin, "Commodity Prices and the U.S. Price Level," *Brookings Papers on Economic Activity*, 1974.



the industrial countries had shifted much of the deficit back to advanced countries, but a new problem was emerging: large current account surpluses in Japan, Germany, and Switzerland were adding to the OPEC surplus and causing the corresponding worldwide deficit for other nations (and its corresponding constraints on their growth policies) to be all the larger.

Table 3 shows the current account surpluses of OPEC countries and of selected industrial countries for the period 1973-1978. The table also reports the total of these surpluses as a percentage of the total exports of industrial countries in each year. It is clear from the table that the oil price increase caused a precipitous rise in the total world surplus that had to be absorbed by deficits in non-oil countries. However, since 1975 this OPEC surplus has become less and less important in relative terms, while the current account surpluses of selected industrial countries have become more important. Ironically, the U.S. surplus was an important source of the world total in 1975. By 1977 and 1978, surpluses in Germany, Switzerland and especially Japan were contributing almost 50 percent more to the global surplus total than was the OPEC surplus, which had fallen to an estimated \$20 billion.

TABLE 3.—CURRENT ACCOUNT SURPLUS OF MAJOR OIL EXPORTING COUNTRIES AND SELECTED INDUSTRIAL COUNTRIES, 1973-78

(In billions of dollars)

	1973	1974	1975	1976	1977	1978
Major oil exporting countries.....	7	68	35	41	35	20
United States.....	7	1	18	4	(-15)	(-17)
Germany.....	4	10	4	4	4	17
Japan.....	0	(-5)	(-1)	4	11	18
Switzerland.....	0	0	2	4	4	24
Total surplus.....	18	79	59	57	54	49
Total surplus as percentage of industrial country exports.....	5	16	11	10	8	16

<sup>1</sup> Based on 1st 2 quarters.

<sup>2</sup> Assumed equal to 1977.

<sup>3</sup> Excluding Japan.

<sup>4</sup> Excluding United States.

Sources: International Monetary Fund (IMF), "Annual Report 1978," p. 19; "International Financial Statistics" 31 (12), December 1978; "Wall Street Journal," Dec. 20, 1978, p. 2.

The presence of large surpluses in certain industrial countries has created two problems for the international economy. (1) These surpluses have aggravated the problems of balance of payments constraints to growth caused by the OPEC surplus. (2) The surpluses of individual industrial countries have caused pressure for exchange rate changes among their currencies (probably in excess of differential inflation rates, as discussed below). Despite flexible exchange rates, then, there remains a serious need for improvement in the adjustment mechanism for the ironing out of current account imbalances among industrial countries.

#### *U.S. Competitiveness*

A widespread concern exists that a central feature of long term change in U.S. foreign trade may have been an erosion in the U.S. capacity to compete in the international market place. As discussed below, the U.S. trade position has shifted from one of large chronic

surpluses in the 1950's and early 1960's to one of balance or serious deficit in the late 1960's and 1970's. Some would attribute this apparent long term reversal to erosion in U.S. competitiveness.

The very concept of competitiveness is elusive. At the proper exchange rate, a country should become competitive. Nevertheless, considering trends over time it is meaningful to speak of underlying changes that may affect the country's ability to compete at a given exchange rate (and therefore its ability to achieve external balance without secular depreciation).

This section considers two concepts of competitiveness: relative growth of productivity and relative product price. (The discussion also touches upon several non-economic factors that may have affected U.S. competitiveness in recent years.) Productivity growth affects competitiveness in two ways. First, higher labor productivity growth provides the scope for lower production cost, unless wages rise at correspondingly higher rates. Second, higher productivity growth provides the basis for higher total output. In an absorption approach, the trade balance equals the difference between "absorption" (domestic demand) and output (domestic supply), and other things being equal, it is easier to achieve an excess of output over absorption if productivity is growing faster.

Table 4 reports data on labor productivity growth in the United States and in five competitor countries since 1950. At least until 1965, productivity growth in the United States was high by historical standards. However, productivity grew even faster over the postwar period in competing nations, especially in Japan, Germany, and France. Through the 1950's this more rapid growth in productivity could be attributed largely to postwar recovery, but since the 1960's the differential from the U.S. rate has remained substantial and it can hardly be attributed to postwar recovery over this period. The most extreme growth rates of productivity have been achieved by Japan, especially in the period 1965-70. This pattern is consistent with Japan's transformation by the late 1960's from a chronic trade deficit country to a chronic trade surplus country.

In sum, over the long span from 1950 to 1970, U.S. productivity growth was robust while in Europe and Japan it was much faster, and the implied long-run shift in relative competitive ability was consistent with the long-run erosion of the U.S. trade balance position (to be discussed below.)

TABLE 4.—PRODUCTIVITY GROWTH RATES IN SELECTED INDUSTRIAL COUNTRIES, 1950-75

[Output per employee-hour in manufacturing, average annual percentage increase]

	United States	Canada	Japan	France	Germany	United Kingdom
1950-55.....	2.7	4.2	11.0	4.3	6.0	1.6
1955-60.....	1.1	3.4	7.9	4.8	6.3	2.8
1960-65.....	4.5	4.6	8.5	5.2	6.4	3.4
1965-70.....	1.3	4.1	13.0	6.5	5.2	3.4
1970-75.....	2.6	2.9	4.4	2.9	5.2	2.8
1971.....	5.5	-2.0	3.5	5.2	5.1	4.8
1972.....	5.1	12.4	8.0	6.6	6.4	6.0
1973.....	2.7	3.3	12.4	4.6	6.4	5.5
1974.....	-5.2	0	1.7	2.7	5.0	-6
1975.....	5.0	1.5	-3.0	-4.4	3.3	-1.3
1976.....	4.2	3.3	13.0	9.4	8.2	3.5
1977.....	2.4	4.0	6.1	3.8	4.2	-1.6
1978.....	2.5	NA	NA	NA	NA	NA

Source: Calculated from U.S. Department of Labor, "Productivity and the Economy," Bulletin 1926 (1977), p. 96; and U.S. Department of Labor, Bureau of Labor Statistics, "News" (USDL 78-443, May 12, 1978); and U.S. Department of Commerce, "International Economic Indicators," June 1979, p. 86.

Beginning in 1974, a new phenomenon occurred. Productivity growth slowed and even turned negative by an alarming degree. The abrupt drop in the growth rate in 1974 was evident in every country except Germany, and in the United States productivity actually declined by 5 percent. From 1974 to 1977 the United States maintained a pattern of lower productivity growth than in competitor nations (excluding the U.K.), but the whole base level of productivity growth had declined substantially both here and abroad.

Edward Denison has examined the drop in U.S. productivity growth.<sup>7</sup> His measure of national income per person employed (non-residential business sector) grew at 2.7 percent annually from 1948 to 1969, 2.1 percent from 1969 to 1973, but actually declined by 0.6 percent annually from 1973 to 1976.<sup>8</sup> Of the total turnaround of -3.3 percent annual productivity growth from 1948 to 1969 and from 1969 to 1973, Denison attributes -0.4 from the end changes in hours at work and age-sex composition, -0.4 percent from the end to rural-urban migration (from low income agriculture to high income manufacturing), and -0.4 percent to changes in capital per person employed and increased economies of scale. The contribution of education to the change in productivity growth was a positive 0.4 percent. Of the remaining change of -2.5 percent in productivity growth (1973-76 versus 1948-69), Denison attributes -0.4 percent to "changes in legal and human environment"—primarily higher investment costs to meet environmental regulations but also higher losses to crime. The remaining -2.1 percent change remains unexplained; Denison doubts that it represents a slowdown in advances in knowledge, and he considers it not to be explained by cyclical factors.

Ironically, the radical decline in productivity growth for the U.S. economy as a whole does not appear to have affected the manufacturing sector seriously. From 1976 through 1978 manufacturing productivity grew at an average of 3 percent per year, somewhat above the 20-year average of 2.4 percent annually from 1950 to 1970; and even if the aberrant recession recovery years of 1974-75 are included, the productivity growth rate for 1974 to 1978 averaged 1.8 percent annually. Relative to other countries, U.S. productivity growth remained low, but not as low as in the 1960's. From 1960 to 1970 U.S. productivity grew at an annual average of 2.9 percent, while the average for the five trading partners (weighted by shares in world exports) was twice as high at 6.0 percent (table 4). From 1970 to 1977, the comparison showed 2.8 percent annual productivity growth for the United States and a weighted average of 4.4 percent for the five countries.

In short, data on productivity growth suggest that the United States may be continuing to lose competitiveness in manufactures, but at a much milder rate than in the 1960's because foreign productivity growth has declined while that in the United States has held constant. However, the prognosis could become worse if the remarkable drop in productivity growth for the economy as a whole in recent years begins to affect the manufacturing sector as well. It is beyond the scope of this essay to examine what measures might reverse the

<sup>7</sup> Edward F. Denison, "The Puzzling Drop in Productivity," *Brookings Bulletin* 15(2), Fall 1978.  
<sup>8</sup> *Ibid.*, p. 11. Figures refer to "adjusted growth rate."

recent stagnation of U.S. productivity growth economy wide, but at least one major policy area is probably that of the achievement of a less inflationary economic climate (reducing uncertainty) and of higher rates of new investment.

A second approach to "competitiveness" uses measures of relative cost or relative prices. These measures can diverge from those based on physical productivity because faster wage growth abroad can more than offset faster productivity growth abroad, and indeed this divergence appears to have occurred. The approach of "relative cost" or "relative price" shows that the United States actually became more competitive in the early 1970's, after taking account of exchange rate changes. Table 5 reports OECD calculations of relative U.S. competitiveness based on two measures: unit cost in manufacturing, and export prices (as measured by indices of export unit values). These two measures seek to capture the direct relationship of U.S. "price" relative to the prices of competitors. As the table shows, the relative U.S. price declined (competitiveness improved) in the 1970's. Based on manufacturing unit cost, U.S. competitiveness improved continually from 1970 to 1977, although the bulk of the improvement occurred by 1974. Based on export prices, however, U.S. competitiveness improved through 1974 but then began to erode again in 1975 and 1976. (This pattern is consistent with the analysis of the U.S. trade balance and effective exchange rates in the following sections.)

The main significance of the OECD measures is probably to introduce an element of ambiguity into assessment of U.S. competitiveness. If data on productivity growth suggest a continued (but decelerating) erosion of U.S. competitiveness, but "relative price" measures (adjusted for exchange rate movements) imply improvement in the 1970's, then there exists little convincing basis for asserting either a clear improvement or a clear erosion. This view would leave the title role to differing business cycles in explaining shifts in the U.S. trade balance in the 1970's, an approach that is supported in the analysis below.

TABLE 5.—MEASURES OF RELATIVE COMPETITIVE POSITION<sup>1</sup>

[Adjusted for exchange rate changes—1970=100]

	United States	Canada	Japan	France	Germany	United Kingdom
<b>I. Relative unit costs in manufacturing:</b>						
1971	94.8	100.0	104.5	96.4	105.6	101.6
1972	86.7	98.2	119.3	97.4	108.3	103.6
1973	79.4	96.2	129.7	99.7	115.7	97.4
1974	77.8	95.3	130.0	94.7	115.8	94.8
1975	75.0	91.5	137.6	101.9	109.8	100.6
1976	74.7	100.0	133.0	99.0	107.1	93.7
1977	73.9	94.9	145.3	95.8	110.5	94.3
<b>II. Relative average unit value of exports:</b>						
1971	97.6	99.7	99.2	99.7	101.6	102.4
1972	91.8	100.0	103.6	99.2	103.3	102.1
1973	85.2	97.4	112.1	103.9	106.8	94.6
1974	84.5	99.0	119.8	97.4	104.1	93.3
1975	88.1	94.2	104.3	104.0	102.5	94.6
1976	92.0	98.1	98.0	103.1	101.6	92.1
1977	88.7	92.7	105.4	100.0	102.4	97.2

<sup>1</sup> Decline indicates improvement in competitive position.

Source: "OECD Economic Outlook Occasional Studies," "The International Competitiveness of Selected OECD Countries," July 1978, p. 46.

Two caveats are warranted on the OECD measures of price competitiveness. First, they apply a relatively low weight for Canada in

assessing U.S. relative prices (lower than in the trade-weighted exchange rates examined below), thereby giving a possibly over-optimistic view of changes in U.S. competitiveness.<sup>9</sup> Second, there remains the conceptual problem that relative price does not tell the whole story of competitiveness. Indeed, in a world of homogenous goods and instant goods and instantaneous adjustment, the "law of one price" would hold—there would be only one international price for each good and it would be meaningless to speak of a change in U.S. prices relative to those abroad. This consideration highlights the need to take changes in supply and demand curves into account, not just changes in the price at their intersection. In other words, one must consider not only changing prices but also changing quantity of export supply relative to quantity of import demand (or, "output" and "absorption") in order to speak meaningfully about competitiveness.

A final aspect of U.S. competitiveness concerns changes in the business atmosphere. In recent years there have been several changes that many consider detrimental to the ability of U.S. firms abroad. (a) U.S. citizens living abroad now receive smaller tax advantages than before, raising the cost of personnel posted abroad relative to that for foreign firms operating in the same third countries. (b) U.S. environmental regulations tend to make American production more costly than production in other countries with more lenient standards. (c) U.S. restrictions on exports of certain phases of nuclear power plants and on export of arms, limit U.S. exports of certain phases of nuclear power plants and on export of arms, limit U.S. exports in products with a proven American competitive edge. (d) Antibribery rules limit the ability of U.S. firms to compete in those nations where bribery is conventional practice. (e) The anti-boycott law may cost some firms export business in the Arab states. In addition, some would add: (f) anti-trust restrictions impede U.S. firms from achieving the same kind of coordinated export drives that foreign firms can carry out. Advocates of removing hindrances such as these typically maintain that the best thing the United States government could do for U.S. exporters would be to leave them alone.

Most of these non-price aspects of competitiveness reflect U.S. social objectives, and it would be irresponsible to recommend the repeal of many of these measures. It would hardly further long-term U.S. goals to increase exports at the cost of proliferating the possession of nuclear weapons, for example. The key to resolving problems in these areas will often lie in more aggressive effects to get competitor nations to adopt criteria similar to our own. However, some areas such as tax and anti-trust policies, and environmental reviews, probably warrant reconsideration to determine the export costs relative to benefits of social objectives.

More generally, a popular current notion is that the whole array of institutional factors in competitiveness must radically change, that the United States must become "export conscious," carry out export campaigns, and perhaps dilute its measures in a number of social areas where they impede exports. It is important to keep in mind the underlying economic factors that essentially drive the U.S. trade performance, however.

<sup>9</sup> That is, exchange rates have not moved vis-a-vis Canada as they have vis-a-vis Germany, Japan, and other countries, so that a lower weight for Canada (0.3 in the OECD study) gives a higher weight to countries with larger reductions in their competitiveness because of sharper appreciation relative to the dollar.

A final aspect of U.S. competitiveness concerns the provision of government financing for U.S. exports. As table 6 shows, in recent years the United States has been reducing its levels of export financing in absolute terms relative to total U.S. exports.

TABLE 6.—EXPORT CREDIT THROUGH THE U.S. EXPORT-IMPORT BANK, FISCAL YEARS 1973-80  
[Dollar amounts in billions]

Fiscal year	Direct loans	Total: Loans, insurance, guarantees	Total as percentage of U.S. exports <sup>1</sup>
1973	\$4.1	\$8.5	11.9
1974	4.9	9.1	9.3
1975	3.8	8.3	7.8
1976	3.5	8.6	7.5
1977	1.2	5.6	4.6
1978	2.9	7.1	5.3
1979	3.6	NA	NA
1980	4.1	NA	NA

<sup>1</sup> Exports are for calendar year.

Source: 1973-77, Export-Import Bank of the "United States, 1977 Annual Report," pp. 10-11, 1978-80: Export-Import Bank. Exports: "International Financial Statistics."

The decline apparent in table 6 suggests that it is time for a new look at Export-Import Bank financing as a means of stimulating exports. One of the main reasons for the decline has been the shift in policy from subsidizing interest rates (especially through 1974, when interest rates at 6 percent were below market level), leading to high interest rates on direct loans during 1975 and 1976 (8 percent to 9½ percent). More recently, the bank has held interest rates in the zone 7¼ percent to 8¾ percent even though in 1978 market interest rates rose far higher. One policy option would be to maintain such rates (and their subsidized element) while increasing the volume of loans.

Competition in export credit lending has been high from France and from the United Kingdom (where credit subsidies are high). Japan and Germany have been restrained in official export credit, however, by the OECD International Arrangement in Export Credit Financing (April 1, 1978) setting a floor on the average interest rate (for the blend of official and private credit in any given export deal) at 7½ percent per annum. Because the stability of the yen and deutsche mark have made interest rates in private credit sources considerably lower than this level, official credit is being used little in Germany and Japan.

The Ex-Im Bank has been guilty of excess in subsidizing export credit in the past, and it would be unfortunate to return to the subsidy practices of the early 1970s. Nevertheless, it could well be that the time has come to expand considerably the volume of Ex-Im lending. So long as the trade balance is in serious deficit, it may be argued that there is a benefit to the economy from increased exports (for example, through the relaxation of recessionary measures otherwise necessary, e.g., those of November 1, 1978).

Moreover, because expectations in the foreign exchange market appear to be driven more by the trade balance than by the supply and demand of foreign exchange itself, there need be little concern of counter-productive effects from export credit on grounds that it delays the actual payment for exports into the future. Finally, one institutional constraint on Ex-Im lending is that it must appear in

the budget, even though it is not comparable in economic terms to an unrequited expenditure. With pressure for a balanced budget, the result is a bias against Ex-Im lending. It may be necessary to change budgetary procedures in order to avoid this bias (for example, by placing "on-budget" only some small fraction of lending, designed as a reserve to cover the possibility of default).

### *The Trade and Current Account Balance*

One of the fundamental features of economic change for the United States in the last two decades has been a steady decline in the trade balance. Table 7 shows the U.S. balance of merchandise trade as a percentage of merchandise exports for 1961 to 1978. This measure of trade balance shows a large decline, from the neighborhood of +25 percent in the early 1960's to an average of about zero in the period 1968-1975, with a precipitous drop to approximately -26 percent in 1977 and 1978. The long term trend in current account balance is the same but milder because a negative balance on services and transfers in the early 1960's turned into a substantial positive balance by the mid-1970's.

A first question to consider is whether the long-term decline of the trade balance is a matter of concern. One possibility is that the rising balance in services and transfers justifies a low or negative trade balance. This approach might be valid for a post-maturity economy that had reached the stage where it no longer provided net capital flows to the rest of the world but instead used earnings on past foreign investments to offset a growing trade deficit. For two reasons, however, the data of table 1 do not warrant the interpretation that the United States is in this position. First, the negative balance on transfers and services in the early 1960's was due mainly to U.S. military expenses abroad, which have become much less important now. For services alone (excluding military expenses abroad and other transfers), the U.S. balance averaged approximately +9 percent in the period 1961-64. The corresponding figure for 1974-1977 was +15.5 percent.

TABLE 7.—U.S. TRADE, SERVICES, AND CURRENT ACCOUNT BALANCES RELATIVE TO EXPORTS, 1961-78  
[Percentage of merchandise exports]

Year	Trade balance	Services and transfers	Current account balance including transfers
1961	27.0	-7.7	19.3
1962	21.3	-5.2	16.0
1963	22.7	-3.5	19.7
1964	26.7	.3	27.0
1965	18.7	1.8	20.5
1966	13.0	-2.9	10.2
1967	12.4	-4.7	7.8
1968	1.9	-1.0	.9
1969	1.7	-1.2	.4
1970	6.1	-1.0	5.1
1971	-5.2	2.2	-3.0
1972	-13.0	1.3	-11.7
1973	1.3	8.4	9.7
1974	-5.4	6.6	1.2
1975	8.5	8.0	16.5
1976	8.2	11.3	3.1
1977	-25.8	13.1	-12.7
1978	-27.4	12.9	-14.5

<sup>1</sup> Estimate based on 1st 3 quarters.

<sup>2</sup> Estimate based on 2d quarter.

Source: International Monetary Fund, "International Financial Statistics" May 1977 and November 1978.

Therefore, the true swing in the services account over the last two decades is closer to +6 percent than to the swing from -4 percent to +11 percent suggested by the column for services and transfers (four-year average for beginning and end of period, respectively). The swing for services alone (excluding transfers) is the relevant concept, because there is no further scope for major effects on the balances through the compression of transfers such as military spending.

A second reason why the "rising services balance" argument has serious limitations is that net profits remittances and interest earnings are likely to decline relative to trade levels. Direct foreign investment in the United States has grown much faster than U.S. investment abroad in recent years, and foreign holdings of U.S. debt instruments and securities have also increased rapidly (as the counterpart of U.S. current account deficits).<sup>10</sup> Therefore the services balance is likely to decline relative to trade levels (thus becoming less capable of paying for trade deficits). A declining trend already exists. The net balance of payments and receipts on foreign assets and liabilities (direct investment, fees and royalties, indirect investment, and government) has fallen from 13.4 percent of merchandise trade turnover (exports plus imports) in 1960-63 to 10.4 percent in 1970-73 and 8.3 percent in 1975-78.<sup>11</sup>

Aside from these two factors, there remains the basic question of whether the United States economy is mature or "post-mature" in the international scene: whether the United States should continue to provide capital to the outside world (especially the developing countries) or should become a "rentier" state. There is no reason to believe that the phase of "mature creditor" is, or should be, over and that a subsequent period of "post-mature rentier" has, or should have, begun. If the United States remains a capital exporter, then it will require a surplus on current account to finance a deficit on capital account.

If services provide no sure remedy, the secular decline of the relative trade balance would appear to represent an economic problem. In terms of Keynesian demand, a current account deficit represents a source of drag on the economy, which may be helpful if the economy is suffering from excess demand<sup>12</sup> but is otherwise a negative influence in the pursuit of full employment. Moreover, in a world of flexible exchange rates, the trade and current account balances influence the exchange rate (as discussed below). A large deficit drives down the dollar, inducing domestic inflation by raising the price of imports, as well as (probably) worsening the U.S. terms of trade.

What are the chief causes of the deteriorating U.S. trade and current balances? The relatively high balances of the early 1960s may be regarded as a phenomenon of the past, associated with the early

<sup>10</sup> The ratio of U.S. direct foreign investment abroad to the inflow of direct investment from abroad fell from 8.3 in 1970-1972 to 3.9 in 1975-1977. International Monetary Fund, *Balance of Payments Yearbook* 29 (May 1978), p. 23. Moreover, U.S. Government foreign liabilities grew from \$32 billion at the end of 1970 to \$133 billion at the end of 1977, while U.S. Government foreign assets grew only from \$46 billion to \$105 billion. Robert Z. Lawrence, "The United States Current Account: Trends and Prospects," (Washington, D.C.: Brookings Institution, mimeographed, 1979), p. 29.

<sup>11</sup> Calculated from Survey of Current Business, June 1979, table 1, and International Financial Statistics, May 1978 and June 1979.

<sup>12</sup> Gottfried Haberler, "Reactions to the U.S. Trade Deficit and the Floating Dollar," in William Fellner "Contemporary Economic Problems: 1978" (Washington, D.C.: American Enterprise Institute, 1978), pp. 211-243.



growth phases of Europe and Japan (shortly after the seeming "dollar shortage") and with extraordinary price stability in the United States. Focusing only on the period 1968-1978, two basic phenomena appear to dominate the trade balance: (1) The U.S. growth rate relative to growth in the rest of the OECD; and (2) the oil price increase of 1974. Even the oil price increase, which (together with quantity increases) raised the oil U.S. import bill from \$4 billion in 1972 to \$41 billion in 1977,<sup>13</sup> does not constitute a longer run explanation of the trade balance, considering that other countries even more dependent on oil than the United States (especially Japan) have reestablished strong trade balance positions.

A simple statistical examination shows that different growth rates between the United States and other OECD countries explains a considerable portion of the changes in the U.S. trade balance. As shown in table 7, in 1977 when the U.S. trade balance sank to -25.8 percent of exports, the United States growth rate of 4.8 percent was 2.1 percent higher than the weighted average growth rate for the rest of the OECD. This was its largest positive deviation from the OECD average during the entire period 1961-1977. Similarly, the temporary increases in the U.S. trade balances relative to exports in 1970 and again in 1975 (table 7) both occurred in years when the U.S. growth rate was lower than growth in other OECD countries (table 8).

TABLE 8.—ANNUAL GROWTH RATES OF REAL GNP: UNITED STATES AND OTHER OECD COUNTRIES  
[In percent]

Year	United States	Other, OECD	United States, other
1961.....	2.3	5.6	-3.3
1962.....	5.6	5.1	.5
1963.....	4.1	5.1	-1.0
1964.....	5.1	6.6	-1.5
1965.....	6.0	4.8	1.2
1966.....	6.0	5.3	.7
1967.....	2.7	4.2	1.5
1968.....	4.5	6.2	-1.7
1969.....	2.6	6.1	-3.5
1970.....	-1	5.2	-5.3
1971.....	2.9	4.2	-1.3
1972.....	5.8	5.1	.7
1973.....	5.4	6.2	-.8
1974.....	-1.6	1.4	-3.0
1975.....	-1.3	-.6	-.7
1976.....	6.0	4.7	1.3
1977.....	4.8	2.7	2.1

Source: Calculated from OECD, "Economic Outlook" 22 (December 1977), pp. 15, 124.

A simple regression of the U.S. trade balance relative to exports (dependent variable) against the difference between growth rates in the United States and in the rest of the OECD yields the following results for the period 1968-1977.

$$B = -4.77 - 4.75[G_u - G_o] - 0.673[G_u - G_o]^2$$

(2.39)                      (1.25)

where

$B$  = trade balance as percentage of exports; and  
 $G_u, G_o$  = growth rates in the United States and other OECD countries.

( $t$ —statistic in parentheses;  $R^2 = 0.366$ ).

<sup>13</sup> International Financial Statistics, December 1978, p. 388.

The statistically significant coefficient on " $G_u - G_o$ " confirms growth at home and abroad is instrumental in explaining the trade balance. This finding contains some optimistic as well as potentially pessimistic implications. The optimistic implication was that in 1979 and 1980 the U.S. trade balance should improve considerably because U.S. growth is widely expected to decline while growth in Europe and Japan is expected to increase. The pessimistic implication is that the United States is interdependent with other OECD economies and suffers an unfavorable trade balance when they grow slowly. If the next decade is to be a period of slower growth in Europe and Japan than the period 1961-1973, as many expect (because of ongoing difficulties with stagflation and because the early dynamics of postwar recovery are gone), then the United States could confront a serious dilemma. The potential dilemma would be a choice between accepting a slower growth rate at home, on the one hand, and enduring a persistent trade balance deficit, on the other hand. A variant on the second alternative would be high growth at home but with the resulting tendency toward trade imbalance offset by continued devaluation (at a slow but steady rate) of the dollar. This alternative variant of the high-growth choice would have its own problems, in particular a constant cost-push-inflationary pressure from a declining dollar.

### *Trade and Flexible Exchange Rates*

The classic remedy for a current accounts deficit is exchange rate depreciation, and this remedy should be more readily available in the post-1973 regime of flexible exchange rates. The exchange rate is an instrument of policy to only a limited degree, however. For the United States, market forces rather than direct government intervention have primarily determined the exchange rate (at least prior to the energetic measures taken in defense of the dollar November 1, 1978). Therefore the relevant question is whether natural market forces act in an equilibrating way: does the exchange-rate/trade balance mechanism secure smooth and prompt adjustment of the external sector? There has been increasing frustration among policymakers about the seemingly slow and feeble results on the U.S. trade account from what appear to have been major declines in the international value of the dollar. The following discussion attempts to determine whether this frustration is appropriate or whether, instead, the exchange rate adjustment mechanism is working adequately.

To begin with, there is relatively clear evidence that the current account (and trade) balance affects the exchange rate. Table 9 shows indices of the dollar exchange rate with four major currencies individually and the trade-weighted exchange rate for the nine largest trading partners (using bilateral trade in manufactures for 1976 as weights). The upper panel reports nominal exchange rate indices, and the lower panel shows indices for exchange rates adjusted for U.S. inflation relative to foreign inflation (using wholesale price indices). The lower right hand column, for the "inflation-adjusted trade-weighted" exchange rate, shows as the most conspicuous case that in 1975 when the U.S. trade balance was abnormally high (table 6) because of the U.S. recession, the real exchange rate rebounded sharply from its downward trend of 1970-1974. Conversely, during the high trade balance deficits of 1977 and 1978, the dollar sank back in

real terms. A regression of the current value of the inflation-adjusted, trade-weighted exchange rate on the trade balance expressed as a percentage of the exports shows the following results for the period 1966-1978:

$$R = 0.937 + 0.0348 B \quad (2.37)$$

where

$R$  = inflation-adjusted trade-weighted exchange rate index and  
 $B$  = trade balance as a percent of exports. ( $t$ -statistic in parentheses;  $R^2 = 0.234$ ).

These results indicate a statistically significant influence of the trade balance upon the exchange rate in the same period.

TABLE 9.—EXCHANGE RATE INDEXES FOR THE U.S. DOLLAR  
 [Units of foreign currency per dollar, 1970=100]

	Canada	Japan	Germany	United Kingdom	Trade-weighted, countries <sup>1</sup>
<b>I. Nominal:</b>					
1970.....	100.0	100.0	100.0	100.0	100.0
1971.....	96.7	97.4	95.5	98.0	97.0
1972.....	94.9	86.0	87.5	95.8	91.1
1973.....	95.8	76.0	73.3	97.7	86.9
1974.....	93.7	81.4	71.1	102.4	87.9
1975.....	97.4	82.9	67.5	107.8	88.9
1976.....	94.4	82.8	69.1	132.6	91.6
1977.....	101.8	75.0	63.7	137.3	93.0
1978 <sup>2</sup> .....	108.0	60.6	56.3	126.2	89.7
<b>II. Adjusted for foreign and U.S. inflation<sup>3</sup> (purchasing power index):</b>					
1970.....	100.0	100.0	100.0	100.0	100.0
1971.....	98.7	101.5	94.6	92.9	98.5
1972.....	94.5	92.8	88.9	90.0	92.3
1973.....	88.8	80.3	78.4	96.8	85.2
1974.....	84.5	77.5	79.6	97.7	82.9
1975.....	90.0	83.7	78.9	90.5	86.1
1976.....	87.5	83.0	81.3	100.0	86.6
1977.....	91.7	78.6	77.5	91.0	85.9
1978 <sup>2</sup> .....	96.8	69.1	72.5	83.0	83.0

<sup>1</sup> Countries and weights: Canada, 0.425; Japan, 0.215; United Kingdom, 0.081; Germany, 0.097; France, 0.053; Italy, 0.041; Belgium, 0.034; the Netherlands, 0.033; Switzerland, 0.021. Weights are for bilateral trade in manufactures, Morgan Guaranty estimates for 1976.

<sup>2</sup> 1st 3 quarters.

<sup>3</sup> Using Wholesale Price Index.

Source: "International Financial Statistics," May 1977 and November 1978, and "World Financial Markets," Morgan Guaranty, May 1978, p. 5.

The trade balance may be expected to influence the exchange rate for several reasons, in theoretical terms. A current account deficit increases the supply of dollars held by foreigners, and as supply rises relative to demand one may expect the price of the dollar to decline. Expectations also play a role: with a large current account deficit, exchange market participants will anticipate that the dollar must decline to provide the eventual stimulus to exports and restraint to imports required to eliminate the deficit. In another theoretical approach concerning the asset market, a current account deficit for the United States implies a decrease in our saving and an increase in foreign saving, and a resulting transfer of assets from the U.S. to abroad. With a higher propensity to hold wealth in foreign currency than in dollars (compared to Americans), foreigners will convert some of the transferred assets out of dollars, causing a decrease in the demand for dollars and a decline in their relative value.

In short, there are theoretical reasons to expect the trade (or current account) balance to affect the exchange rate, and there is empirical evidence that it does so and promptly. What about causation in the other direction from exchange rate to trade balance? Changes in the exchange rate should cause changes in the trade balance as well, and indeed an effective adjustment mechanism is premised in part on the assumption that depreciation will increase the trade balance (and appreciation reduce it). However, the exchange rate affects the trade balance only after a significant time lag. The so-called J-curve represents the fact that after a depreciation the trade balance may actually worsen (expressed in domestic currency) along the initial downward leg of the "J" before improving along its upward stem. Imports become more expensive (in domestic currency) after depreciation, raising the import bill. Exports probably do not increase until after a time lag because there will be months or even years between the date of newly placed orders and actual deliveries. Accordingly, in 1972 after the Smithsonian realignment of exchange rates in December 1971, the U.S. trade balance became much worse than in 1971, before turning around in 1973 (table 7). Moreover, the time lags can be considerably longer than one or even two years. Junz and Rhomberg have estimated that it requires up to three years for price changes to achieve one-half of their effect on trade, and up to five years for 90 percent of their total effect to be achieved.<sup>14</sup>

Empirical studies have examined the responsiveness of the trade balance to exchange rate changes since the regime of floating. Peter B. Clark found that the devaluation of the dollar from 1971 to 1973 improved the trade balance by \$2 billion at an annual rate by the second quarter of 1973,<sup>15</sup> or by about 2 percent of export earnings (and the considerable devaluation that occurred in 1973—table 9—had not had time to affect trade). Clark found the initial downward phase of the J-curve to be moderate because trading prices took a considerable time to reflect devaluation, and the eventual "pass through" of devaluation into higher prices only reached 50 percent. Using a dynamic simulation model, Sung Y. Kwack calculated that the 8 percent dollar devaluation from 1971 to 1972 raised the trade balance by \$3 billion, while causing capital outflow of \$1.6 billion; his model predicted a positive net balance of payments effects of \$6 billion by 1976, given lagged effects.<sup>16</sup>

There is a need for more empirical work on the effectiveness of the exchange rate and payments adjustment mechanism. The available evidence indicates, however, that the exchange rate does influence the trade balance, although with lags that may be considerable. (A seemingly more powerful influence, however, is the differential between growth at home and abroad.) Even so, the question remains whether the exchange rate influences the trade balance sufficiently that the external sector can adjust properly. In this context, it is important to recognize that the popular conception of the extent of dollar depreciation is exaggerated. Press reports typically cite the exchange between

<sup>14</sup> Helen B. Junz and Rudolf R. Rhomberg, "Price Competitiveness in Export Trade Among Industrial Countries," *American Economic Review* 63 (2), May 1973, p. 418.

<sup>15</sup> Peter B. Clark, "The Effects of Recent Exchange Rate Changes on the U.S. Trade Balance," in P. B. Clark, D. E. Logue, and R. J. Sweeney, editors, "The Effects of Exchange Rate Adjustments (U.S. Treasury Department, 1974), pp. 229-32.

<sup>16</sup> Sung Y. Kwack, "Simulations with a Model of the U.S. Balance of Payments: The Impact of the Smithsonian Exchange-Rate Agreement," in Clark, Logue, and Sweeney, editors, "The Effects of Exchange Rate Adjustments," p. 257.

the dollar and the German mark, Swiss franc, or Japanese yen. But these countries make up only part of U.S. trade. While the dollar has fallen markedly relative to these three currencies, it has actually risen relative to other important currencies, especially the Canadian dollar (and Canada has a very large weight in U.S. bilateral trade) and the British pound. Accordingly, from 1970 to 1978 while the dollar sank from a nominal index of 100 to 59, 55, and 42 for the Japanese yen, German mark, and Swiss franc, respectively, it rose to index levels of 109 and 125 vis-a-vis the Canadian dollar and British pound, respectively. Adjusting for U.S. and foreign inflation (purchasing parity index), the dollar did fall with respect to all nine major currencies from 1970 to 1978, but while the decline was from 100 to 68, 71, and 62 for Japan, Germany, and Switzerland, respectively, the fall was small relative to Canada (97), France (88), Italy (85), and the U.K. (82). As a result, the trade-weighted exchange rate adjusted for inflation fell only to an index of 84 for the whole period (table 9). Moreover, virtually all of this decline occurred by 1974. In the period 1975-78, the real value of the dollar rose (1975 and 1976) and then retreated again (1977 and 1978) to approximately its 1974 level. Therefore one reason why the U.S. trade balance has not improved more as a result of devaluation is that devaluation has not been large, when relative inflation rates and the trade weights of major countries are taken into account. (The high weight of Canada, and its minimal real appreciation, are important to the result.)

With respect to the serious deficits of 1977 and 1978, two considerations warrant further discussion. First, these deficits appear to be due in part to the fact that the dollar strengthened in 1975 (and 1976), setting the stage for a negative impact on the trade balance after a one to two-year lag. This experience illustrates the potential for poorly timed adjustments and "incorrect signals" in the exchange rate mechanism. In particular, the low U.S. growth rate of 1975 strengthened the trade balance, causing a rise in the dollar that was "inappropriate" in terms of longer run trade relationships that could be expected once the U.S. economy recovered.

Second, there are signs that the depreciation of the dollar in 1977 and 1978 is having a positive effect on the trade balance (and official forecasts for 1979 are for the trade deficit to be cut in half). The U.S. current account deficit fell dramatically from \$6.4 billion in the first quarter of 1978 to \$0.5 billion in the fourth quarter, although for the year as a whole the trade deficit was slightly larger in calendar 1978 than in 1977 (\$16 billion versus \$15 billion).<sup>17</sup> For the first six months of the year, the trade balance deficit was down to \$11.7 billion in 1979, compared with \$17.2 billion in 1978, despite rising oil prices.<sup>18</sup> For Japan, the country with the most serious trade balance surplus,<sup>19</sup> the sharp rise in the inflation-adjusted value of the yen in 1977 and 1978 (table 9) failed to stop a rising current account surplus from 1977 to 1978 (even expressed in yen). By 1979, however, the surplus was falling rapidly, with monthly deficits recorded in April and May. The oil price increase of 1979 meant any surplus for 1979 would probably be small. Even without higher oil prices, however, the adjustment process

<sup>17</sup> International Financial Statistics 32 (12), June 1979, pp. 390-91.

<sup>18</sup> Washington Post, July 27, 1979.

<sup>19</sup> Japan's \$11 billion current account surplus in 1977 represented 14 percent of exports. Germany had a current account surplus of only \$3.8 billion or about 3 percent of exports, and Switzerland's current surplus of \$3.7 billion was also much smaller than Japan's in absolute terms, (although larger in relative terms, standing at 21 percent of exports). International Financial Statistics 31 (11), November 1978.

seemed to be working. From the first quarter of 1977 to the first quarter of 1978, the yen rose by approximately 17 percent relative to the SDR (which serves as an indicator of a basket of major currencies). With a year's lag (which could be expected for trade effects), trade volume responded considerably: import volume rose by 15 percent and export volume fell by 11 percent, from 1978:I to 1979:I.<sup>20</sup>

The 60 percent rise in the world price of oil in the first few months of 1979 changed many of these policy issues. The resulting pressure on the Japanese and European payments balances meant a much smaller source of worldwide payments imbalance coming from Japan, Germany and Switzerland, and a much larger portion coming from OPEC. Accordingly, downward pressure on the dollar was relieved, although the relief could prove short-lived unless U.S. inflation rates decline relative to those in Europe and Japan (which were rising in mid-1979, partly as the result of the new higher oil price).

Judging the longer term performance of the system, the trade balance adjustment mechanism under flexible exchange rates appears to have been functioning, but not as fast or effectively as might be hoped. Nevertheless, it is not clear that any alternative mechanism would perform better. One possibility is that more attention should be given to intervention to prevent departures from appropriate longer term exchange rates. If intervention had occurred in 1975 and 1976 to keep the dollar from strengthening even though the U.S. recession temporarily raised the trade balance, the trade deficits and dollar depreciations of 1977 and 1978 probably would not have been so severe. More generally, the foreign exchange market may have the dynamics known as the "hog cycle" pattern, whereby demand responds to current prices but supply responds to previous year prices and as a result prices can cycle up and down as supply is first inadequate and then excessive. That is, the exchange rate for the dollar responds to current year trade balance, but trade balance responds to previous year's exchange rates. Therefore there exists the possibility of cycling fluctuations for the dollar, and as a result intervention may be appropriate to smooth out the cycles.<sup>21</sup> (The recent literature on "asset-adjustment" also points to the possibility of exchange rate fluctuation that overshoot purchasing power parity trends.<sup>22</sup>)

Beyond the caveat that more intervention may be called for to keep the exchange rate closer to its longer run level, there are two principal conclusions of this review of experience. The first is that, because the growth rate differential strongly affects the trade balance, the United States probably cannot achieve high growth without chronic trade deficits or depreciation until Europe and Japan return to higher growth rates. The second conclusion is that, because it is

<sup>20</sup> International Monetary Fund, International Financial Statistics, July 1979, pp. 214-215.

<sup>21</sup> If  $B_t = f(R_{t-1})$  and  $R_t = g(B_t)$ , where variables are as used in the text, then an exogenous shock to the trade balance in year  $t$  (because of recession, for example) can cause an exchange rate in that year that leads to a disequilibrium in the next year. Suppose all prices are constant and the long term equilibrium exchange rate is  $R^*$  and equilibrium trade balance is  $B=0$ . An exogenous shock of  $dB$  in year  $t$  causes the exchange rate for year  $t$  to move to  $R_t = R^* + (dB)g'$  (where the prime indicates partial derivative). This change in turn causes trade balance in year  $t+1$ , when the original temporary shock of  $dB$  has disappeared, to move to  $B_{t+1} = 0 + (R_t - R^*)f' = dBg'f'$ . That non-zero trade balance in turn will cause a new change in the exchange rate, so that in time  $t+1$  the rate moves to:

$$R_{t+1} = R^* + (dB)g' = (dBg'f')g'$$

Therefore in year  $t+1$ , instead of returning to equilibrium  $R=R^*$  and  $B=0$ , the exchange rate and trade balance move into disequilibrium, cyclical paths. The disequilibria can continue and become even wider (or else dampen over time), depending on the particular parameters of the relationship.

<sup>22</sup> See for example Rudiger Dornbush and Paul Krugman, "Flexible Exchange Rates in the Short Run," Brookings Papers on Economic Activity 1976:3, pp. 357-384.

the inflation-adjusted exchange rate that matters (in affecting the trade balance), the dollar may continue to depreciate relative to those currencies (the mark, yen, and Swiss franc) of countries with inflation lower than the U.S. rate. Therefore a "stable dollar" vis-a-vis these stronger currencies should not be expected until the U.S. inflation rate declines (or inflation in these countries rises to the U.S. level).

#### 4. THE TOKYO ROUND OF TRADE NEGOTIATIONS

##### *The Major Issues*

A ministerial meeting in Tokyo in September 1973 initiated the Tokyo Round of multilateral trade negotiations under GATT. Negotiations did not begin in earnest until 1975, after the passage of the U.S. Trade Act of 1974 establishing U.S. negotiation authority. The negotiations proceeded slowly, partly because of changing administrations in major governments but also because of the difficult fundamental issues dividing the negotiators.

Regarding tariff cuts, the United States and Canada sought relatively deep cuts (the initial U.S. proposal was for a 60 percent cut in tariffs). Japan and the European Communities (EC) supported more limited cuts, and the EC emphasized harmonization, providing for deeper cuts of higher tariffs and smaller cuts of low tariffs. In September 1977 the United States and the EC reached tentative agreement on the compromise Swiss formula, which provided for an average tariff cut of approximately 40 percent, with a harmonization element.

Throughout the negotiations, agriculture represented a persistent obstacle to progress. The reduction of agricultural non-tariff barriers in Japan and Europe has been a salient objective of the United States, Canada, and other agricultural exporting countries such as Australia and New Zealand, since the relative failure of the Kennedy Round to liberalize agricultural trade. To break the impasse for overall negotiations posed by the question of agriculture, in July 1977 U.S. Special Trade Representative Robert S. Strauss accepted the negotiation of agricultural and industrial issues in separate but parallel discussions. That procedural change, combined with agreement on a tariff formula and with recurrent political pressure for agreement from successive economic summit meetings, accelerated negotiations to a rapid pace through the rest of 1977 and through 1978.

Aside from industrial tariffs and agricultural protection, non-tariff barriers were the principal subject of negotiations. The Tokyo Round began with tariffs already at a relatively low average of approximately 10 percent, and the round specifically sought to break new ground by dealing with non-tariff barriers (NTB's) that had gone largely untreated in earlier negotiations. The result was a negotiated set of codes on NTB's, concerning: Subsidies and countervailing duties, safeguards, government procurement, customs valuation, product standards, and licensing. The discussion of NTB's below sets forth the issues and the tentative outcomes in each of these areas.

Apart from the direct agenda issues dividing the negotiating countries, external events complicated the negotiating task. The world recession of 1974-1975 brought high unemployment levels that heightened domestic pressures for protectionism. Cyclical differences

between economies injected a note of strain, especially in 1977 and 1978 as the United States pressed Japan and Germany to accelerate their growth, and as the United States pressured Japan to make trade concessions to help correct the large U.S.-Japanese bilateral trade imbalance. Moreover, specific flare-ups posed recurrent threats to the negotiations. A court case brought by Zenith sought to countervail against the rebate of indirect taxes, a rebate practice accepted under GATT. If the Supreme Court had not reversed a lower court ruling in the case, the great bulk of U.S. imports would have been subject to countervailing duties, leading in all probability to some form of trade war.

A more serious conflict arose when the 95th Congress failed to renew the President's authority to waive countervailing duties (which expired January 2, 1979), although the EC was unwilling to sign a Tokyo Round agreement without passage of the waiver (considering that significant amounts of European agricultural exports were to become subject to countervailing at the expiry of the waiver). In early 1979 Congress renewed the waiver, after extracting from the administration a pledge to tighten textile quotas. The negotiating parties signed the agreement, and by July 1979 Congress had passed the implementing legislation for the agreements.

### *Economic Effects of Tariff Cuts*

A recent study conducted at the Brookings Institution examined the prospective economic effects of tariff cuts and liberalization of NTBs in agriculture and government procurement.<sup>23</sup> For tariffs, the study applies alternative tariff cutting formulas to detailed trade and tariff data to estimate resulting changes in trade. (The approach used applies the percentage change in price caused by the tariff cut to empirically estimated "import elasticities" to estimate the changes in trade flows.) For the compromise Swiss formula, the study finds that industrial countries' imports would rise by approximately \$7 billion annually using a 1974 trade value base, or by approximately \$11 billion expanding to a 1978 trade value base. This boost in world trade represents a relatively liberal outcome, in view of the much more restrictive original positions of the EEC and Japan and considering recent pressures for protection.

The economic welfare benefits from these tariff reductions would also amount to close to \$11 billion annually (1978 trade value base). These benefits represent savings to consumers, the gains from moving resources out of inefficient sectors, stimulus to investment, and increased economies of scale. Because these benefits would accrue year after year and continue growing with the trade base, their once-for-all value (present discounted value) would reach approximately \$200 billion (1978 trade value base), of which the U.S. share would be on the order of \$60 billion. And these estimates are conservative, because they do not include a potentially large benefit: macroeconomic gains achievable through higher employment once the anti-inflationary results of import liberalization relax the inflationary constraint to achievement of full employment. Calculations for the United States indicate that this anti-inflationary benefit increases total measured

<sup>23</sup> William R. Cline, Noboru Kawanabe, T.O.M. Kronsjo, and Thomas Williams, "Trade Negotiations in the Tokyo Round" (Washington, D.C.: The Brookings Institution, 1978).



welfare benefits by approximately one-third. In sum, the prospective economic benefits from tariff liberalization in the Tokyo Round are large.

These economic benefits should occur without causing significant economic costs. In terms of trade balances, the trade impacts are relatively well balanced and would cause no significant trade balance deterioration for any of the major parties. In terms of employment, tariff liberalization would not cause serious displacement of workers in the United States or abroad. Tariff cuts according to the Swiss formula would increase U.S. export jobs by about 120,000 and reduce employment in export-competing industries by an estimated 90,000 jobs. Even in "sensitive" industries job displacement would be limited. In textiles, even liberalization of both quotas and tariffs would cause job losses of only about 2 percent of sectoral employment. In the event, only textile tariffs are to be liberalized (thereby affecting only European and Japanese suppliers not screened out by textile quotas), and even these tariff cut offers are expected to be extremely limited, since a large number of the tariff cut exemptions submitted by the United States are concentrated in textiles.

Overall, the benefit-cost ratio of tariff liberalization is highly favorable. For the United States, the value of benefits is approximately 80 times as large as the value of labor adjustment costs (based on the number of workers displaced by imports, multiplied by the average number of weeks of unemployment for trade-impacted workers and by the average industrial wage). The ratio of economic benefits to labor adjustment cost is also high for other countries (ranging from 49 in Japan to 96 in the EEC).<sup>24</sup>

The benefits from tariff cuts will be reduced somewhat by exceptions of products from the tariff cuts. However, even after exceptions the average depth of tariff cut will be approximately 30 percent for the United States, the EC, and Canada, a level comparable with the results of the Kennedy Round.<sup>25</sup> Moreover, the estimates of economic benefits just discussed are probably understated rather than exaggerated (because of the exclusion of anti-inflationary gains and because of the difficulty of quantifying dynamic benefits), so that the true benefits should be large even if there is partial erosion by the exception of selected industries from full formula tariff cuts.

### *Codes on Nontariff Barriers*<sup>26</sup>

The Tokyo Round stands out among post-war trade negotiations as the first to make a major breakthrough in liberalizing, or limiting, non-tariff barriers to trade. The negotiations achieved agreements on codes concerning subsidies and countervailing duties, product standards, licensing, government procurement, customs valuation (each considered an area where non-tariff measures restrict trade), agricultural trade, and the "framework" for world trade. Unfortunately, the negotiators failed to conclude agreement on a safeguards code, largely because of an impasse between the EC and the developing

<sup>24</sup> *Ibid.*, p. 130.

<sup>25</sup> Congressional Budget Office, "The Effects of the Tokyo Round of Multilateral Trade Negotiations on the U.S. Economy: An Updated View" (Washington, D.C.: 1979), p. 8. The CBO study mentions the Japanese depth of cut as 10.7 percent, but acknowledges that the cut is higher when taken with respect to "bound" duty rates—because Japan had already voluntarily lowered tariffs from bound levels.

<sup>26</sup> The analysis of non-tariff barriers draws upon "International Trade Agreements," Federal Register, January 8, 1979, part VIII, as well as discussions with Administration experts on the negotiations.

countries. Taken together, the set of codes represent an opportunity for a watershed change in the international trading regime.

#### SUBSIDIES AND COUNTERVAILING DUTIES

The principal negotiating objectives of the United States in the area of subsidies and countervailing duties were to tighten up GATT rules so that: (a) there are limitations on the use of a whole host of indirect subsidies that affect exports, in addition to the traditional limitations on direct export subsidies; and (b) there are stricter limits to agricultural export subsidies, especially those used by the EEC to dispose of surplus goods arising under its Common Agricultural Policy. For its part, the EEC (with many "domestic" subsidy schemes) was unenthusiastic about such changes but prepared to go along with them if in return the United States would accept the principle of requiring an "injury" test before applying countervailing duties (special levies designed to offset export subsidies from abroad). The U.S. practice of not requiring injury stems from the "grandfather clause" enabling pre-existing national legislation to overrule GATT practice; the standard GATT practice is to require an injury test.

#### *Provisions*

The code finally agreed upon in the negotiations has the following major provisions:

(1) *Export subsidies*.—For industrial and non-agricultural primary products the code prohibits export subsidies.<sup>27</sup> This flat prohibition is given substance by an updated illustrative listing of proscribed export subsidies.

(2) *Other subsidies*.—For other subsidies (internal subsidies), the code commits signatories to apply these subsidies in a way that causes: (a) no injury; (b) no nullification or impairment of benefits of previous GATT concessions (e.g. tariff bindings); and (c) no serious prejudice to trading partners. There are indicative guidelines for such subsidies, including a listing of them. There are two critical changes: (1) The types of subsidies covered are more comprehensive than before (meeting the U.S. objective of bringing domestic subsidies under the subsidy-countervailing duty obligations); and (2) the location of the subsidy impact is extended to include not only (a) the complaining country's import market, but also (b) third country markets where the complaining country is losing exports to the subsidizing country, and (c) the home market of the subsidizing country itself, where the subsidy may be causing import substitution and a resulting loss of exports for the complaining country. The two new concepts of location of serious prejudice represent a potentially radical enlargement of the scope for redress of the trade impact of subsidy programs.

(3) *Agriculture*.—The agricultural sector is treated separately by the proposed code. Export subsidies are not prohibited in agriculture, but there is tighter language than before, limiting their application so that they do not cause the subsidizing country to obtain more than its "equitable share of world export trade in that product" (General Agreement on Tariffs and Trade, article XVI, section B, paragraph 3).

<sup>27</sup> Article XVI of the General Agreement on Tariff and Trade already provides that contracting parties shall cease granting any subsidy on a non-primary product that "results in the sale of such product for export at a price lower than the comparable price charged for the like product to buyers in the domestic market." (Section B, paragraph 4).

The new code defines this share in a way that limits a country's use of subsidies if they cause a displacement of traditional market shares. The code therefore addresses one of the key U.S. objectives, the restriction of agricultural subsidies (especially those by the EEC).

(4) *Remedies*.—There are two tracks for remedial action against subsidies under the proposed code. The first track, for export subsidies, provides for the traditional countervailing duties in appropriate amounts to offset the subsidy. There are three significant changes, however. First, the United States will now accept an injury test as a prior condition for applying countervailing duties. Second, injury is now defined in considerably greater detail than before. The more comprehensive definition (which includes phrases as broad as "whether the effect of such imports is . . . to depress prices to a significant degree or prevent price increases . . .") appears to represent a watering down of the injury test, making it easier for all countries to apply countervailing duties. However, it is difficult to say how significant this relaxation of the test might be in practice. Third, the code provides for provisional measures (of 60 days duration) that may be taken immediately after a preliminary determination that an export subsidy exists and injury has occurred. This provision addresses the concern of many in the United States for more expeditious procedures that will counter the flow of subsidized imports during the often lengthy period before a final determination by the Treasury Department.

The second track of remedies involves a procedure for dispute settlement and the application of countermeasures that are similar to countervailing duties. This second track applies to all complaints brought under the concept of serious prejudice. Therefore it applies to the whole set of domestic subsidies insofar as they have trade effects that give rise to a complaint. Moreover, the second track is automatically open to cases of export subsidies where countervailing duties have been rejected because of the absence of an injury test. Here the logic is that because the code prohibits export subsidies, the granting of an export subsidy is sufficient evidence in itself of breach of the code, and therefore of serious prejudice, to permit consideration of countermeasures under track 2 even though the absence of injury ruled out countervailing duties under track 1. It is also under the second track of remedy that action may be taken in new fields of serious prejudice caused by displacement by subsidized products in a third-country market, and by displacement in the home market of the subsidizing country.

Unlike the countervailing duty (track 1), the countermeasure (track 2) must first be approved by a multilateral committee of representatives from signatory countries. In reaching its decision, the panel is to apply what essentially amounts to more lenient injury criteria than those that apply for the countervailing duty. It is the process of dispute settlement, with its judgments by the multilateral panel, that represents the potential for the building of a body of international common law on a case by case basis, in the area of trade distortions caused by subsidy practices.

(5) *Developing countries*.—A final feature of the proposed code on subsidies and countervailing duties concerns special treatment for developing countries. Countries that do not sign the code, including developing countries, will be deprived of the code's privileges (such as

the U.S. acceptance of an injury test), so that there is strong pressure for developing countries to accede to the code. They will be bound by the code's prohibition on export subsidies. However, they will be allowed to phase out their export subsidies over a period of time, in a manner to be agreed upon in bilateral negotiations on an item by item basis. It is to be anticipated that countries such as the United States will insist on the relatively rapid phaseout of export subsidies on products for which the particular developing country is considered to be already competitive in world markets.

### *Prospective effects*

The major impact of the subsidy/countervailing duty code may well be to prevent serious international trade conflicts that could arise in the future in the absence of the code. In many industrial countries, governments are intervening more and more in the production process, and subsidy programs (often designed to aid ailing industries or regions) are proliferating. There has been growing pressure, especially in the United States, to impose countervailing duties to offset the perceived trade effects of those programs. The new code would provide an internationally accepted process for dealing with these conflicts (under the track 2 remedy of countermeasures for "serious prejudice").

Another important effect, especially for U.S. export interests, is that the code should limit the extent to which EEC farm export subsidies can displace U.S. agricultural exports in third country markets. This prospective limitation is likely to constitute one of the chief benefits of the Tokyo Round for U.S. agricultural exporters.

Another effect of the code may be to rationalize the state of export subsidies by developing countries, leading to a general phaseout of these subsidies. Because of the large perceived threat from manufactured imports from newly industrialized countries such as Brazil, Korea, and Taiwan, the provision for orderly phasing out of their export subsidies should head off what could otherwise be ugly trade confrontations with these countries over countervailing duties. This being said, from the economist's standpoint the code is woefully devoid of any recognition of the concept of "real" subsidy in excess of the amount necessary to offset distortions impeding exports in the developing country's own economy. A strong case can be made that, given their structural problems such as overvalued exchange rates and the need to protect domestic industry for "infant industry" development, many developing countries should be providing some degree of export subsidy in order to achieve economic efficiency.<sup>28</sup> It can only be hoped that in the actual process of bilateral negotiations with developing countries under the code, the United States and other industrial countries will take into account the need for export subsidy as a general developmental measure in most developing countries, and will accordingly adopt a lenient policy of subsidy phaseout, except in those products where subsidies clearly exceed the level required for efficiency or in which a clearly strong competitive position of the developing country is resulting in import injury in the industrial country.

<sup>28</sup> See for example Bela Balassa and Michael Sharpston, "Export Subsidies by Developing Countries: Issues of Policy" (Leiden: A. W. Sijthoff, 1977).

Another effect of the code should be to speed up the processing of countervailing duty cases. Provisional measures after a preliminary determination of export subsidy and injury should be sufficient to deal with the frequent complaint that U.S. Treasury rulings take so long that considerable trade damage occurs before their conclusion.

Finally, it is possible that an effect of the new code will be to reduce the incidence of U.S. countervailing duty actions because the new injury test will screen out those cases where injury is not found. Table A-1 of the appendix lists the U.S. countervailing duty actions over the period 1971-1977. As the table shows, there have been many actions in recent years and their pace has been accelerating from an average of two actions yearly in the period 1971-1973, to four actions yearly in 1974-1975, and 12 actions yearly in 1976-1977. (However, 10 of the 28 actions in 1975-1977 were waived pending the outcome of the Tokyo Round of negotiations). Some of these countervailing cases might not have had a positive determination if the proposed injury test had been in force, although it would require a detailed review of the cases (and strong assumptions about the likely practices in applying the new injury test) to determine which ones would have been eliminated. The main point is that the United States may be trading off the right to impose countervailing duties in cases of lesser significance (no injury) in return for several improvements in the overall subsidy regime, especially an acceptance by other countries that domestic subsidies should not cause trade prejudice, and special benefits such as tighter restrictions on agricultural export subsidies. From an economic standpoint this tradeoff should be highly favorable, considering that there is no welfare loss to the United States when there is no injury. From a political viewpoint the tradeoff should also be favorable because the indirect effects of tightening discipline in the field of subsidies seems likely to far exceed the direct effects of disqualifying some U.S. cases for countervailing action for lack of injury.

#### SAFEGUARDS—BACKGROUND

Another important code negotiated in the Tokyo Round deals with safeguards, temporary protective measures designed to relieve industries being seriously injured by imports. GATT rules already provide for safeguard measures in article XIX. Two crucial issues are at stake in the newly negotiated code improving article XIX: (1) standardizing internationally acceptable safeguard action, bringing under established GATT trading rules those protective actions that have been used in recent years outside the accepted criteria of article XIX (especially the "Voluntary Restraint Agreements" with exporting countries); and (2) allowing for selectivity in the application of safeguard protection to some suppliers but not to others. The principal U.S. goal in the code was to achieve extended coverage of safeguard rules (especially close the Voluntary Restraint Agreements "loop hole"); the main goal of the EC was to establish the principle of selectivity.

#### *Provisions*

The draft code provided that all signatories agree stay within article XIX (as amended by the code) in their safeguard actions—a pledge to terminate the resort to measures not covered by GATT

rules. The draft code enumerates criteria for the test for "serious injury" (such as employment, profits, and imports), and the new listing specifically conforms to much of the language in the U.S. Trade Act. The code would have set forth conditions for permissible safeguard actions: They would be for limited time periods and could not be renewed immediately; they would be liberalized progressively over time; and they would not reduce imports below levels of a representative previous period. The set of injury criteria and conditions on protective measures therefore represents standardized rules for international behavior, quite the opposite of the undisciplined Voluntary Restraint Agreements of the past that have not been confined by such conditions.

A provision in the new code with profound implications was that importing countries may impose safeguard protection on a "selective" basis. This provision, which the EC sought and the United States resisted, meant that the most-favored-nation principle would no longer hold for safeguards; the importing country could single out the supplier causing the most trouble and apply safeguard protection to that supplier alone. Clearly, this change would be in the protectionist direction, for the reasons discussed below.

In the final Tokyo Round negotiations, the United States sought provisions subjecting selectivity to international control, whereby the multilateral Committee on Safeguard Measures established by the code would have to authorize a selective safeguard measure before it could be imposed. The EC sought the right to impose selective safeguards without prior international approval. In the end, the developing countries and the EC reached an impasse over the issue of selectivity and there was no agreement on the code. Future negotiation on the code remained a possibility, however.

Another area of contention in the draft code was over Voluntary Restraint Agreements (VRA) and cartels. Following the mandate of the Trade Act, the United States sought coverage of the VRA and applicability of the code's general conditions and injury criteria to the VRA. Other parties (the EEC and, apparently, Japan) were reluctant to have the same relatively stringent conditions apply to the VRA. Clearly, the most protectionist outcome of a negotiated code would be one with loose conditions on export restraints (VRAs) and the right to impose selective safeguards unilaterally, because then the threat of the one (selective safeguard) could be used easily to force acquiescence to the other (VRA). Moreover, to an extent the chief bargaining goal of the EC had been the establishment of selectivity under article XIX as a way of legitimizing restrictions against individual supplying countries. For a balanced bargaining outcome, therefore, it was important that the United States secure its own main objective, the extension of the rules to regulate the Voluntary Restraint Agreements on exports.

The code also would have provided for third party consultation. That is, when the importing country imposes safeguard protection, the exporting country may divert supplies to a third country, provoking adjustment problems in that country. For this reason consultation by potentially affected third parties is provided (although again such consultation prior to imposition of a VRA remained in dispute in January 1979). The code establishes a Committee on Safeguard Measures for surveillance and dispute settlement. Safeguard proceedings become more open and formal under the code (as in the formal

U.S. procedures under the International Trade Commission with reporting to GATT), limiting the secretiveness that has often marked safeguard actions (especially of the export-restraint variety). The code also provides for special treatment of developing countries, whereby signatories make a special effort not to impose safeguards against them, but withdraw this favorable treatment once the supplier country achieves either a higher level of development or competitiveness in the product in question.

### *Effects*

The code on safeguards could lead either to greater protection in world trade or to the avoidance of greater protection. If unilaterally imposed selective safeguards were permitted by a new code, and if only loose conditions are placed on voluntary export restraints (and especially if they need not pass the test of serious injury), then the code could well have a protectionist impact. If instead prior multi-lateral approval is required for a selective safeguard, and if the conditions on voluntary export restraint agreements are tight, then the code could lead to a more open trading system in the next decade. The reason is that in the absence of the code, many countries may impose more and more restrictions (generally of the VRA type) outside the bounds of the GATT rules. This second, liberal outcome was the main U.S. objective in the negotiations.

The protectionist potential of selective safeguards warrants further discussion. When all most-favored-nation suppliers are affected, they have a common interest in pressuring the importing country to remove protection. However, an individual supplier selectively singled out loses its potential allies for liberalization once the other suppliers are exempted from the safeguard restrictions. Nor is it accurate that selective safeguards already exist in the form of Voluntary Export Quotas (such as the type the United States has negotiated with Japan on color television sets and with Korea and Taiwan on shoes). Those arrangements involve the consent of the exporting country. By contrast, a selective safeguard action would amount to protection imposed on a specific supplier without that supplier's consent.

Indeed, a danger of the selective safeguard is that it would probably be used as a club to force troublesome suppliers (such as newly industrialized countries and Japan) to accept Voluntary Restraint Agreements, under the threat of resort to the selective safeguard. Therefore, the presence of selectivity under the new code could actually cause a proliferation of Voluntary Restraint Agreements. Selectivity would weaken the bargaining power of exporting countries in resisting these agreements.

Another disturbing aspect of selectivity is that it raises the prospect of a "rich man's club," whereby industrial countries would have a gentlemen's agreement not to impose safeguard protection against each others' goods but instead to screen out selectively the products from developing countries. (The Multifibers Agreement already provides privileged market access for rich countries in textile trade.) A natural force in this direction is that it is the developing countries that have little recourse to retaliation, because they have not offered reciprocal tariff cuts of their own in the past and therefore they have no concessions to rescind. In practice, discrimination against developing countries could well take the following form. The EC would

probably take care of its affiliated Caribbean-African-Pacific (CAP) developing country partners, while applying selective safeguards to screen out imports from Latin America and Asia. The result would be unfavorable to the United States in two ways. First, it would limit export prospects for developing countries with close ties to the United States. Second, it would aggravate U.S. trade issues with these countries by diverting more of their exports of sensitive industrial products from the EC to the U.S. market.

In sum, a code on safeguards could play an important liberalizing role by bringing "voluntary export restraint agreements" under the aegis of GATT rules, thereby tempering their severity and limiting their frequency over the next few years. But unless such a code provides for stringent multilateral control over the use of "selective safeguards," and fairly tight conditions for voluntary export restraint agreements, the effect of the code could well be the protectionist proliferation of both voluntary restraint agreements and unilateral safeguard actions. Given the proliferation of safeguard restrictions on imports, a safeguards code remains the most important unfinished business of the negotiators after the closing of the Tokyo Round.

#### STANDARDS

Because there has been a general recognition of growing trade problems associated with technical product standards, the proposed code on standards is one of the least controversial in the negotiations. The purpose of the code is to end the manipulation of product standards, tests, and certification for purposes of discriminating against imports. The code, which would apply to agricultural as well as industrial products, calls for open procedures for the adoption of new standards. It provides that signatories may complain when they believe a code violation has occurred, and the Committee of Signatories would settle disputes (permitting retaliation by the complaining party in the event of unsatisfactory action by a country found in violation). Central governments would commit themselves to use their available means to ensure compliance with the code by state and local bodies as well. The code provides that national and regional certification systems grant access to nonmembers; that signatories be encouraged to accept certification inside the exporting country; and that whenever new or revised standards are developed, they use appropriate international standards where possible.

The effects of the standards code on international trade are difficult to gauge, but the increasing trade in technologically sophisticated products, and the increasing stringency of domestic standards for environmental and health purposes suggest that international rules for orderly trading practices in this area will be increasingly important. It is possible to enumerate a number of illustrative trade problems of the recent past typifying the problems the code addresses.

For U.S. exporters, technical standards have caused problems in products such as citrus fruit in Japan, wood products in Japan and Canada, electronics products in the EC, beef in Australia, automobiles in Japan, and beverage containers in the EC. For foreign exporters to the United States, difficulties with standards have existed in areas such as building codes and agricultural standards.



The following listing of instances of trade interference from standards is not exhaustive nor does it necessarily include the most significant cases. Moreover, several of these issues have now been resolved even before the signing of the agreements reached in the Tokyo Round. Nevertheless, the cases described below illustrate the types of problems that have occurred and that could be expected to proliferate in the absence of the code.

In electronics, in recent years, the Europeans have developed SENEC, a Europeanwide system of certification for electronic equipment. U.S. exporters were at a disadvantage given the exclusion of the United States from the system, and a major U.S. negotiating goal in the Tokyo Round was to open up regional certification systems of this type. For their part, the Europeans sought greater U.S. adherence to international standards.

Standards have affected U.S. exports of automobiles to Japan. For a time, each automobile had to be inspected individually (instead of being automatically qualified for entry once the product line had been inspected). Automobiles with inflation canisters for spare tires had to be conspicuously labeled as containing a "pressurized container." Japan has also applied seemingly arbitrary standards for consumer appliances. One report indicated, for example, that upon arrival in Japan, U.S. refrigerators had to be refitted with new electrical cords and new motors for cooling fans.<sup>29</sup>

In France, it has been the practice to forbid pharmaceutical importation without inspection by French authorities. Because French inspectors did not travel outside the country, the effect was to screen out imports. In another instance, illustrating the need for open procedures in drawing up product standards, the EC disallowed 12 ounce beer cans from the United States because they deviated by a small percentage from the stipulated size.

A major U.S. barrier to imports has been the network of state and local building codes. Typically authorities enact the codes drawn up by private building associations, opening the way for discriminatory standards favorable to the local industry. An example for past years is the case of ceramic tile. After Japanese imports captured much of the U.S. market for floor tile in the 1960's, building codes tended to screen out imported ceramic wall tile by requiring a thickness of  $\frac{1}{4}$  inch and disallowing the standard  $\frac{5}{32}$  inch thickness produced in Japan and Europe.

As an example of how conflicts over standards may be resolved, the United States sends agricultural inspectors abroad (e.g., to Poland to inspect canned ham plants, and to Holland to inspect tulip bulbs), at the exporter's expense, to verify conformance with U.S. standards.

In sum, there have been increasing problems of interference in trade from discriminatory applications of product standards. The new code will probably have a generally balanced effect on U.S. exports and imports, and will provide for less discriminatory systems of standards abroad and in the United States. As in the cases of subsidies and safeguards, the more significant impact of the code may be in the limitations it places on possible future trade discrimination, rather than its impact on existing trade practices.

<sup>29</sup> Committee on Banking, Housing, and Urban Affairs, Subcommittee on International Finance, Export Policy, Hearing, Part 8, May 17, 1978 (Washington, D.C.: GPO, 1978), p. 39.

## GOVERNMENT PROCUREMENT

Another major code on non-tariff barriers would discourage discrimination against imports in government procurement of goods (but not services). Countries that maintain explicit legal preferences for domestic over imported goods would eliminate these preferences. For the United States, the "Buy America" preferences of 6 percent price differential for domestic goods over imports (rising to 50 percent for Defense Department procurement or for areas with high unemployment) would be discontinued for exports from signatories. In most countries, however, more invisible means are used to discriminate against imports, and the code provides for open bidding and other procedures that would tend to eliminate discrimination.

The code would affect governments' procedures for advertising prospective purchases, drafting product specifications, qualifying suppliers, evaluating their bids, and awarding contracts. The losing bidders (or their governments) would be entitled to know the reason for losing and the amount of the winning bid. The code provides for dispute settlement.

The code does not affect certain areas of trade. Items involving national security considerations are exempt, as are products under agricultural support programs. Contracts below a threshold level (150,000 Special Drawing Rights) will be excluded. In the final stages of negotiation, exact inclusion of various government entities became an issue (particularly the treatment of Nippon Telephone and Telegraph, which Japan eventually agreed to include under the code).<sup>30</sup>

The trade effects of the government procurement code could be large. For U.S. export interests, large markets abroad could be opened up in a whole range of goods purchased by government entities (goods that are often technologically sophisticated products in which the United States has a comparative advantage). Some portions of government procurement would not be covered, however. The EC, Canada, and most of the Nordic governments intend to exempt from the code public entities in the areas of telecommunications, transportation, and postal services (all areas in which even intra-EC trade is restricted in government). On the other hand, Japan probably will include some portions of railway procurement in addition to Nippon Telephone and Telegraph, although negotiations between the United States and Japan are not likely to be completed before 1980.

The U.S. Government procurement market is the world's largest single market, but the combined government procurement market abroad far exceeds that of the United States, because aggregate GNP in other industrial countries exceeds that in the United States and because government participation in industry is much more extensive abroad. When it is considered in addition that the United States should have a natural competitive advantage in highly sophisticated "big ticket" products (e.g. in the fields of aircraft and telephone exchange systems), it is reasonable to conclude on a qualitative basis that non-discrimination in government procurement could lead to a considerable rise in U.S. exports and a somewhat more limited rise in U.S. imports.

<sup>30</sup> United States-Japan Trade Council, Trade Roundup No. 16, June 8, 1979.

Quantitative estimates of the effects of liberalizing government procurement are difficult to carry out, although some attempts have been made, based on the assumption that the difference between private and public import propensity by sector (percentage of purchase supplied by imports) represents discrimination. Studies by Robert Baldwin and by Thomas Lowinger indicate that discrimination against imports is significant in government procurement in the United States, France, and the United Kingdom. Using a 1974 trade base, the elimination of discrimination in government procurement might raise U.S. imports by approximately \$1 billion annually (1974 prices) and increase imports into the United Kingdom and France by \$545 million.<sup>31</sup> Taking account of increased imports in countries excluded from the studies (especially Japan and Canada), it would be reasonable to expect both U.S. imports and exports to rise by something on the order of \$1 billion annually, and if the qualitative observations suggested above are correct, U.S. exports might be expected to rise even more. Two more recent studies give widely differing estimates of the trade and employment effects of the code. The office of the Special Trade Representative has estimated that net employment gains from the code will amount to 50,000 to 100,000 jobs for the United States while Deardorff and Stern have estimated a net gain of only 2,600 jobs.<sup>32</sup> In view of the relatively balanced impact on exports and imports suggested by the Baldwin and Lowinger studies, the Deardorff and Stern results appear to be more in line with those of previous studies.

#### OTHER CODES

The other codes negotiated in the Tokyo Round are those on licensing, customs valuation, and commercial counterfeiting, an aircraft agreement, a GATT "framework" agreement, a wheat trade convention, and an international dairy arrangement. The code on licensing is aimed primarily at developing countries. It would reduce the use of import licenses as non-tariff barriers. Delays, redtape, and the use of licenses to ration foreign exchange are limited by the code. It is unclear how widely the code will be accepted, especially by developing countries. Ironically, Mexico and Brazil were among its chief advocates because of difficulties in getting past licensing barriers to their own exports to other developing countries.

The code on customs valuation deals with barriers such as the American Selling Price system that use artificially high prices as the basis for assessing ad valorem tariffs, leading to high duty levies. The code provides that such systems must be abolished and replaced by ad valorem tariffs levied on import value.

The code on commercial counterfeiting provides that goods discovered to have fake trademarks would be confiscated, addressing a trade problem that has increased greatly in recent years. An aircraft agreement would eliminate tariffs on aircraft. Although other major countries already have a zero duty (and the U.S. duty is only 5 percent), the agreement achieves a binding of the zero tariffs abroad, an important benefit in view of what otherwise might occur as several industrial countries seek to develop their own aircraft industries.

<sup>31</sup> Cline, Kawanabe, et. al., "Trade Negotiations in the Tokyo Round," pp. 193-94.

<sup>32</sup> The two alternative estimates are discussed in Congressional Budget Office, "The Effects of the Tokyo Round . . ." pp. 27-29.

The Framework agreement refers to several general GATT rules rather than to any one particular form of non-tariff barrier. The agreement, initiated by a Brazilian proposal, includes the following major provisions: (1) An "enabling clause" would be incorporated into the GATT to provide a firmer legal basis for the Generalized System of Preferences (GSP) and other measures of special and differential treatment for developing countries. (2) The agreement affirms that, for developed countries, trade restrictions constitute an inappropriate response to balance of payments difficulties. (3) The code recognizes that for developing countries safeguard measures may be necessary for developmental purposes, including temporary measures on an emergency basis. (4) The agreement affirms the continuation of the principle of non-reciprocity for developing countries in future negotiations, while calling for fuller participation by developing countries in the GATT obligations as they "graduate" to more developed status. (5) The agreement calls for negotiations after the Tokyo Round on export controls. (6) The agreement provides for improved dispute settlement procedures.

As the general thrust of the Framework agreement indicates, this code is the principal component of the Tokyo Round devoted to meeting the objectives of the developing countries. It remains to be seen whether the developing countries will consider the code sufficient to rate the Tokyo Round as a success, or whether instead they will denounce the results of negotiations as inadequate for their needs (for example, because of the absence of enlarged preference provisions in the negotiations, the introduction of selective safeguards, and the tightening of rules against export subsidies by developing countries.)

The Wheat Trade Convention under the auspices of the United Nations Conference on Trade and Development (UNCTAD) is tangentially related to the multilateral trade negotiations, although it appears that its timing is in large part due to the desire of the EC to portray the wheat agreement as its compromise in the area of agricultural trade (thereby lightening the onus of failure to negotiate liberalization of the EC's Common Agricultural Policy). The Convention calls for an international reserve of nationally held wheat stocks on the order of 20 to 25 million tons, with purchases to occur at a floor price of \$140 per ton (one half the stock; the rest would be purchased if prices fell to \$125 per ton) and with a release price on the order of \$200 per ton. This agreement holds vital potential for addressing the problem of food price fluctuations and their inflationary consequences (as in the 1973 explosion of grains prices).

The International Dairy Arrangement calls for an embargo on trade in dairy products at prices below established floor levels. In practical terms, the arrangement addresses the problem of subsidized disposal of surplus EC dairy products. The agreement raises disturbing questions, however, because in format it is no different from a cartel such as OPEC. The only difference is that its signatories believe that the floor price to be set is reasonable. No doubt OPEC members believe theirs is also. The more appropriate way to address the area of dairy trade would be to reform the domestic support mechanism that generate the surpluses in the first place. It remains unclear in the dairy arrangement how cartel quotas will be allocated when export supply is too great relative to world market demand at the specified floor prices.

### Tokyo Round: Overview

Considered as a whole, the tariff and non-tariff agreements in the Tokyo Round constitute a major step forward in the postwar process of trade liberalization, comparable in scope to, or even exceeding, the Kennedy Round. The non-tariff agreements represent a potential breakthrough toward the establishment of a "common law" of international trade, with their provisions for case by case dispute settlement. They address some of the most bothersome problems (subsidized trade, voluntary export restraints) and should go a long way toward providing the legal discipline that may be needed to resist a worldwide drift toward future protectionism. The measurable economic benefits of the tariff cuts alone are substantial and dwarf the corresponding labor adjustment costs.

The negotiation results appear balanced for the United States. While it is true that no major change has been negotiated in non-tariff barriers facing U.S. agricultural exports, there have been some successes for agriculture in the form of bilateral agreements with Japan (on citrus fruit and beef) and in the potential limitations on subsidized EC agricultural exports under the subsidy/countervailing duty code. Moreover, recent strains between EC members over the costs of the Common Agricultural Policy (brought to a head, ironically, in negotiations over the new European Monetary System) suggest that this network of agricultural non-tariff barriers may eventually fall of its own weight.

An overall estimate of the economic welfare benefits the United States may expect from the Tokyo Round would be on the order of \$10 billion annually, taking account of tariff cut exemptions and assuming that benefits from the non-tariff barrier codes are at least as great as those from tariff cuts.<sup>33</sup> Probably the major shortcoming of the Tokyo Round was its failure to obtain a code that would exert discipline on safeguard protection. Furthermore, the U.S. executive branch may have paid a high price in protectionist terms for congressional approval of the Tokyo Round, by entering into an understanding with the textile industry that would reduce import surges, phase down unused quotas, and potentially reduce the quota growth rate of sensitive items from the 6 percent annual rate under the multi-fibers agreement to the rate of domestic market expansion, or typically 2 percent per year.<sup>34</sup> Despite these shortcomings, the Tokyo Round represents a major accomplishment.<sup>35</sup> It will mean higher economic welfare here and abroad at little labor adjustment cost, and its new codes and procedures on non-tariff barriers should liberalize restrictions and act as a bulwark against new protective measures.

<sup>33</sup> See my testimony before the Senate Subcommittee on International Finance, Committee on Banking, Housing, and Urban Affairs, *Multilateral Trade Negotiations*, hearings April 5, 1979, p. 103.

<sup>34</sup> STR, Press release 302, "Administration Textile Program," February 15, 1979. Extra protection was at least conditionally promised even though textiles already enjoyed massive quota protection under the Multifibers Agreement. Moreover, a large fraction of the tariff cutting "exceptions" in the U.S. offer list was concentrated in textiles and apparel. Even if there were no such exceptions, full-formula tariff cuts for textiles and apparel would represent a potential loss of only about 17,000 jobs, and even this limited effect (less than 1 percent of textile sector employment) would be spread over several years. See William R. Cline, "Statement," in House Committee on Ways and Means, "Exemption of Certain Products from Tariff Reductions Negotiated in the Multilateral Trade Negotiations (MTN): Hearing," July 10, 1978 (Washington, D.C.: GPO, 1978), pp. 292-302.

<sup>35</sup> Robert Baldwin has reviewed the protectionist concessions that the U.S. administration made in the area of textiles, sugar, and steel to secure congressional passage of implementing legislation. He has also expressed doubts that the new dispute settlement mechanisms in the non-tariff barrier codes will be more effective than past mechanisms. Nevertheless, he judges the "negotiated agreements by themselves" to be a "brilliant achievement," "very much worth the downside risk" of new protection. Robert Baldwin, "The Multilateral Trade Negotiations: Toward Greater Liberalization?" (Washington, D.C.: American Enterprise Institute, 1979), pp. 3-8, 22-23.

## 5. RECENT PROTECTIONISM

Success in the Tokyo Round is all the more important because of the global trend toward protectionism in recent years. There have been two distinct phases of global trends in protectionism in the 1970's. The first major phase was one toward liberalization. From 1970 to 1973 countries were still carrying out tariff reductions negotiated in the Kennedy Round. More importantly, the surge of worldwide inflation in 1973 and 1974 led many countries to dismantle major protective barriers in an effort to fight inflation through greater import supply. Faced with excess demand in steel, the United States allowed the comprehensive set of voluntary export quotas on steel to expire in 1974. In the face of high world prices of sugar, U.S. sugar quotas were allowed to expire in 1975. Japan and Germany carried out unilateral tariff reductions in 1972, for anti-inflationary purposes. Considering that the United States also allowed oil import quotas to expire in 1973 (although not for reasons of fighting inflation), U.S. imports became substantially more liberal over the period 1970-1975.<sup>36</sup>

The world-wide recession of 1974-1975 and the OPEC oil price increase of 1974 marked the turning point for global trade restrictions, and protectionism began to rise in the period 1975-1978. The worst recession since the 1930's had as a predictable consequence heightened protectionist pressures in the name of preserving employment. Balance of payments pressures associated with the oil price rise aggravated these pressures, although the industrial countries formally pledged not to resort to trade barriers in response to higher oil prices (thereby avoiding what could have been a serious downward spiral of protection and worsening global recession). The United States, for its part, faced massive current account deficits in 1977 and 1978 while Japan's surplus was large and persistent, evoking calls for special protection against Japan. Sectoral problems emerged especially acute as the general level of economic activity subsided, revealing problems of excess capacity in sectors such as steel and shipbuilding. At the same time heightened export efforts of countries such as Japan and Korea (in part as their own means of adjusting to the oil price increase) led to a sudden expansion of imports into sensitive industries such as footwear and television sets.

As the result of these forces there have been increasing instances of protection in the United States, Europe, and Canada in the period 1975-1978. The United States has negotiated voluntary quotas on specialty steel imports, on color television sets from Japan and Taiwan, and on footwear from Korea and Taiwan. The administration has implemented a regime of "trigger prices" for steel, designed to expedite antidumping investigations if imported steel is sold below a price related to cost in Japan. The incidence of U.S. countervailing duty and antidumping actions has accelerated (as discussed above), although in principle these measures are not "protective" but "compensatory" against unfair competition. For its part, in recent years protectionist measures in the EC have included the imposition of a number of restrictions on imports from Japan, and restrictive measures in steel, electronics, textiles and clothing, shipbuilding, and chemicals.

<sup>36</sup> Magee's study in 1972 found that a major share of U.S. welfare losses from protection occurred as the result of these three quota regimes alone (petroleum, sugar, and steel). Stephen P. Magee, "The Welfare Effects of Restrictions on U.S. Trade," *Brookings Papers on Economic Activity* 3: 1978.

A recent IMF study has compiled information on these protectionist trends.<sup>37</sup> Many of the protective measures were found to be concentrated in steel, textiles and clothing, and footwear.

In the face of a large increase in steel imports from Japan in 1975, the United States negotiated an orderly marketing arrangement with Japan on specialty steel in June 1976 and imposed quotas on other suppliers. Under industry pressure for further action, the U.S. Government implemented its trigger price system on December 28, 1977. Under the system, antidumping investigations were to be expedited on any steel shipments imported at prices below Japanese cost (assumed to be the lowest foreign cost) as reported by Japan's Ministry of International Trade and Industry (MITI). (Ironically, the system did not address European "dumping" at prices below their production cost because their cost was considerably higher than that of Japan.)

The Europeans instituted a regime of minimum prices for steel at the same time as the U.S. trigger price system. The European industry had been operating far below capacity in 1976 and 1977, and in 1977 steel imports rose by 67 percent, with heightened competition from suppliers such as Brazil, Taiwan, and South Africa. The minimum price regime restricted imports by imposing an antidumping duty equal to the difference between the minimum price and the import price, resulting in antidumping duties on steel from Japan and several other suppliers.

Protection in textiles and clothing has increased in recent years as the earlier international regime of quotas was renewed and, in many cases, tightened. The Multifiber Agreement (MFA) of 1974, which expired at the end of 1977, was extended four more years. The United States renewed its bilateral quotas on terms similar to earlier agreements. The EC, however, tightened its restrictions, freezing its quotas at the 1976 level for a number of sensitive items instead of permitting the growth of quotas at the general rate of 6 percent annually as provided by the earlier MFA. Canada's action (in 1976) was even more restrictive, freezing the global quota for clothing imports at their 1975 level for a five-year period.

In footwear, the United States negotiated export quotas with Taiwan and Korea in June 1977. Similarly, in December 1977, Canada imposed a global quota on all footwear imports, at their average level for 1974-76.

In the United States, other restrictive actions have included an orderly market agreement with Japan (July 1977) restricting imports of color television sets for three years (followed by a corresponding agreement with Taiwan). The agreement followed a sudden surge of Japanese sets from 18 percent of the U.S. market in 1975 to 37 percent in 1976.

The pressures for protection far exceeded specific restrictive measures. From 1971 through 1977 the International Trade Commission considered 57 "escape clause" (safeguard) cases, and only four resulted in protective action (ball bearings, 1973; specialty steel, 1976; foot-

<sup>37</sup> The following discussion draws heavily on the IMF report. See Bahram Nowzad, "The Rise in Protectionism" (Washington, D.C.: International Monetary Fund, 1978).

wear, 1977; color television sets, 1977). Of the remaining 53 cases, the ITC made negative findings in 26, and in 27 the President decided against action or chose adjustment assistance as an alternative measure. Some would argue that the low ratio of restrictive actions to favorable ITC recommendations (4 out of 31) indicates a circumvention of congressional will by the President. It is fully within congressional design, however, for the President to have rejected protective action in many cases. The escape clause mechanism enacted by Congress explicitly calls for judgment from the ITC and the President both, and whereas the ITC is concerned with microeconomic issues specific to the industry, the President must take in account macroeconomic issues (such as inflation) and international political considerations as well.

In the EC, an indication of accelerating protectionism has been the rising frequency of safeguard actions. These rose from an average of six per year in 1971-74 to 18 per year in 1975-76 and 41 during 1977.<sup>38</sup> Of these cases, about one-half involved textiles and clothing (i.e. protection beyond that provided by the Multifiber Agreement). The other major areas were chemicals, fertilizers and steel.

One of the more significant safeguard cases in the EC involved imports of television sets from Korea, which rose from a negligible level in 1975 to 37 percent of the U.K. market in 1977. The quota set by safeguard action reduced this share to only 4 percent of the market.

The EC also imposed meat quotas in 1974. Faced with a resulting shift of supply from the EC market, Canada also imposed meat quotas in 1974.

Japan is perhaps the only major industrial country that has not participated in the rash of protectionist measures in recent years. In part this fact derives from Japan's strong competitiveness in the very sectors that have been most troublesome (steel, television, shipbuilding). It is also true, however, that the basic trend has been toward greater liberalization in Japan. Quantitative restrictions limited imports in 120 categories in 1969, but in only 27 categories (22 of them agricultural) by 1977.<sup>39</sup> Japan has also undertaken specific liberalization efforts as the result of pressure from the United States and other countries resulting from the high Japanese trade surplus (e.g. Japanese measures partially liberalizing imports of beef and citrus fruits). It is often argued that the reason for Japan's surplus is her high level of protection. This viewpoint is ill-informed, because during the period when Japan's trade surplus rose (1975 to 1978) Japan liberalized her imports rather than increased protection against them.

In sum, in the period 1975-1978 most industrial countries resorted to some degree to increasing protection, with the exception of Japan. In the future, protection could either increase, level off, or even decline. Implementation of the agreements from the Tokyo Round should reduce protection considerably. Pressures for protection will remain, however. In the United States, the AFL-CIO has issued a program

<sup>38</sup> *Ibid.*, p. 31: The count includes surveillance and antidumping actions, but most of the actions were safeguard cases.

<sup>39</sup> *Ibid.*, p. 34.



of protection<sup>40</sup> reminiscent of (although perhaps more subtle than) the earlier Burke-Hartke bill. The AFL-CIO program would widen, not eliminate, Buy America preferences. It would envision eventual quota regimes limiting the extent of import penetration into U.S. markets. The program would eliminate certain liberal elements now in the law, such as the provisions for duty-free re-entry of U.S. components assembled abroad.

Aside from the now traditional pressure from organized labor for protection (which appears to have reflected the transition of the U.S. trade account from one of chronic surplus to one of chronic deficit, or at best, balance), there are other advocates of protection. Some have advocated special protection against Japan because of the persistent Japanese trade surplus. An influential congressional report on a fact finding mission, the "Jones report," has been widely interpreted as evidence of Japanese restriction.<sup>41</sup> Yet many of the practices cited in that report should be adequately addressed by the new codes on government procurement, technical standards, and subsidies; moreover, the report focuses too narrowly on bilateral trade balance and gives inadequate attention to cyclical conditions as sources of trade imbalance.<sup>42</sup>

The widely held view that Japan is highly protective is probably inaccurate, moreover. Post-Tokyo Round tariffs will be lower in Japan than in the United States and the EC, and Japan has fewer import quotas on industrial goods than most other major nations. Critics have often charged that "administrative guidance" limits Japanese imports. Up until the 1960's MITI did not allocate foreign exchange for imports it desired to limit. However, these exchange controls were phased out in the early 1970's. By 1978 and 1979, administrative guidance was pointed in the direction of encouraging special import purchases from the United States.<sup>43</sup> The Japanese distribution system remains an obstacle by its structure—myriad small outlets—but it is not a trade barrier as such. The one factor that does hint at some persistent form of invisible protection is the low share of manufactures in Japan's non-fuel imports: 20 percent, as compared with 62 percent in the United States and 38 percent in the United Kingdom.<sup>44</sup> In addition, Japan has stiff agricultural quotas, which were only marginally liberalized in the Tokyo Round.

In any case, events may have bypassed the surge of anti-Japan protectionism. The sharp drop in Japan's trade surplus caused by the oil price increase in 1979 (and by earlier yen appreciation) means that Japan is unlikely in the near term to cause major balance of payments problems for other nations, including the United States.

<sup>40</sup> AFL-CIO, *Statements and Reports Adopted by the AFL-CIO Executive Council, Bal Harbour, Florida, February 20-27, 1978*.

<sup>41</sup> U.S. House of Representatives, Committee on Ways and Means, "Task Force Report on United States-Japan Trade" (Washington, D.C.: U.S. Government Printing Office, January 2, 1979).

<sup>42</sup> See my critique of the Jones Report in Senate Subcommittee on International Finance hearings, "Multilateral Trade Negotiations," April 5, 1979, p. 108.

<sup>43</sup> Panel discussion following my speech "U.S. and Japan in the World Economy of the 1980s," Tokyo, June 11-12, 1979, sponsored by the Association for Economic Development (Keidanren) and the U.S. International Communications Agency.

<sup>44</sup> Calculated from U.N. "Yearbook of International Trade Statistics 1977."

TABLE 10.—EMPLOYMENT IN U.S. MANUFACTURING RELATIVE TO TOTAL NONAGRICULTURAL EMPLOYMENT  
[Million workers]

	Total	Manufacturing	Government	Service, retail and wholesale trade	Other
1960.....	54.2	16.8	8.4	18.8	10.2
Percent.....	100.0	31.0	15.5	34.7	18.8
1965.....	60.8	18.1	10.1	21.8	10.8
Percent.....	100.0	29.8	16.6	35.9	17.8
1970.....	70.9	19.4	12.6	26.6	12.3
Percent.....	100.0	27.4	17.8	37.5	17.3
1977.....	82.1	19.6	15.2	33.6	13.7
Percent.....	100.0	23.9	18.5	40.9	16.7

Source: U.S. Department of Commerce, "Statistical Abstract of The United States 1978," p. 412.

There are grounds for concern about the longer run pressures for protectionism, however, even assuming that the U.S. trade balance deficit declines (and the Japanese surplus declines). A long term structural transformation has been taking place in the U.S. economy that has kept the growth of manufacturing employment stagnant. As shown in table 10, the number of manufacturing jobs in the United States has remained almost unchanged in the last decade at approximately 19 million, while total nonagricultural employment has risen from 65 million to 81 million workers, a 24 percent increase. As a result manufacturing employment has declined from approximately 30 percent of the non-agricultural salaried labor force to only 24 percent.

Basic domestic economic forces account for most of the systematic shift. The composition of demand has moved toward government and services. Moreover, productivity growth is higher in the manufacturing industry than in services, causing manufacturing employment to grow more slowly even if demand grows at an equal rate for manufactures and services. As a result, the sectors "government," "services" and "wholesale and retail trade" have increased their share of total employment from 51 percent to 59 percent over the last 15 years.

International trade may have played some role in the stagnation of manufacturing employment. Imports have grown rapidly in labor intensive apparel and footwear. At the same time, however, manufacturing employment has grown in export related activities. Approximately one out of nine U.S. manufacturing jobs and one out of four agricultural jobs are related to exports,<sup>45</sup> and any general move toward protection would probably cost as many lost jobs in exports (as other countries retaliated) as it would save in import competing industries.

The stagnation of manufacturing employment poses political pressure for protection, however, even if analytically its causes may be shown to be unrelated to foreign trade. Organized labor is most interested in the sectors it represents, industrial labor, and it is not necessarily interested in the fact that new jobs in the service sector

<sup>45</sup> U.S. Department of Commerce, "Exports," State Export Series, 1978, p. 1.

make up for stagnation of employment opportunities in manufacturing. This source of pressure for protection is all the stronger when imports increase rapidly in labor intensive products as newly industrialized countries achieve the requisite quality control and marketing skill to penetrate markets in industrial countries. Indeed, the long run prospects are for constant pressure for protection in the area of labor intensive products (or standardized products not requiring technological sophistication) in which increasing import penetration by developing-country products can be expected. Whether the United States will successfully adjust employment and production patterns over the coming decades to permit the natural evolution of industrial comparative advantage (and its attendant welfare benefits, both for the United States and for developing countries), will depend upon the flexibility of our institutions and the degree of our commitment to the principle of equal economic opportunity.

A final consideration about the current trend toward protection is that it may be reversed by the growing concern about inflation. In 1973-74 the fight against inflation led to the dismantling of several major protective barriers here and abroad. In 1978 as inflation increasingly became the "number one economic problem," it became an increasingly important reason for avoiding new protection and for encouraging successful trade liberalization in the Tokyo Round. Although some have argued that import liberalization cannot help the consumer because retail firms do not pass on lower costs of imports to consumers, that argument is specious in logic and is contradicted by recent sample survey evidence showing that import prices to consumers are indeed cheaper than prices of comparable domestic goods.<sup>46</sup>

## 6. ISSUES FOR FUTURE TRADE POLICY

### *Structural Evolution of the World Economy*

As suggested in the preceding discussion, one of the major persistent issues facing future U.S. trade policy will be the reaction to the developing countries becoming more able to compete in selling manufactured products to industrial countries. A specific policy issue that may have to be faced is where policymakers should draw the line on imports. Should entire industries be allowed to disappear? Among industrial countries, intraindustry trade has been the form of most trade growth, allaying the earlier fears that some industries in each country would be totally eliminated by the process of specialization during the postwar process of trade liberalization (especially within the EC). It is possible, however, that because factor endowments are so different between industrial and developing countries (whereas they have been similar among industrial countries), the norm will be increasing inter-industry specialization instead of intraindustry specialization, in North-South trade. If so, then the question arises, What are the criteria for determining whether an industry should be allowed to disappear? Black and white television sets, 35 millimeter cameras, and certain other products are essentially no longer manufactured in the United States, having been replaced by imports. If the footwear and apparel industries were likely to disappear in the

<sup>46</sup> See William R. Cline, "Imports and Consumer Prices: A Survey Analysis" (Washington, D.C.: American Retail Federation, mimeographed, 1978).

absence of protection, should they be allowed to do so? Should steel production be phased out in favor of imports?

The only clear criterion under which an industry should be guaranteed its existence is that of national security. It would be difficult to imagine a secure national industrial structure that possessed no steel producing capacity. This being said, it is highly unlikely that any major U.S. industry will experience sufficient import penetration to threaten its existence. Despite persistent outcry against imports, textiles and apparel presently constitute only 10 percent of U.S. market supply, and imports would reach only 22 percent of total supply by 1985 even if the most pessimistic forecasts by the industry actually materialized.<sup>47</sup> In footwear, imports represent about half the U.S. market supply in number of pairs, but only 35 percent by value.<sup>48</sup>

If import penetration did increase much more rapidly than anticipated in many industries, consideration might be given to legislation that would provide special measures to ensure that domestic production fall no further than, say, 40 to 50 percent of consumption needs, but only for industries considered to be vital to the national security. For the time being the need for this type of legislation is remote.

Another issue in future trade policy may be the question of how to adopt trade regimes to a new period of slow growth in the world economy. Factors such as the completion of the postwar recovery phase in Europe and Japan, the termination of the formation phase of the EEC, slower population growth, and greater attention to environmental concerns, may mean lower long run growth rates abroad even if the OECD countries somehow manage to overcome the problem of stagflation. With slower domestic growth, pressures would be all the higher to prevent increased imports from affecting employment. At the same time, foreign export supply might be greater as firms abroad seek to dispose of a larger fraction of output on the world market because of slack domestic demand. Still another source of increased foreign export supply could be ambitious industrial expansion programs in developing countries (especially in sectors such as steel, shipbuilding and petrochemicals). Any resulting tendency toward trade deficit would only add to the problem of maintaining rapid growth, as the trade deficit would cause a drag on the economy (in terms of Keynesian demand).

Despite events since 1974, it is premature to write the obituary of the postwar epoch of rapid economic growth in the world economy. All that can be said on this subject is that if a long period of slow growth does materialize, it will be important to have the best possible international trading rules (including those negotiated in the Tokyo Round), in order to avoid increased protectionism and its likely consequence—still slower growth for all countries concerned.

Another major theme in future trade policy concerns the choice between markets and cartels in the determination of trade flows. In textile trade there already exists an international cartel-like allocation of trade under the Multifiber Arrangement. There have been pressures, especially from Europe, to divide up world markets in a

<sup>47</sup> Statement of Burlington Industries, Inc. to the Sub-committee on Trade, Committee on Ways and Means, U.S. House of Representatives, "U.S. Trade Deficit in the Textile/Apparel Industry," November 7, 1977. The corresponding import shares for apparel alone are 13 percent currently and 40 percent by 1985.

<sup>48</sup> Based on data for January-September, 1978. American Footwear Industries Association, "Statistical Reporter: Quarterly Report, Third Quarter" (Arlington, Virginia, 1978).

similar way for other sensitive products such as steel, electronics, chemicals, and shipbuilding.

If some countries pursue rapid expansion of capacity relying on export markets to an overly optimistic degree, the result may be greater pressure for cartelized trade, as world excess capacity grows. Currently, there appears to be a tendency in this direction in some developing countries.<sup>49</sup> Considering that the developing countries would almost certainly be the suppliers dealt out in any global trade quota regimes, it is in the developing countries own interest to pursue industrial expansion with realistic export goals in mind, and it is appropriate for international organizations such as the World Bank and UNCTAD to coordinate the expansion plans of many developing countries so that the resulting levels of production are compatible with world demand.

More generally, if global economic efficiency (and maximum growth) are to be achieved it will be essential to avoid international cartelization of trade, whether it is called by that name or by euphemisms such as "organized free trade."

A final issue of future trade policy concerns the future of the GATT after conclusion of the Tokyo Round of negotiations. Here, a number of needs are apparent.<sup>50</sup>

(1) There will be unfinished business from the Tokyo Round. It will be necessary to come to terms with still unresolved issues concerning subsidies and the role of government in industrial production and trade. The Framework Agreement itself calls for further negotiations on export controls.

(2) The GATT Secretariat may have to be considerably expanded. The new procedures for dispute settlement by committees of signatories to individual codes will require technical assistance from GATT. Ideally, the GATT Secretariat could also expand in the area of forward analysis of prospective trade problems, as in the forecasting of global capacity expansion and trade prospects in sectors likely to be subject to demands for protection.

(3) There will be a need for review and amendment to the codes established in the Tokyo Round. For this process to be manageable, it is important to devise means for amendment that are more simple than a full scale round of new negotiations. For example, there could be a review session scheduled for a limited period (such as three months) at periodic intervals (such as every two years) for the purpose of amending GATT provisions.

(4) More generally, it would appear that after the Tokyo Round the GATT should shift to a new pattern of relatively continuous consultation and review, replacing the earlier pattern of massive and lengthy rounds of negotiations every five years or so.

(5) It will be necessary in the future to integrate the developing countries more fully into GATT deliberations. Even for the codes already negotiated in the Tokyo Round, it remains unclear what will happen if many developing countries refuse to become signatories. In particular the GATT principle of most-favored-nation treatment could be seriously undermined if code signatories refuse to extend the benefits of the codes to non-signatories.

<sup>49</sup> UNCTAD, "Review of Recent Trends and Developments in Trade in Manufactures and Semi-Manufactures," TD/B/C.2/190, 21 March 1978, p. 1.

<sup>50</sup> Some of the following points are based on discussions with Thomas Graham, former Deputy General Counsel, Office of the Special Trade Representative.

## 7. CONCLUSION AND POLICY IMPLICATIONS

International trade has been a key factor in dynamic growth during the postwar period. The successive rounds of trade negotiations were vital to the rapid growth of world trade.

After two decades of buoyant international economic conditions, external shocks and domestic recession and inflation marked the 1970's. The oil price increase of 1974 was the most severe shock, and the large OPEC surplus placed the international economic system under severe pressure through the mid-1970's. By 1978, however, the OPEC surplus had fallen dramatically (from \$68 billion in 1974 to only \$20 billion). Current account surpluses in Japan, Germany, and Switzerland, by contrast, had grown to a high level of nearly \$30 billion. An important policy implication is that OPEC is no longer the major source of international payments imbalances. Instead, the industrial countries themselves are now responsible for large payments imbalances, and they should take corrective action on exchange rates and internal growth policies to remove these self-inflicted strains on their external economic sectors.

The United States has experienced a long-run decline in its merchandise trade balance, which stood as high as +25 percent of exports in the period 1961-64 and fell as low as -26 percent of exports in 1977-78. The decline from large surplus to approximate balance in the early 1960's reflected the strong reemergence of the recovered economies of Japan and Europe. In the last decade, U.S. trade balance movements have been largely explained by differential growth rates here and abroad and by changes in exchange rates corrected for inflation. The massive deficits of 1977 and 1978 reflected the wide discrepancy between high U.S. growth and low growth abroad, increasing U.S. demand for imports and tempering foreign demand for U.S. exports.

Lagging productivity growth has also played a role in U.S. trade performance. Output per employee-hours in manufacturing consistency has grown by less in the United States than abroad in the past quarter century, and the difference is especially large when comparing productivity growth with that in Japan. Since 1974 productivity growth has plummeted both here and abroad, for reasons not yet fully explained. Measures of "price competitiveness" tell a more favorable story, indicating that after compensating for exchange rate movements and inflation, U.S. export prices have declined relative to those of Europe and Japan since 1971 (although most of this increasing competitiveness was already accomplished by 1973). On balance, however, it is difficult to be optimistic about U.S. trade performance unless U.S. productivity growth can be increased, and basic macroeconomic forces such as a more certain, less inflationary environment are probably the key to higher investment and productivity growth. U.S. competitiveness would also be enhanced by a revitalized program for the Export-Import Bank. Loans, guarantees, and insurance from Ex-Im Bank fell from 12 percent of U.S. exports in 1973 to less than 5 percent in 1978, while export credit or other forms of official support covered 29 percent of exports in France in 1978, 35 percent in Japan, and approximately 12 percent in Germany.<sup>51</sup>

<sup>51</sup> According to a recent analysis by the U.S. Export-Import Bank.

The move to flexible exchange rates in 1973 helped the international economy adjust to the severe pressures of the oil price increase and world inflation. Recent disillusion with seemingly excessive fluctuation of rates, and with the seeming inability of dollar depreciation to correct the U.S. trade deficit, is probably unwarranted. It takes 18 months or more for depreciation to improve the trade balance, and because the dollar strengthened in 1975 and 1976 (as a result of the large U.S. trade surplus in 1975), there was no major dollar depreciation in real terms until 1978. Even in 1978 the dollar was no cheaper to foreigners in real terms than it was in 1974. The heavy trade weight of Canada and to some extent the United Kingdom means that the dollar has declined much less in real terms than the headlines featuring the German mark and the Swiss franc suggest.

What is now required is patience as the delayed trade effects of the 1977-1978 dollar depreciation work themselves out and as slower growth in the United States relative to that abroad boosts the U.S. trade balance. The U.S. trade balance improved greatly after the first quarter of 1978 and for 1979 the trade deficit was expected to be much smaller than in 1978, despite higher oil prices. Moreover, Japan's trade surplus declined substantially in the first half of 1979. An important policy need for the near term will be to avoid extreme actions such as special import restrictions against Japan that will attempt to hasten, with a meat-axe approach, the process of trade balance correction that is already occurring. Special protection not only would radically worsen political relations with Japan but would also set a dangerous precedent that could lead to future trade wars, including ones launched against the United States if the U.S. accounts turned into strong surplus (as they did in 1975).

The tentative agreements reached in the Tokyo Round of trade negotiations represent perhaps the most significant accomplishment to date in the postwar succession of trade negotiations. Tariff cuts of approximately one-third will be comparable to those in the Kennedy round. Moreover, the new codes on non-tariff barriers represent a major breakthrough in establishing order in the world trading system. The economic benefits of trade liberalization—from lower prices to consumers, stimulus to economies of scale and new investment in exports, and anti-inflationary effects—will be large and will far outweigh labor adjustment costs. The price-restraining consequences of liberalization are especially crucial to the U.S. economy at this time when inflation has once again become the number one economic problem. The non-tariff barrier codes should help prevent a drift toward world-wide protectionism, by disciplining subsidized production and trade, harmonizing national practices on safeguard protection, opening up government procurement markets to trade, and reducing the use of product standards for protective purposes. The new World Wheat Convention should play a major role in avoiding the wild fluctuations in grain prices, with their resulting inflationary impacts alternating with other periods of extremely low prices to farmers. In sum, the agreements negotiated fully deserved the strong support they obtained from Congress.

The Tokyo Round agreements came none too soon, because in recent years industrial countries (including the United States) have drifted toward protectionism. After an interim of anti-inflation liberalization

in 1972-1973, many countries took more and more actions that restricted trade. These actions have centered in sensitive sectors such as textiles, steel, footwear, electronics, chemicals, and shipbuilding. Over the longer run, the new codes negotiated in the Tokyo Round should help stem the proliferation of protective actions. Nevertheless, structural factors, such as the stagnation of manufacturing employment and the growing competitive strength of several developing countries, will require a forceful commitment to an open trading regime. Without such a commitment, the pressure from groups unwilling to adjust to changing comparative advantage may lead to increased trade restrictions and to a corresponding sacrifice of economic well-being both for the industrial and the developing countries.

A strengthened GATT will be an important vehicle for dealing with these trade issues after the Tokyo Round. The GATT Secretariat probably should be expanded to strengthen its analytical ability to anticipate trade problems and to act as honest broker and provider of information for the network of dispute settlement committees set up by the new codes on non-tariff barriers. Somehow the future GATT will also have to integrate the developing countries into the decision-making process more effectively than has been done to date.

## APPENDIX

TABLE A-1.—U.S. COUNTERVAILING DUTY ACTIONS, 1971-77

Product	Year	Product	Year
Barley.....	1971	Handbags.....	1977
Boneless beef.....	1976	Leather wearing apparel.....	1977
Butter cookies.....	(2) 1977	Molasses.....	1971
Canned hams.....	<sup>1</sup> 1975	Nonrubber footwear.....	(2) 1974
Castor oil products.....	1975	Nuts, bolts, cap screws.....	1977
Chains and parts.....	(2) 1977	Olives, green.....	1974
Cheese.....	<sup>1</sup> (5) 1976	Radial steel-belted tires.....	1973
Compressors and parts.....	1972	Refrigerators, freezers.....	1973
Cotton yarn.....	1977	Rubber footwear.....	<sup>1</sup> 1975
Dairy products.....	<sup>1</sup> 1975	Scissors and shears.....	1977
Dye presses.....	1974	Screws.....	1976
Fish.....	<sup>1</sup> 1977	Steel, carbon, and high strength plates.....	<sup>1</sup> 1977
Float glass.....	1976	Tomato products.....	1972
Footwear.....	(2) 1976	Unwrought zinc.....	1977
Glass beads.....	1976	Vitamin K.....	1976

<sup>1</sup> Action waived through Jan. 1, 1979.

Note: Number in parentheses indicates number of actions if more than 1.

Source: IMF, "The Rise in Protectionism" (Washington, D.C.: 1978), p. 28.



# THE SYMPTOMS OF DECLINING UNITED STATES INTERNATIONAL COMPETITIVENESS

By James Riedel\*

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## I. INTRODUCTION

The issue of U.S. international competitiveness is one in which there is apparent unanimity; everyone seems to agree that we are losing it. The evidence people point to varies, however. Some cite the deficit in merchandise trade that has existed since 1970 in all but two years—1973 and 1975. Others point to declining shares of U.S. exports in world trade. Still others find deepening penetration of U.S. markets by foreign suppliers, more recently developing countries, to be indicative of declining competitiveness.

Accompanying the concern about U.S. competitiveness is a growing insistence that government do something about it. Among the alleged (related) causes that are singled out for redress by economic policy expressly for the purpose of improving U.S. international competitiveness are inflation, low rates of growth of output and productivity, low rates of savings and investment, declining levels of R. & D. expenditures, a general loss of innovativeness in the economy, excessive U.S. governmental regulation of industry and unfair advantages accorded foreign competitors by their governments.

Perhaps not surprisingly, economists are more ambivalent about the issue and what to do about it. Economists recognize (although some forget) that the analogy between the competitiveness of a firm in a domestic economy and the competitiveness of a country in the world economy, which is often the basis of popular theorizing, is tenuous indeed. In the international economy an adjustment mechanism exists to ensure the long-run competitiveness of countries—no analogous mechanism exists to protect incompetent or inefficient entrepreneurs. Moreover, while a firm must be concerned to maintain

\*The Johns Hopkins University. I am indebted to Robert Lawrence for providing some of the data analyzed in this paper and for stimulating discussions of the issues examined here. Robert Baldwin, Isaiah Frank, Morris Morike, and Charles Pearson contributed helpful suggestions and comments on a preliminary draft.

an absolute advantage over its competitors, a country need be concerned only that it is exporting goods in which it has a comparative advantage (and importing those in which it has a comparative disadvantage), at least in theory.

Theory does not, however, render international competitiveness a nonissue. There are circumstances in which a country's concerns both about the structure of its balance of payments and the structure of its trade are legitimate and deserving of policy action. The international adjustment mechanism, for example, only ensures competitiveness over the long-run; meanwhile, a country can undergo declining competitiveness and rising trade deficits for a considerable time, in fact as long as it is able to finance trade deficits by investment income, exporting nonfactor services, borrowing or drawing down reserves. Moreover, the world's willingness to lend to a country to finance a trade deficit may exceed a country's own desire to borrow. The fear of indebtedness itself, or of the abrupt shock to the economy that results when adjustment is eventually forced upon a country, can understandably motivate government to initiate policies to improve or maintain overall international competitiveness. Even government intervention to protect the absolute advantage of specific export or import-competing industries may be legitimate, the principle of comparative advantage notwithstanding, if for example imperfections in international markets or domestic noneconomic objectives exist.

While recognizing that declining international competitiveness can be a legitimate concern of economic policy, symptoms of declining competitiveness do not necessarily justify government intervention. Neither trade deficits, declining exports shares nor increasing import penetration are necessarily harmful to social welfare, although the causes of these symptoms may well be undesirable quite independently of their impact on international competitiveness. Nevertheless, international competitiveness is often the chief rallying point for a variety of causes and special interest groups, no doubt in large part because of the political leverage gained by appealing to flag and country. The consequence is that the issue of international competitiveness and what to do about it has become obscured in rhetoric and cliches. It is the purpose of this paper to sort through the issues, examining in turn each of the principal symptoms of declining U.S. competitiveness to determine its causes and consequences.

## II. TRADE DEFICITS

### *Deficits in the 1970's*

Merchandise trade deficits in the U.S. balance of payments are a phenomenon of the 1970's. Trade surpluses in the 1950's averaged almost 20 percent of U.S. merchandise exports, and in the 1960's averaged about 15 percent of exports (see table 1). The net outflow of goods reflected in U.S. trade surpluses was an important ingredient in the postwar reconstruction of Europe and Japan in the 1950's the 1960's made an important contribution to the financing of a massive expansion of foreign investment by U.S. corporations. But, since 1970 (with the exception of 1973 and 1975) the United States has become a net importer of goods from the rest of the world, although in

two of the six deficit years current receipts from net sale of final services and investment income were sufficient to provide current account surpluses. In 1977 and 1978 however, current account deficits reached the record figures of \$15.3 billion and \$15.9 billion, respectively.

TABLE 1.—U.S. CURRENT ACCOUNT: 1950-78

(Millions of dollars)

Year	Merchandise <sup>1</sup>		Net <sup>2</sup> investment income	Net nonfactor services	Balance <sup>1</sup> goods and services	Net unilateral transfers	Balance current account	
	Exports	Imports						Net balance
1950	10,203	-9,081	1,122	1,509	-454	2,177	-4,017	-1,840
1953	12,412	-10,975	1,437	2,112	-2,354	1,195	-2,481	-1,286
1957	19,562	-13,291	6,271	3,384	-2,548	7,107	-2,345	4,762
1960	19,650	-14,758	4,892	3,379	-3,139	5,132	-2,308	2,824
1963	22,272	-17,048	5,224	4,596	-2,652	7,168	-2,754	4,414
1967	30,666	-26,866	3,800	5,277	-3,365	5,712	-3,125	2,587
1968	33,626	-32,991	635	5,999	-3,061	3,573	-2,952	621
1969	36,414	-35,807	607	6,051	-3,257	3,401	-2,994	406
1970	42,469	-39,866	2,603	6,235	-3,184	5,654	-3,294	2,360
1971	43,319	-45,579	-2,260	7,252	-2,698	2,294	-3,701	-1,407
1972	49,381	-55,797	-6,416	8,150	-3,859	-2,125	-3,854	-5,979
1973	71,410	-70,499	911	12,042	-2,187	10,766	-3,881	6,885
1974	98,306	-103,649	-5,343	15,457	-1,205	8,905	-7,186	1,719
1975	107,088	-98,041	9,047	12,795	1,218	23,060	-4,615	18,445
1976	114,694	-124,047	-9,353	15,933	2,781	9,361	-5,022	4,339
1977	120,576	-151,706	-31,130	17,507	3,038	-10,585	-4,708	-15,292
1978	141,844	-175,988	-34,144	19,915	3,344	-10,885	-5,076	-15,961

<sup>1</sup> Excludes military grants.<sup>2</sup> Fees and royalties from U.S. direct investments abroad or from foreign direct investments in the United States are excluded from investment income and included in nonfactor income.

Source: "Economic Report of the President," January 1979, p. 294. "U.S. Department of Commerce News," Mar. 21, 1979.

The transition from a trade surplus to a trade deficit country has occurred during a tumultuous period in the world economy, which makes understanding the causes and consequences all the more difficult. The year in which the U.S. recorded its first trade deficit, 1971, saw the international monetary system begin to crumble with the United States formally abandoning its commitment to honor liabilities to foreign monetary authorities in terms of gold and other countries relinquishing their commitments to maintain fixed exchange rates against the U.S. dollar. The collapse of the Bretton Woods system, which culminated in March 1973 with the floating of the Deutsche mark, Swiss franc and other major currencies, was shortly followed by the oil crisis. The Organization of Petroleum Exporting Countries (OPEC) administered oil-price increase precipitously altered international payments as has no other event in recent history, and aided by misguided macroeconomic policy in the United States and other industrialized countries threw the world into the worst recession since the 1930's.<sup>1</sup> As documented in table 2, recovery since the 1974-75 recession has been fitful at best, with no major industrialized countries other than the United States having yet regained a sustained rate of real GNP growth equal to the average recorded over the period 1960-73.

It is against this background that rising concern about U.S. international competitiveness has emerged. Yet the nature of much of

<sup>1</sup> See Corden, 1977, for a concise analysis of relationship between the OPEC oil price increase and the 1974-75 recession.

TABLE 2.—GROWTH RATES IN REAL GROSS NATIONAL PRODUCT: 1960-78

[Percentage change]

	1960-73 annual average	1974	1975	1976	1977	1978 <sup>1</sup>
OECD <sup>2</sup> Countries.....	4.8	0.4	-0.6	5.2	3.7	3.5
United States.....	3.9	-1.4	-1.3	4.7	4.9	3.9
Canada.....	5.4	3.5	1.2	5.8	2.7	3.5
Japan.....	10.5	-1.0	2.4	6.0	5.2	5.8
European Community.....	4.7	1.7	-1.8	5.0	2.3	2.8
France.....	5.7	2.6	-1.1	5.6	3.0	3.0
West Germany.....	4.8	.5	-2.6	5.6	2.6	3.0
Italy.....	5.2	3.9	-3.5	5.6	1.7	2.0
United Kingdom.....	3.2	-6	-1.6	2.6	1.6	3.0
Other OECD.....	5.4	3.6	.0	3.5	1.8	2.3
OPEC.....	9.0	8.0	.1	12.9	6.3	-----
Nonoil developing countries.....	6.1	5.3	4.1	4.8	4.9	-----
Communist countries.....	5.3	4.6	3.7	3.4	4.6	-----

<sup>1</sup> Preliminary estimate.<sup>2</sup> Organization for Economic Cooperation Development.

Source: "Economic Report of the President," January 1979, p. 306.

the concern is not that the problem is a transitory one, associated with the extraordinary events of the 1970's, but that it reflects a fundamental, long-term weakness of the economy and its ability to compete. For policy purposes it is of course critical to determine whether the symptoms of declining competitiveness are the result of short-term, cyclical phenomena, or longer run, secular forces.

Before attempting to delineate long-run and short-run determinants of recent U.S. trade balances, it is useful to separate volume and price changes of exports relative to imports, the sum of which constitute changes in the trade balance. Table 3 presents the results of such an exercise, listing in column (1) the annual trade balance (1970-78) and in column (2) the change in the balance from the preceding year. Column (3) presents the hypothetical change in the trade balance holding prices of exports and imports unchanged at the 1970 level. The difference between columns (2) and (3), presented in column (6), indicates the effect of changes in relative prices of exports and imports (i.e., changes in the terms of trade) on changes in the balance of trade. The contributions of changes in volumes and prices of fuel and non-fuel imports relative to changes volume and price of exports are presented in the remaining columns of the table.

Table 3 shows that in all but two years, 1973 and 1974, changes in terms of trade and changes in the volume of net exports (exports less imports) have contributed in the same direction to changes in the balance of trade. In every year except 1975, terms of trade have declined to produce a negative impact on the U.S. trade balance; indeed, with the exceptions of 1971 and 1973, terms of trade effects have far outweighed relative volume changes in their impact on the balance of trade.

Table 3 further reveals the predominant effect of rising fuel prices on the U.S. trade balance. The United States was spared a deficit of almost \$20 billion in 1974 only because of improved terms of trade outside of oil and increases in net export volume. Rising oil prices are also shown to have contributed significantly (about 40 percent) to rising deficits in 1976 and 1977, while the modest 1978 increase in the deficit is wholly concentrated in nonoil volume and price developments.

TABLE 3.—QUALITY AND PRICE EFFECTS ON THE U.S. TRADE BALANCE: 1970-78

(\$ billions)

Year	Level of trade balance X-M	Change in trade balance $\Delta[X-M]$	Due to <sup>1</sup> —					
			Volume $\Delta[QX-QM]$	Of which—		Terms of trade <sup>2</sup> $\Delta[PX-PM]$	Of which—	
				Nonoil $\Delta[QX-QMNF]$	Oil $\Delta[QX-QMF]$		Nonoil $\Delta[PX-PMNF]$	Oil $\Delta[PX-PMF]$
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
1970.....	2.6							
1971.....	-2.3	-4.9	-3.9	-3.6	-0.3	-1.0	-0.6	-0.4
1972.....	-6.4	-4.1	-1.8	-1.3	-.5	-2.3	-1.8	-.8
1973.....	.9	+7.3	+8.3	+9.4	-1.1	-1.0	+1.6	-2.6
1974.....	-5.4	-6.3	+6.8	+5.5	+1.3	-13.1	+6.4	-19.5
1975.....	9.1	+14.5	+4.4	+6.8	-2.4	+10.1	+8.5	+1.6
1976.....	-9.3	-18.6	-7.7	-7.4	-.3	-10.9	-3.8	-7.1
1977.....	-31.1	-22.0	-5.6	-4.9	+9	-16.4	-6.5	-7.9
1978 <sup>3</sup> .....	-34.2	-3.1	-.6	-1.5	+9	-2.5	-4.5	+2.0

$$^1 \Delta[X-M] = \Delta QX - \Delta QM + \Delta PX - \Delta PM \\ = \Delta QX - [\Delta QMNF + \Delta QMF] + \Delta PX - [\Delta PMNF + \Delta PMF]$$

Where:

- $\Delta$  = absolute change from preceding year.
- X = exports in current prices.
- M = imports in current prices.
- QX = exports in 1970 prices.
- QM = imports in 1970 prices.
- QMNF = nonfuel imports in 1970 prices.
- QMF = fuel imports in 1970 prices.
- PX = 1970 exports in current prices.
- PM = 1970 imports in current prices.
- PMNF = 1970 nonfuel imports in current prices.
- PMF = 1970 fuel imports in current prices.

<sup>2</sup> The price effect is calculated as a residual and thus contains cross product effects.

<sup>3</sup> Authors estimate.

Sources: "U.S. Merchandise Trade, 1965-76" (Department of Commerce, 1977); "Survey of Current Business" (Department of Commerce, various issues). Nonfuel import volume courtesy of Peter Hoopes Federal Reserve Board.

When one attempts to relate the data presented in table 3 to the issue of competitiveness, it becomes apparent just how slippery the concept is. Changes in the volume of net exports would clearly seem to bear a direct and positive relationship to competitiveness, although it is necessary to allow for changes that might result purely from fluctuations in the level of demand at home and abroad. But, what is the significance, in terms of competitiveness, of deficits resulting from deteriorating terms of trade—a classic example of which is the 1974 deficit caused by the OPEC administered oil-price increase? Does the 1974 deficit of \$5.4 billion imply that the U.S. lost competitiveness, when in fact the volume of goods exported in 1974 increased significantly while the volume imported fell?

Even if deficits resulting from declining terms of trade are not indicative of fundamental changes in competitiveness, they do nevertheless indicate how competitiveness would have to change in the future if the impact of declining terms of trade were to be overcome. Thus some would argue that it matters not whether the United States has a deficit because the price of imports has gone up or the quantity of exports has gone down; the objective fact is that the United States has a deficit and the United States must become more competitive to correct it. It should be recognized, however, that this approach involves a normative judgment regarding the structure of the balance of payments, and as such goes somewhat beyond the central issue of this paper—has the United States undergone a fundamental loss of competitiveness?

The competitive position of the United States as reflected in changes in net export volumes (columns 3 and 4 of table 3), has in the 1970's experienced only one short three-year period of improvement—1973-75. Otherwise, the record is negative, with particularly sharp declines in net export volumes recorded in 1971, 1976 and 1977. In an effort to get behind these indicators, to better understand what have been the principal determinants of change in the volume of trade, export and import functions have been estimated using annual data (1963 to 1977) on manufactured goods trade. Agricultural trade has been excluded from analysis because of the complications arising from the multiplicity of trade restrictions and exogenous factors which affect trade in agricultural goods. Conveniently this shortcoming is not too severe since manufactured goods constitute 70 percent of total exports and 75 percent of total nonoil imports.

Equations estimating the volume of manufactured exports and imports are presented in table 4.<sup>2</sup> The volume of exports (X) is assumed to be a function of three variables: Distributed-lagged values of the ratio of U.S. export prices (unit values) to those of the rest of the world (RPX), the level of potential (full employment) output (in constant prices) in the rest of the world ( $Q^*_{ROW}$ ) and the ratio of actual to potential real output in the rest of the world ( $Q/Q^*_{ROW}$ ). The inclusion of potential output and the ratio of actual to potential output is an attempt to capture cyclical as well as long-run income elasticities of demand. A positive coefficient for ( $Q/Q^*_{ROW}$ ) implies that as supply constraints set in during the upswing of the business cycles, the demand for U.S. exports increases. The equation estimating the volume of U.S. manufactured imports (M) is similar in form, with three explanatory variables: Distributed-lagged ratios of import prices (unit values) to domestic substitute goods prices (RPM), potential U.S. real output ( $Q^*_{US}$ ) and the ratio of actual to potential U.S. real output ( $Q/Q^*_{US}$ ). Since all the variables are expressed in logarithms, the estimated coefficients represent constant elasticities.

TABLE 4.—ESTIMATED EQUATIONS FOR U.S. EXPORT AND IMPORT VOLUMES OF MANUFACTURED GOODS: 1963-77\*

[All variables expressed in logarithms]

$$X = 0.045 - 1.904RPX + 1.312(Q/Q^*)_{ROW} + 1.285Q^*_{ROW} + UX^c$$

(1.126)(-6.691)      (4.707)      (35.021)

$$R^2 = .993 \quad SEE = .032 \quad D.W. = 1.480$$

$$M = -0.047 - 1.593RPM + 1.737(Q/Q^*)_{US} + 2.940Q^*_{US} + UM^c$$

(-1.377)(-3.582)      (2.983)      (23.761)

$$R^2 = .985 \quad SEE = .048 \quad D.W. = 2.088$$

\* T—statistics in parentheses.

<sup>b</sup>  $RPX = .2RPX_t + .3RPX_{t-1} + .5RPX_{t-2}$ .

<sup>c</sup> UX and UM = unexplained residuals.

<sup>d</sup>  $RPM = .2RPM_t + .3RPM_{t-1} + .5RPM_{t-2}$ .

Sources: All data were provided courtesy of Dr. Robert Lawrence of the Brookings Institution. X is the volume of exports of manufactured goods (standard international trade classifications 5-8) from Department of Commerce data.  $Q_{US}$  is GNP for the United States measured in 1972 dollars, from Comets Database;  $Q^*_{US}$  is Perry's annual estimates of potential GNP (George L. Perry, "Potential Output and Productivity," BPEA, 1:1977, pp. 11-47).  $Q_{ROW}$  is actual manufacturing output in six major industrial countries (ROW) weighted by their 1970 shares in world manufactured goods trade;  $Q^*_{ROW}$  is derived by similarly weighting the Artus estimates of the potential manufactured goods output of these countries. RPX is the ratio of unit values of U.S. exports of manufactured goods (from the Department of Commerce) to the United Nations unit value index for exports of manufactured goods (from various issues of United Nations, Monthly Bulletin of Statistics). M is the volume of manufactured goods imports adjusted to exclude automobile exports from Canada. Prior to 1968 it is formed from quantity indexes of imports of semifinished and finished manufactured goods. The numerator of RPM is the import/unit-value index for manufactured goods (standard international trade classifications 5-8). The 1963-67 values were estimated using coefficients from a 1968-77 regression of the import/unit-value index on finished and semifinished manufactured goods. The denominator is the U.S. manufactured goods wholesale price index with refined petroleum products removed. Both are from the Department of Commerce. RPM is multiplied by a tariff variable, which reflects the Kennedy Round reductions and 1971 import levy (obtained from Peter Hooper of the Federal Reserve System).

<sup>2</sup> The models and data used to estimate them were kindly provided by Dr. Robert Z. Lawrence of the Brookings Institution. The results presented in table 4 differ from those presented in Lawrence's recent paper, "Toward a Better Understanding of Trade Balance Trends—The Cost Price Puzzle," only in that a different lag operator was used on the relative price variable.

The results reported in table 4 indicate that both export and import volumes are highly sensitive to relative price changes, exports more so than imports. Both are also found to exhibit long-run income elasticities of demand greater than unity, in the case of imports almost as high as 3.0. The empirical finding of a long-run income elasticity for imports far above that for exports is common in studies such as this and has been singled out as an important source of potential trouble in the U.S. balance of payments [Houthakker and Magee, 1969]. This is an issue which will be subsequently addressed in some depth, for estimates of the long-run income elasticities of demand may contain systematic biases which distort estimated coefficients.<sup>3</sup> Finally, both exports and imports are significantly affected by the state of the business cycle (see table 4).

The elasticity coefficients reported in table 4 explain the impact of a *given* change in each of the independent variables on the dependent variables (export and import volumes). Multiplying *actual* changes in each of the independent variables by its respective elasticity coefficient provides a measure of the contribution of changes in each independent variable to observed changes in the dependent variables. This exercise is carried out in table 5 in an effort to delineate long-run and short-run factors underlying U.S. trade performance in manufactures over the past 15 years.

As shown in table 5 (columns 4 and 9), long-run income growth in the United States and abroad has had a large, steady, positive impact on the growth of U.S. exports and imports. The income growth factor for imports is of course greater than for exports principally because of the higher (estimated) import-income-elasticity coefficient. But perhaps more significant is the fact that the difference between long-run import and export growth (columns 4 and 9) has increased in recent years. This phenomenon can be traced to the slowdown in growth in Western Europe and Japan since 1973, while the United States has continued to expand capacity (potential output) at a steady pace.

These trends could contain alarming implications for the future of the U.S. trade balance; for they suggest, other things equal, an acceleration in the secular deterioration of the U.S. trade balance. For reasons which will be discussed in more detail later, other things are not likely to be equal; the long-run slowdown in demand for U.S. exports may well be accompanied by a long-run slowdown in supply of imports to the United States, a phenomenon which would be reflected in a falling long-run income elasticity coefficient for U.S. imports. Estimates of the U.S. income elasticity of demand for imports have been found to be notoriously unstable over time, primarily because changing supply conditions in the rest of the world have been ignored [Hooper, 1978]. The failure to consider the supply side in analyzing export and import performance can lead (and has led) to misinterpretation of past experience and future prospects.

<sup>3</sup> Other coefficients as well may be biased; however, because they exhibit expected signs and reasonable values, the problem does not appear to be as severe as with the income elasticity coefficients.

TABLE 5.—THE DETERMINANTS OF CHANGES IN THE VOLUME OF U.S. MANUFACTURED EXPORT AND IMPORTS: 1963-77

[Annual percentage change]

Year	Volume manufacture exports X (1)	Due to—				Volume manufacture imports M (6)	Due to—			
		Relative prices $-1.904 \times$ RPX (2)	Income cycle $1.312 \times$ (Q/Q*) <sub>ROW</sub> (3)	Long-run income $1.285 \times$ Q* <sub>ROW</sub> (4)	Unexplained residual UM (5)		Relative prices $-1.593 \times$ RPM (7)	Income cycle $1.737 \times$ (Q/Q*) <sub>US</sub> (8)	Long-run income $2.940 \times$ Q* <sub>US</sub> (9)	Unexplained residual UM (10)
1963	6.92	-1.10	-1.40	8.39	-1.03	5.56	0.21	1.18	9.38	-5.21
1964	16.66	-1.74	2.76	8.26	3.90	9.19	1.59	3.03	9.93	-5.36
1965	1.18	.42	.60	7.99	-6.63	17.33	.60	3.77	10.43	2.53
1966	5.71	-.35	-1.31	8.34	-.97	16.74	1.03	4.00	10.24	1.47
1967	8.53	-3.17	-3.21	8.29	6.62	2.05	.87	-1.13	9.79	-7.48
1968	11.91	-2.57	4.13	8.04	.47	21.38	.50	1.68	9.74	9.46
1969	7.07	-2.65	4.42	7.89	-2.59	5.22	.39	-1.53	10.06	3.70
1970	4.41	-2.51	-.38	7.96	.66	5.11	.90	-7.17	11.17	.21
1971	1.34	.23	-4.91	7.95	-1.93	8.53	-3.68	-1.81	11.74	2.28
1972	8.19	4.95	-1.85	7.76	-2.67	14.43	-5.75	2.47	12.20	5.51
1973	21.05	9.43	4.06	7.29	.27	4.42	-5.46	2.26	11.82	-3.85
1974	16.19	10.55	-4.43	4.67	5.40	1.62	-5.81	-9.35	11.76	5.02
1975	-3.35	6.66	-17.21	6.37	.83	-20.90	-8.64	-9.12	11.53	-14.67
1976	2.53	-2.98	4.00	5.80	-6.48	18.26	-4.85	3.32	11.64	8.15
1977	-1.16	-4.98	.29	5.27	.58	11.89	.00	1.08	12.29	1.48

Source: Same as table 4.



Perhaps the most interesting results contained in table 5 pertain to the effect of changes in relative prices and the business cycle. The impact of major swings in the business cycle in recent years—1970–71 recession, 1973 boom, and disastrous 1974–75 recession—all show up clearly in the results. Perhaps most interesting of all, however, are the results relating to the impact of relative price movements on the volume of manufactured goods traded. These results are important because of the widespread skepticism that prevails outside the economics profession concerning the price sensitivity of international trade despite ample econometric evidence to the contrary [e.g., Lawrence, 1978; Magee, 1975].

The impact of relative price changes on growth of exports and imports exhibits a clear pattern: relative prices moved steadily against U.S. export- and import-competing industries until 1971, after which the United States steadily gained price competitiveness until 1976 when the trend (for exports) once again reversed itself. Relative prices depend largely on relative costs of production, the most important component of which is labor, and exchange rates. Table 6 (columns 1, 2, and 3) presents data on unit values of manufactured exports, unit labor costs in manufacturing and unit current costs (including intermediates and fuel) in manufacturing for the United States relative to the U.S. trade-weighted average of other OECD countries. Column 4 shows the “effective” exchange rate of the dollar (trade-weighted average foreign-currency price of the dollar).

Some important conclusions emerge from table 6. First, comparing columns (1) and (4) reveals that the loss of U.S. price competitiveness in the 1960's was partly the result of nominal exchange rate appreciation, and partly due to a rise in relative export prices *per se*; the significant improvement in price competitiveness in the 1970's is attributable almost wholly to the devaluation of the dollar from 1969 to 1974. From 1974 to 1976 the dollar appreciated on average with a significant (but lagged) negative impact on U.S. export performance in 1976 and 1977 (as shown in table 5). Comparing columns (2) and (3) with column (1) suggests that the profitability of exporting in the United States has increased tremendously relative to other countries, since relative unit costs have fallen considerably more than relative export prices (unit values). This evidence implies that in addition to advantages gained on the demand side by falling relative export prices, there should have been as well strong supply side incentives in the United States to increase (and in the rest of the world to reduce) the rate of export expansion. Attempts to test this hypothesis proved unsuccessful, perhaps because cost movements in manufacturing as a whole fail to reflect accurately enough cost movements in the subsector of export industries, particularly in dualistic economies such as Japan.<sup>4</sup>

To summarize, recent trade deficits (1976–78) have in large part resulted from declining terms of trade, but the declining volume of net exports has contributed as well. The recent decline in terms of trade is largely but not exclusively an oil price phenomenon; dollar devaluations have produced negative changes in the terms of nonoil trade as well. Declining net export volumes in recent years are attributable to deteriorating price competitiveness from 1974 to 1977 and

<sup>4</sup> Robert E. Lawrence reports evidence to this effect in his paper, “Toward a Better Understanding of Trade Balance Trends—The Cost Price Puzzle,” *Brookings Papers in Economic Activity*, forthcoming.

the failure abroad to recover from the 1974 to 1975 recession. Robert Lawrence [1978, p. 182] in a recent study likewise finds that "about half the decline in the [trade] balance [from 1975 to 1977] is associated with oil, a quarter with the failure of cyclical recovery abroad and roughly one-fifth with competitive deterioration."

TABLE 6.—INDICATORS OF U.S. INTERNATIONAL PRICE COMPETITIVENESS IN MANUFACTURING

[Indexes 1979=100]

	Relative export unit values <sup>1</sup> (U.S. dollars)	Relative unit labor costs <sup>1</sup> (U.S. dollars)	Relative current costs <sup>2</sup> (U.S. dollars)	Effective exchange rate <sup>2</sup> for currency (dollars)
	(1)	(2)	(3)	(4)
1963	94.7	97.9		
1964	94.3	96.3	97.4	98.6
1965	96.6	92.4	96.1	98.6
1966	97.7	92.3	93.5	98.6
1967	98.2	95.3	92.3	98.7
1968	99.5	99.6	94.5	99.0
1969	101.6	102.1	98.3	101.0
1970	100.0	100.1	100.8	101.2
1971	97.6	92.3	100.0	100.5
1972	91.8	82.9	95.1	97.5
1973	85.2	75.3	85.6	91.4
1974	84.5	75.3	78.6	84.2
1975	88.1	70.2	78.7	85.2
1976	92.0	71.3	76.7	84.6
1977	89.0	71.1	76.6	88.3
			76.3	87.9

<sup>1</sup> Ratios of U.S. index to a weighted average of 14 OECD countries. Weights are derived using the IMF multilateral exchange rate model.

<sup>2</sup> Weighted average price of U.S. dollar in 14 OECD countries.

Source: OECD, "International Competitiveness of Selected OECD Countries" "Occasional Studies," July 1978.

The question raised at the outset was whether recent deficits are cyclical or secular phenomena. It is difficult to consider the contribution of rising oil prices to U.S. deficits to be cyclical; oil prices after all are only going to increase (in relative terms) in the future. But, neither can one consider deficits due to rising oil prices to be symptomatic of fundamental loss of competitiveness in the traditional sense. Rather, current and expected future oil deficits constitute a structural (and probably secular) problem in our balance of payments, which under certain circumstances might necessitate improving U.S. trade competitiveness in order to pay for an ever growing oil import bill. The contribution of falling real net exports to rising deficits, which can more appropriately be considered a competitiveness problem, is primarily the result of cyclical factors. Nevertheless, traditional analysis, along the lines of the export and import equations reported in table 4, suggests that a secular weakness in U.S. trade balance does exist.

#### *Long-Term Trends in the Trade Balance*

The pessimistic notion of a built-in weakness in the U.S. trade balance owes its origin to a widely quoted empirical study by H. S. Houthakker and Stephen P. Magee [1969], which on the basis of estimated export and import demand functions (similar in form to those estimated above) found (as in the results reported in table 4) a relatively low income elasticity of demand for U.S. exports (0.99) as compared to the U.S. income elasticity of demand for imports (1.51).

The implication of these results is that over the long-run the United States will be spared declining trade balances (or dollar devaluation) only as long as the United States manages to grow more slowly than the rest of the world. Japan, it was found, faces the opposite dilemma; the income elasticity of demand for Japanese exports was found to be 3.55 as compared to a Japanese income elasticity of demand for imports of only 1.23, implying that Japan would have to grow more rapidly than the rest of the world to prevent growing trade surpluses or secular appreciation of the yen.

The Houthakker-Magee effect clearly fails to capture recent trends; for both countries have satisfied the necessary conditions—the U.S. long-run growth falling below that of the rest of the world and Japan far above it—but with quite different outcomes. Furthermore, the Houthakker-Magee effect runs counter to what one would expect given the nature of the goods in which the United States and Japan find comparative advantage. U.S. exports are concentrated in high technology capital goods and consumer goods within the early stage of the product cycle—the income elasticity of demand for which one would presume to be relatively high, higher in fact than for Japanese exports which until recently contained a relatively large component of standardized, labor-intensive consumer goods.<sup>5</sup> The Houthakker-Magee effect, therefore, constitutes something of a paradox.

The paradox is resolved when one looks more closely at the methodology by which demand elasticity parameters are obtained. The critical assumption is that supply (both of exports and imports) is infinitely elastic, responding passively to changes in demand. Without this assumption the estimated coefficients can not be interpreted as pure demand parameters, and instead must be regarded as the combined result of supply and demand factors, the relative contribution of which is unidentifiable.

Econometric evidence of the relative importance of supply in determining export performance is emerging in the literature.<sup>6</sup> However, intuitive but nevertheless persuasive evidence of the importance of supply (i.e., domestic growth) is given in table 7, which shows the uniform ranking of real gross domestic product (GDP) growth rates and real export growth rates among the eight major industrialized countries from 1950 to 1970. If, as the data in table 7 suggest, export growth over the long-run is determined more by growth of domestic supply than by growth of foreign demand, then it follows that regressions of foreign income on export volume will tend to yield high income elasticity coefficients for relatively fast growing countries, and low coefficients, for relatively slow growing countries. This is in fact precisely the result that Houthakker and Magee obtained, as is shown in the last column of table 7.<sup>7</sup>

The implication of this interpretation of the Houthakker-Magee results is not that the United States is exempt from a secularly declining trade balance, but that if the phenomenon exists, it is attributable to relatively slow long-run growth of the U.S. economy and not to an unfortunate set of demand parameters. In the short run, the balance of payments is of course negatively related to the rate of growth. An

<sup>5</sup> Note: Houthakker-Magee estimates were run over the period 1951-66.

<sup>6</sup> See for example, Sato (1978), Goldstein and Khan (1978), Donges and Riedel (1977).

<sup>7</sup> A correlation coefficient of 0.8 was obtained in a correlation of Houthakker-Magee income elasticity of export estimates and the rates of economic growth for the 14 countries they studied.

TABLE 7.—REAL GDP AND EXPORT GROWTH RATES IN SELECTED INDUSTRIAL COUNTRIES: 1950-70

[In percent]

Country	Real GDP growth			Real export growth			Estimated export income elasticity <sup>1</sup>
	1950-60	1960-65	1965-70	1950-60	1960-65	1965-70	
Japan.....	8.7	10.2	12.4	14.5	15.9	3.55	
West Germany.....	7.9	5.0	4.8	16.9	7.0	2.08	
Italy.....	6.1	5.1	6.0	13.6	12.1	2.95	
Netherlands.....	4.5	5.1	6.0	9.6	7.0	1.88	
France.....	4.4	5.9	5.8	5.8	6.8	1.53	
Canada.....	3.9	5.8	4.8	3.7	7.8	1.41	
United States.....	3.3	4.9	3.5	5.2	6.6	.99	
United Kingdom.....	2.8	3.3	2.5	2.6	3.5	.86	

<sup>1</sup> Estimated income elasticity of demand for exports by H. S. Hauthakker and S. Magee (1969), p. 113.

Source: The World Bank, "World Tables 1976," and Hauthakker and Magee (1969).

upswing in the domestic business cycle expands the demand for imports beyond foreign demand for exports, and by straining existing capacity can lead to falling productivity and declining competitiveness. This characterizes the situation in the U.S. economy in 1977 and 1978. In the long-run, however, growth derives primarily from capital accumulation and technological change which together increase productivity and enhance international competitiveness. Faster growing countries have a greater opportunity to introduce process and product innovations that allow a country to enjoy a "dynamic comparative advantage" [Sato, 1977]. Moreover, faster growing countries encounter lower adjustment costs to rising imports which are of course part and parcel of the same process of dynamic comparative advantage.

It is one thing to argue that long-run growth at a rate slower than that of the rest of the world could cause a secular decline in the trade balance (or depreciation of the dollar), and quite another to argue that as a consequence government should do something to speed growth and prevent this possible outcome. Unfortunately, the two separate strands of argumentation are frequently intertwined by the tendency of observers to view the relatively slow growth of the U.S. economy as a "decline" [Gilpin, 1975], or in Charles Kindleberger's [1974] evocative term, a climacteric. In fact, the evidence is that the decline in the relative position of the United States over the last two decades is far more the result of accelerated growth in the rest of the world than deceleration in the United States. Of course, if one takes as an article of faith that the United States should strive to maintain its lead in the world economy, then it matters not whether our relative decline is the product of the rest of the world's catching up or our own slowing down. But, to accept the argument implicitly rejects the philosophy behind the U.S. postwar efforts to rebuild Europe and Japan and our current efforts to reduce the gap between rich and poor countries. Furthermore, to impose measures, in the name of international competitiveness, so as to attain a rate of growth that at least equals that of the rest of the world is to curtail sovereignty of the individual in choosing between work and leisure, savings, and consumption, the present and the future.

This is not to be construed as an argument that the current rate of growth in the United States is optimal or that government should do

nothing to accelerate it. There is far too much evidence that distorted incentives discourage saving and investment and misallocate resources in this country; and government bears a large part of the blame. The case for correcting this situation, however, should not be built on how it affects the trade balance, which is only one relatively unimportant manifestation of suboptimal growth in the U.S. economy. Appealing to government for a more rational growth policy in the name of international competitiveness not only defies logic but is likely, if successful, to bring forth suboptimal policy responses which while perhaps increasing growth may at the same time create distortions elsewhere in the economy.

If the likelihood of accelerated long-run growth in the U.S. economy (or more precisely the lack of it) leads to a pessimistic view of the secular trend in the U.S. trade balance, the outlook for economic growth in the rest of the world may be more encouraging—that is, if there is concern about the relative position of the United States in the world economy. All the leading indicators, and best estimates of the international organizations involved in predicting the future, suggest a long-run slowdown in Western Europe and Japan, with a convergence of economic growth rates among the industrialized countries. According to World Bank [1978, p. 19] estimates over the decade 1975–85, North America is expected to grow within one-tenth of 1 percent of the industrialized countries' average, at a rate about 1 percent above what is expected for Western Europe and 1 percent below what is expected for Japan. Certainly the extraordinary events of the 1970's are an important ingredient of the future growth scenerio, but the convergence is as well a natural consequence of Western Europe and Japan having caught up with the United States. Without the tremendous store of readily available technology that the U.S. technological lead provided, Europe and Japan could never have advanced so rapidly. But, having narrowed the gap, these countries have now to draw more heavily on their own resources for technological change, as the United States as the leader has had to do all along. Thus, rising proportions of GNP devoted to research and development in other industrialized countries should not, as is so often the case, be taken as a sign of our own failure, but recognized as a welcome sign that other countries are at last prepared to bear a part (but still a relatively small, part) of the cost of extending technological frontiers.<sup>8</sup> For, as concluded in a recent study by Rachel McCulloch [1978, p. 60], "Narrowing of the technology gap between the United States and its trading partners can yield benefits to the United States through lower import prices and expanded opportunities to adopt technological innovations originating abroad."

Again, it is important to stress that this is not an argument that current U.S. research and development policy is adequate. As McCulloch (p. 61) notes, "Because knowledge is a 'public good,' governmental support for R. & D. particularly in the area of basic science, is required to ensure a socially adequate rate of production." And, in recent years U.S. government support in this area has declined. The case for a more active R. & D. policy, however, should be concerned with what is an adequate *absolute* (and not *relative*) level of expenditure given U.S. growth objectives.

<sup>8</sup> In absolute terms, U.S. R. & D. expenditures still dwarf those of all other countries combined (McCulloch, 1978, p. 59).

## III. DECLINING EXPORT SHARES

The discussion so far has been concerned with the level rather than the structure of exports and imports. As noted at the outset, concern about international competitiveness has focused as well on the changing structure of U.S. trade. On the one hand, the United States is losing world market shares fastest in those product categories in which its comparative advantage has traditionally been the strongest—capital-intensive, high-technology capital goods. On the other hand, the structure of U.S. (nonfuel) imports is shifting steadily from industrial raw materials to finished manufactures. This section investigates falling U.S. export shares in world markets and the next takes up the issue of increasing import penetration in manufactures. Both phenomena, like the secular deterioration in the U.S. trade balance, are, it is argued primarily manifestations of the changing structure of the world economy—the catching up of Western Europe and Japan.

Export shares of the United States, industrialized countries (excluding the United States) and developing countries (excluding OPEC) in total world trade, expressed both in value and in volume terms, are presented in table 8. In terms of both value and volume, the United States and the developing countries lost export shares to other industrialized countries from 1954 to 1972. After 1972, all three regions lost value shares due to the radical alteration in terms of trade caused by the OPEC oil price increase. In volume terms, however, export shares after 1972 exhibit no discernible trend.

TABLE 8.—VALUE AND VOLUME SHARES IN WORLD EXPORTS: 1954-77<sup>1</sup>

Year	United States		Other industrialized countries		Nonoil developing countries		Others	
	Value	Volume	Value	Volume	Value	Volume	Value	Volume
1954.....	18.3	18.0	45.8	41.8	20.6	16.5	15.3	23.6
1958.....	18.4	16.3	48.6	44.5	17.9	15.9	15.1	23.2
1962.....	17.3	15.0	52.4	48.3	16.1	14.7	14.2	22.1
1966.....	16.6	14.4	54.7	50.6	14.6	12.3	14.1	22.3
1970.....	15.2	12.7	58.2	43.2	13.1	11.5	13.5	27.6
1971.....	13.9	11.8	59.7	54.4	12.1	11.6	14.3	22.1
1972.....	13.2	11.9	60.2	54.2	12.3	12.0	14.3	21.9
1973.....	13.6	12.9	58.3	53.8	12.9	11.3	15.2	21.9
1974.....	12.7	13.1	52.5	53.8	12.7	11.2	22.1	21.9
1975.....	13.5	13.5	54.0	54.0	11.8	11.8	20.7	20.6
1976.....	12.7	12.4	53.3	54.4	12.2	12.2	21.8	21.0
1977.....	11.8	12.1	54.1	55.1	13.3	12.0	20.8	20.9

<sup>1</sup> Volume is computed by deflating export by an index of unit values, 1975=100.

Source: International Monetary Fund (IMF), "International Financial Statistics," Computer tapes.

The 15-percentage point gain of industrialized countries (outside the United States) in share of world trade is, of course, a natural consequence of their higher than average economic growth and the liberalization of trade accomplished both in the General Agreement on Tariffs and Trade (GATT) and through the formation of the European Economic Community. In manufactures, for example, approximately 50 percent of the increase in exports of all industrialized countries (including the United States) between 1963 and 1977 was accounted for by intra-European trade.

As shown in table 9, the United States, lost a considerable share of the Western European market to Japan as well. In 1963, U.S. manufactures exports to Western Europe were more than 6½ times greater than those of Japan, but by 1977 were only 1½ times greater. The loss to Japan is found to have been especially great in those sectors in which the U.S. export concentration is highest—engineering products and chemicals. The increase in the ratio of United States to Japanese exports of textiles and clothing to Western Europe between 1963 and 1977 highlights the dramatic shift in the structure of Japanese comparative advantage over the period 1963–77, since, as table 9 shows, the structure of U.S. exports to Western Europe hardly changed at all.

In the Japanese market, the United States has maintained its position against Western European competition relatively well. In the developing countries, which today constitute the single largest market for U.S. exports, however, the United States has steadily fallen behind the more rapidly growing exports of Western Europe and especially Japan.

The loss of export shares, particularly in engineering goods, is a logical concomitant of more rapid industrial growth in Western Europe and Japan. Nevertheless, relative price performance of U.S. exports can as well affect market shares and may in fact be an important explanation of recent fluctuations in U.S. export market shares. To test this hypothesis, distributed-lagged percentage changes in U.S. manufactured export prices (unit values) relative to the U.S. trade-weighted average of manufactured export prices of other OECD countries ( $\Delta RP$ ) are used in regression analysis to explain changes in U.S. manufactured export shares ( $\Delta XSH$ ), the latter variable defined as the difference between the percentage change in the volume of U.S. manufactured exports and the percentage change in the volume of manufactured imports in 24 OECD countries and eight groups of non-OECD countries averaged together by the weight of each country or region in U.S. total manufactured exports. The following results were obtained for the period 1964–77 (t-statistics are in parentheses and  $u$  stands for the unexplained residual):<sup>9</sup>

$$\Delta XSH = -1.72 - 0.65 (\Delta RP) + u$$

(-2.99)	(-3.00)	
R <sup>2</sup> = .472	S.E.E. = .019	D.W. = 1.938

The results reported above verify that relative price movements have been a statistically significant determinant of changes in U.S. shares in manufactured exports. They further show that independent of changes in relative prices, U.S. export shares can be expected to decline at a rate of 1.72 percent per year, which is in major part the concomitant of more rapid export growth in competing countries.

<sup>9</sup> Source: OECD, "International Competitiveness of Selected OECD Countries", Occasional Papers, July 1978; OECD Economic Outlook, December 1978; OECD, Series A, Trade by Country, various issues.

TABLE 9.—U.S. EXPORTS BY COMMODITY AND DESTINATION: 1963-77

Commodity	Export destination (millions of dollars)													
	Japan				Western Europe				Developing countries, including OPEC				Excluding OPEC	
	1963	1970	1973	1977	1963	1970	1973	1977	1963	1970	1973	1977	1973	1977
Primary.....	11,120.0	2,138.0	5,010	6,670	2,961	4,138	7,870	11,960	2,455	3,249	6,420	9,920	5,520	7,830
Food.....	476.3	1,083.0	2,770	3,600	1,870	2,532	5,880	8,380	1,860	2,253	4,880	6,680	4,110	5,130
Manufacturers.....	571.4	1,951.0	3,130	3,720	3,592	9,365	12,750	20,420	4,740	8,684	13,000	29,620	10,550	19,060
Nonferrous metals.....	17.2	86.6	200	90	247	507	400	460	96	237	220	280	200	220
Iron and steel.....	9.1	23.3	20	20	87	486	210	210	302	459	510	740	460	440
Chemicals.....	168.9	353.2	690	1,080	691	1,571	2,130	4,170	741	1,359	2,120	4,130	1,870	3,430
Wood products.....	3.2	45.9			95	236			83	226				
Engineering products.....	338.3	1,274.8	1,660	1,920	2,093	5,840	8,270	12,810	3,927	5,360	8,500	21,210	6,650	12,660
Textiles.....	5.4	19.4	120	50	124	179	340	650	191	203	350	590	310	430
Clothing.....	2.6	3.3	10	20	26	53	50	170	53	124	170	350	160	300
Total <sup>1</sup> .....	1,686.9	4,569.0	8,180	10,420	6,583	13,662	20,840	32,600	7,422	12,243	19,870	40,160	16,460	27,380

Industry	Ratio of exports													
	United States/Western Europe to Japan				United States/Japan to Western Europe				United States/Japan and Western Europe to LDC's including OPEC				Excluding OPEC	
	1963	1970	1973	1977	1963	1970	1973	1977	1963	1970	1973	1977	1973	1977
Primary.....	11.12	10.69	8.35	10.13	19.74	20.69	31.48	38.58	1.48	1.15	1.22	1.00	1.35	0.89
Food.....	15.87	8.33	6.75	7.20	15.50	16.88	36.75	52.37						
Manufacturers.....	1.14	1.34	1.64	1.02	6.53	3.47	2.04	1.60	.41	.38	.32	.30	.36	.34
Nonferrous metals.....	.86	1.23	1.33	.75		12.68	10.00	7.67						
Iron and steel.....	.91	.77	.50	.78	1.45	1.27	.33	.23						
Chemicals.....	1.05	.98	.97	1.11	23.03	7.14	6.08	6.84	.48	.43	.36	.37	.40	.43
Wood products.....		4.59			9.40	23.60								
Engineering products.....	1.30	1.84	1.33	1.19	8.70	3.61	1.85	1.28	.66	.43	.38	.33	.41	.39
Textiles.....	.18	.19	.41	.23	1.76	1.78	2.61	2.83						
Clothing.....	.13	.11	.13	.13	1.32	1.76	1.25	3.40						
Total <sup>1</sup> .....	2.81	2.68	2.24	2.39	8.78	4.63	3.15	2.47	.55	.48	.43	.36	.48	.44

<sup>1</sup> Including commodities not classified according to kind.

Source: OECD, series B, "Trade by Commodities," various issues. GATT, "International Trade 1977/78," Geneva, 1978. GATT, "Networks of World Trade by Areas and Commodity Classes, 1955-76," Geneva, 1978.



The impact of relative price movements can be examined by multiplying annual changes in relative prices ( $\Delta RP$ ) by the estimated elasticity coefficient ( $-0.65$ ) to yield a measure of their contribution to observe changes in export shares. The results are reported in table 10. The loss of U.S. price competitiveness from 1966 to 1971 is shown to have added to the otherwise steady decline in U.S. export shares. The devaluation of the dollar from 1971 to 1974, which was discussed above, contributed positively to U.S. export shares and was significant enough to reverse the downward trend from 1972-1975. Over a quarter of the decline in export shares in 1976 and almost one half of the decline in 1977 is attributable to falling price competitiveness, the consequence of dollar appreciation from 1974-1977 (see table 6, above). Subsequent devaluation in 1977 and 1978 will again temporarily improve U.S. export shares, but exchange rate adjustments cannot (and should not) be expected to halt the downward trend over the long run.

Most analysts agree that exchange rate changes cannot prevent a secular fall in U.S. export shares. (See, for example, testimony by Dr. Michael Aho and Secretary Weil before the Senate Banking Committee, February 28, 1978.) Where the present author parts company with some who are concerned about falling export shares is with regard to the conclusion that since exchange rates cannot be relied upon to halt the decline, the United States needs an "export policy". In Aho's [1978, p. 93] view, this means "subsidies directed toward increasing the productivity of American workers and enhancing the competitiveness of industry", and more specifically, "subsidies for research and development by domestic industries." Certainly a case can be made for policy changes aimed at accelerating capital formation and technological change, possibly even greater subsidization of R. & D., but not for the purpose of maintaining export share in the aggregate or even in specific branches. Export shares largely reflect the relative size of country in the world economy, and as such contain little or no normative basis for formulating economic policy.

TABLE 10.—IMPACT OF RELATIVE PRICE CHANGES IN U.S. MANUFACTURED EXPORT SHARES: 1966-77

Year	Due to—			
	Change in U.S. market share	Change in relative price	Constant	Unexplained Residual
1966.....	-0.84	-0.48	-1.72	1.35
1967.....	-1.88	-1.07	-1.72	.91
1968.....	1.06	-.64	-1.72	3.41
1969.....	-3.37	-.69	-1.72	-.95
1970.....	-3.89	-.62	-1.72	-1.54
1971.....	-3.53	-.05	-1.72	-1.75
1972.....	-1.83	1.78	-1.72	-1.89
1973.....	1.45	2.95	-1.72	.22
1974.....	.64	3.55	-1.72	-1.18
1975.....	3.58	2.04	-1.72	3.26
1976.....	-4.20	-1.11	-1.72	-1.38
1977.....	-3.94	-1.76	-1.72	-.45

Source: See text, footnote 9.

#### IV. INCREASING IMPORT PENETRATION

Increasing penetration of U.S. markets by foreign suppliers cannot so easily be dismissed; not so much because the phenomenon reflects a fundamental weakness of the economy, but because adjustment to

rapid import penetration entails social and economic costs. Merchandise exports and imports have risen from about 4 percent of GNP in 1950 to almost 8 percent in 1978; but the primary cause of concern is in regard to the structure rather than the level of import penetration.

As shown in table 11, while the structure of U.S. exports has been remarkably stable over time, the structure of U.S. imports has changed dramatically. Of course, the greatest change occurred in oil imports, which have gone from about 10 percent of total imports before 1973 to over 30 percent in 1978. The structure of U.S. nonoil imports has, however, undergone almost equally dramatic change. U.S. imports of automobiles, which in 1950 were negligible and in 1960 were only 4 percent of nonfuel imports, today account for over 18 percent. Consumer goods have increased from about 7 percent to over 22 percent of nonfuel imports. Even capital goods imports, which in the 1950's accounted for no more than 2 percent of nonfuel imports, today constitute over 13 percent. The corresponding declining shares have, of course, occurred in nonfuel industrial raw materials and agricultural goods.

TABLE 11.—THE STRUCTURE OF U.S. NONFUEL EXPORTS (X) AND IMPORTS (M): 1950-78  
(In percent)

Product	1950	1955	1960	1965	1970	1971	1972	1973	1974	1975	1976	1977
Foods, beverages, feeds:												
Exports.....	15.6	14.7	16.0	18.5	14.0	14.2	15.5	21.7	19.5	18.5	17.8	16.9
Imports.....	31.6	29.5	24.3	20.4	16.7	15.2	14.3	14.9	14.0	13.7	13.4	13.6
Nonfuel industrial supplies and materials:												
Exports.....	37.7	34.2	35.8	25.8	29.3	26.3	26.1	22.8	28.2	24.8	24.8	24.9
Imports.....	58.5	55.1	46.8	45.6	32.7	31.7	30.5	30.2	34.0	31.6	30.6	30.3
Capital goods:												
Exports.....	22.6	21.3	27.9	30.2	34.5	35.5	34.6	31.0	31.5	34.5	34.8	33.8
Imports.....	1.3	2.4	4.2	7.6	10.3	9.8	10.9	12.4	12.6	14.0	12.7	13.1
Automobiles and transport equipment:												
Exports.....	7.9	8.9	6.4	7.3	8.8	10.3	10.6	9.1	8.6	9.8	10.2	10.5
Imports.....	0.3	0.8	4.0	4.7	16.1	18.9	18.4	17.8	16.4	17.3	18.8	18.3
Consumer goods:												
Exports.....	8.9	7.8	7.1	6.8	6.5	6.7	7.2	6.8	6.6	6.3	7.2	7.6
Imports.....	6.5	9.4	14.1	17.1	20.4	20.4	22.4	21.6	19.6	19.2	21.4	22.0
Other, not elsewhere classified:												
Exports.....	7.4	13.1	6.7	7.2	6.8	7.1	6.2	5.7	5.6	6.2	5.3	6.1
Imports.....												
Addendum: Share of fuel in total:												
Exports.....	8.0	7.0	4.0	3.4	3.5	3.4	3.1	2.7	3.7	4.4	4.1	4.0
Imports.....	6.7	8.9	10.5	10.3	7.6	8.1	8.8	11.9	25.2	27.4	28.7	30.5

Note: Percentage shares may not sum to 100 due to rounding errors.

Sources: U.S. Department of Commerce, "U.S. Exports and Imports Classified by End-Use Categories, 1923-1968," supplement to Survey of Current Business 1970. U.S. Bureau of Census, "Highlights of U.S. Export and Import Trade," FT990, various issues.

The steadily increasing share of manufactures in U.S. imports is certainly a sign of changing comparative advantage, at least in a definitional sense. It is evident, however, that this shift is a product of changes in the structure of the world economy rather than change in the structure of the U.S. economy for at least two reasons. First, it is important to note that the structure of U.S. exports has undergone little change; the comparative advantage of U.S. manufactures in world markets has remained remarkably stable over three decades. Second, there is no evidence that import-competing branches of the U.S. manufacturing sector have performed significantly worse than

the manufacturing sector overall or even exporting branches. Table 12 shows weighted average annual rates of labor productivity change in 20 two-digit ISIC manufacturing branches—the weights being the proportion of exports, imports, and total shipments, alternatively in each branch. As one would expect, labor productivity growth is highest in the export sector. But, what is more remarkable is that productivity change has been almost uniform across manufacturing branches. This, of course, reflects the maturity and absence of industrial dualism in the U.S. economy.

Attributing shifts in United States comparative advantage to changes in the structure of the world economy does not imply that there are no important policy implications. The implications, however, are considerably different from those which follow from the conclusion that the shifts are symptomatic of internal deterioration in competitiveness. In the latter case, the policy recommendation is generally to shore up domestic industry and prevent further competitive loss, whereas in the former the general recommendation is to implement policies which lower the cost, spread the burden and speed the rate of adjustment to import penetration.<sup>10</sup> In cases where rising import penetration constitutes a threat to national security, or compromises other noneconomic social objectives, industrial subsidies or import restrictions may be called for. But such measures should be justified *ad hoc*, rather than as a general reaction to increasing import penetration.

TABLE 12.—WEIGHTED AVERAGE ANNUAL PERCENTAGE CHANGE OF LABOR PRODUCTIVITY IN MANUFACTURING BRANCHES: 1955-77<sup>1</sup>

	1955-59	1960-64	1965-69	1970-77	1955-77
Weighted by the share of each branch in:					
Exports.....	4.17	4.30	2.57	3.48	3.60
Imports.....	3.94	4.11	2.28	3.29	3.39
Total shipments.....	4.15	3.39	2.45	3.24	3.42

<sup>1</sup> Manufacturing branches aggregated at the ISIC 2-digit level. ISIC 20-39.

Sources: Labor productivity indexes derived from Data Resource, Inc. data tapes in the Brookings Social Science Computer Center. Branch weight derived from Trade Relations Council, "Employment, Output and Foreign Trade of U.S. Manufacturing Industries, 1958-71," Washington, D.C., 1978.

## V. CONCLUSION

Is the United States losing international competitiveness? The most commonly cited symptoms—trade deficits, declining export shares and increasing import penetration—leave little doubt that it is. Competitiveness after all is a relative concept. Thus, when every year U.S. exports claim a smaller share of the world market, imports claim a larger share of the domestic market and the negative difference between exports and imports grows larger, the United States is by definition losing competitiveness. What is relevant for policy, however, is not so much whether the United States is gaining or losing, but rather what the source is of change in its relative position in the world economy. Because of this, the common symptoms of changing competitiveness taken at face value provide little if any guidance for formulating economic policy.

<sup>10</sup> For an in-depth analysis of this issue see Charles Pearson [1979].

This paper argues that the symptoms of declining U.S. competitiveness are attributable far more to the catching up of other countries than to economic decline of the United States. The reconstruction of Europe and Japan, and the narrowing of the gap between rich and poor countries, has been a cornerstone of U.S. foreign economic policy since World War II. Thus, the declining share of the United States in world exports is perhaps more an indication of success than failure. The shifting structure of U.S. imports toward manufactures is also a concomitant of rapid postwar foreign industrial expansion; and it is, of course, through imports that the United States benefits from this expansion. This is not to imply that these benefits are obtained without adjustment costs, which to be shared equitably requires appropriate economic policy. The trade balance has as well been subject to downward secular pressure as a result of more rapid industrial growth abroad than in the United States although recent trade deficits are primarily the result of rising oil prices and adverse cyclical factors.

Severe economic problems among the more important including inflation, low rates of saving and investment, declining growth and productivity plague the U.S. and pose a serious challenge to policymakers. The implications of these problems for U.S. international competitiveness, however, are likely among the least important, and as such should not be the primary motivation for formulating policy remedies. Remedies should be applied at the source of the problem; invoking the international competitiveness issue as the motive for policy, although perhaps politically expedient, is less likely to give rise to measures that are effective in dealing with root causes of the country's problems, and is more likely to introduce additional distortions in the economy.

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# THE UNITED STATES CURRENT ACCOUNT: TRENDS AND PROSPECTS

By Robert Z. Lawrence\*

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## SUMMARY

This paper analyzes long run trends in the U.S. current account. The introductory section contrasts the volatile short run changes, which result from business fluctuations and unique events such as wars, embargoes and crop failures, which the strong and persistent long run trends, which reflect the evolution of the United States as a maturing creditor nation with a declining balance on merchandise trade and a growing surplus from investment income. The secular drain in the trade balance is the result of fundamental changes in international specialization caused by the diffusion of technology, changes in factor endowments and the depletion of natural resources. The United States has been able to sustain growing trade surpluses in commodities, such as food, chemicals and machinery, that require the relatively intensive use of its more abundant factors of production: land and skilled labor. On the other hand, these surpluses have been more than offset by the growing deficits in products which require the relatively intensive use of unskilled labor and capital and which are amenable to routinized methods of mass production.

After a brief overview of agriculture and fuels trade, the paper focuses on U.S. manufactured goods. As U.S. manufactured goods trade is highly sensitive to cyclical developments at home and abroad, a pair of regressions is used to separate the influences of changes in international cyclical developments from those of relative prices and long run output growth.

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Exchange rate changes have effectively altered the competitiveness of U.S. manufactured products, but they have required up to 3 years to have most of their effects. The dollar depreciations in 1971, 1973, and 1978 led to improvements in U.S. price competitiveness that were major offsets to the declining trend in the manufactured goods trade balance. The appreciation in 1975, on the other hand, contributed to the declines in 1977 and 1978. The price competitiveness of U.S. manufactured goods has been affected by relative inflation rates, the sectoral composition of foreign productivity growth and exchange rate changes. Movements in U.S. manufactured goods export prices have matched the general movements in U.S. manufacturing costs, but in several major industrial economies, export industry costs have not risen as rapidly as costs in overall manufacturing. As a result, maintaining U.S. international price competitiveness has required a relatively lower U.S. inflation rate or a decline in the U.S. exchange rate.

Unless offset by cyclical or relative price changes, over the long run the manufactured goods trade balance has tended to decline. The relative income demand elasticities for the manufactured goods the United States imports and exports cannot account for the trends. Supply-side factors such as technological change, capital accumulation, and economies of scale that have resulted from foreign economic development have caused the decline. While some have ascribed a major role to declining U.S. productivity growth since 1973, foreign productivity growth since 1973 has declined at least as much as that in the United States.

The growing surplus in the services accounts reflects the U.S. role as a provider of savings, managerial skills, technology, and private and official international liquidity to the rest of the world. The growing surplus from investment income results primarily from the U.S. net direct foreign investment position. Although foreign direct investment in the United States has grown rapidly in recent years, annual flows remain much smaller than those of U.S. direct investment abroad. Private portfolio investment has also led to a net surplus, partly from the interest rate spread that the U.S. capital market derives from operating as an international financial intermediary. On the other hand, the payments on foreign official holdings of U.S. Government debt have been a major debit item.

The next part of the paper looks toward the future. An econometric model and several commodity studies are used to project the current account in 1985 given the U.S. exchange rate as of December 1978 and some plausible assumptions about growth and inflation rates in the United States and the rest of the world. Rather than provide a forecast, the paper seeks to indicate whether adjustments will be needed and to indicate the effects of some alternative scenarios. Although the U.S. current account may improve as a result of cyclical and exchange rate developments in the early 1980's substantial deficits could emerge by the middle of the decade.

A high degree of uncertainty surrounds the projections. Can equations which reflect historic behavior be used for projection purposes? In the 1980's, will foreign industrial economies continue to enjoy the benefits of relative backwardness or will they be forced to assume more of the burdens of innovation? Will the relatively faster growth

in developing countries lead to generally smaller U.S. current account deficits or will larger OPEC surpluses make the deficits larger? Can the United States adopt and adhere to an effective program of energy conservation?

If the United States should run large current account deficits, these might be offset by sufficiently large capital inflows and require no further adjustments. On the other hand, historically, private foreign capital has flowed from the United States rather than to it, and the ability to avoid balance of payments adjustments has hinged upon the willingness of official foreign agencies to accumulate U.S. Government securities.

Should adjustment be called for, it should be compatible with other objectives such as inflation and unemployment, Macroeconomic measures that reduce expenditures relative to income must be coordinated with microeconomic policies that efficiently allocate resources toward the production and away from the consumption of tradeable goods. The United States should follow a mix of relatively tight fiscal and easy monetary policies that reduce private expenditures on consumption rather than investment. There are valid arguments for adopting measures that promote productivity and achieve important social objectives such as energy conservation, improved technical know-how and the diffusion of information. But an efficient adjustment to a current account deficit should depend upon an improvement in relative U.S. cost competitiveness to achieve the highest marginal benefits from resource allocation. The required improvement in relative U.S. competitiveness would ideally be achieved by lower inflation rates in the United States relative to rates in foreign economies. But if anti-inflationary measures fail, a devaluation of the dollar would be preferable to protectionist measures such as tariffs and quotas which inefficiently allocate the adjustment burden.

#### INTRODUCTION <sup>1</sup>

With the benefit of hindsight the historian can distinguish the transitory from the permanent, but the policymaker, required to respond quickly, is often lured by current events to make decisions which ignore the long run. A review of changes in the United States current account since 1950 suggests that the factors that dominate its short run movements often disguise its long run determinants.

Notice the volatility in the annual changes in the current account plotted in figure 1 and detailed in table 1. These fluctuations stem from a variety of causes: business cycles in the United States and in its trading partners, relative inflation rates, changes in exchange rates as well as particular events such as wars, embargoes, and crop failures. For each change there is a special story.

The surplus in 1951 reflected the rise in the demand for primary products (especially cotton, wheat, petroleum and coal) induced by

<sup>1</sup> The computations for this paper were done in early 1979. Since then, the increases in international oil prices have made the costs of U.S. oil imports projected for 1985 in the paper unrealistically low. On the other hand, President Carter has announced a commitment not to allow U.S. oil imports to rise above the 9.3 million barrels a day levels (measured on a balance of payments basis) that were achieved in 1977. This would be some 20 percent lower than the volumes projected in the base case scenario in this paper. On balance, however, these events point to a prospectively larger U.S. current account deficit projection for 1985 and have therefore increased the relevance of the policy discussion in the final section of the paper.



the world-wide inventory boom that followed the outbreak of the Korean war. The reversal of boom, when Europe and Japan experienced a contraction in activity, induced the subsequent decline. The surplus in 1957 resulted from: (1) rapid growth in the rest of the world at a time when contractionary policies had been applied in the U.S.; (2) the closing of the Suez Canal (which boosted sales of petroleum exports and raised the prices of metals exports); and (3) a higher than normal demand for U.S. agricultural goods because of poor European harvests. The reversal in 1958-59 reflected the rapid increase in U.S. imports at a time when the rest of the world was still in a contraction.

FIGURE 1.—Year-to-year changes in current account and merchandise trade balances, 1950-77 (billions of dollars).

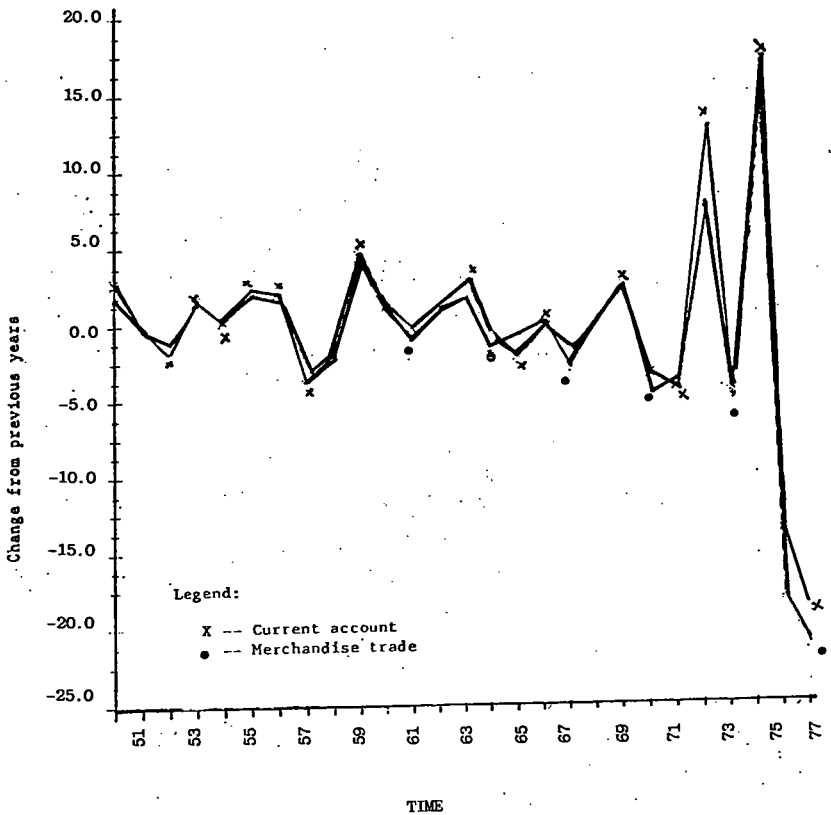


TABLE 1.—OVERALL CURRENT ACCOUNT BALANCE AND MAJOR COMPONENTS, 1950-77

[Billions of dollars]<sup>1</sup>

Year	Merchandise			Nonincome services	Investment income <sup>2</sup>	Unilateral transfers <sup>3</sup>	Current account balance
	Exports	Imports	Balance				
1950.....	10.1	9.1	1.0	-0.6	1.6	-4.0	-2.0
1955.....	14.3	11.5	2.8	-2.9	2.9	-2.5	.3
1960.....	19.6	14.8	4.9	-3.7	3.9	-2.3	2.8
1961.....	20.1	14.5	5.6	-3.6	4.4	-2.5	3.8
1962.....	20.8	16.3	4.5	-3.5	5.0	-2.6	3.4
1963.....	22.3	17.0	5.2	-3.5	5.4	-2.8	4.4
1964.....	25.5	18.7	6.8	-3.2	6.0	-2.8	6.8
1965.....	26.5	21.5	5.0	-3.1	6.5	-2.9	5.4
1966.....	29.3	25.5	3.8	-4.0	6.1	-2.9	3.0
1967.....	30.7	26.9	3.8	-4.7	6.6	-3.1	2.6
1968.....	33.6	33.0	.6	-4.4	7.3	-3.0	.6
1969.....	36.4	35.8	.6	-4.7	7.5	-3.0	.4
1970.....	42.5	39.9	2.6	-4.8	7.9	-3.3	2.4
1971.....	43.3	45.6	-2.3	-4.5	9.1	-3.7	-1.4
1972.....	49.4	55.8	-6.4	-5.8	10.1	-3.9	-6.0
1973.....	71.4	70.5	.9	-4.5	14.3	-3.9	6.9
1974.....	98.3	103.6	-5.3	-4.1	18.4	-7.2	1.7
1975.....	107.1	98.0	9.0	-2.0	16.1	-4.6	18.4
1976.....	114.7	124.0	-9.4	-5	19.2	-5.0	4.3
1977.....	120.6	151.6	-31.1	-5	21.0	-4.7	-15.2

<sup>1</sup> Figures may not add due to rounding.<sup>2</sup> Includes fees and royalties paid by affiliates.<sup>3</sup> Excluding military grants.

Sources: Survey of Current Business, various issues; and Bureau of Economic Analysis, unpublished data.

More recently, the massive surplus in the current account in 1975 resulted from the confluence of several factors each of which tended to increase the balance. For most of the year, the U.S. economy was in its deepest postwar recession while many of its trading partners had experienced much smaller declines in output. U.S. imports, which are cyclically sensitive, declined in volume by 11.2 percent. At the same time, exports increased by 8.9 percent as a result of: (1) the expansion of the OPEC market; (2) the increase in capital goods investment that followed the bottlenecks of 1973 to 1974; and (3) a strong world grains market. In addition, U.S. manufactured goods enjoyed the full cumulative effects of the price advantage conferred by the dollar devaluations in 1971 and 1973.

The size of that 1975 surplus made the large deficit that emerged subsequently even more conspicuous. The rapid and sustained recovery in the United States boosted its imports, particularly those of oil and manufactured goods, while the economies in the rest of the world were either forced by balance of payments predicaments or by their fears of rekindling inflation to adopt more contractionary policies. At the same time, the delayed effects of the dollar revaluation in 1975 exerted an adverse influence on U.S. competitiveness in 1977 and 1978.

When it became apparent in 1977 that foreign growth prospects were poor, the dollar began to decline in value, a development which affected the trade balance in the traditional way. In the short run, higher import prices led to a further decline. In the first quarter of 1978 the trade balance reached an all time low \$47.6 billion annual rate. Later, however, the deficit narrowed as renewed foreign growth coincided with an improved U.S. competitive position and slower U.S. growth.

TABLE 2.—QUINQUENNIAL ANNUAL AVERAGES OF THE U.S. CURRENT ACCOUNT AND ITS MAJOR COMPONENTS

[In billions of dollars]

Period	Balance			Current account
	Merchandise trade	Services	Transfers <sup>1</sup>	
1950-54 .....	2.2	0.5	-3.0	-0.3
1955-59 .....	3.7	.2	-2.4	1.5
1960-64 .....	5.4	1.5	2.6	4.3
1965-69 .....	2.8	2.6	-5.1	2.4
1970-74 .....	-2.1	7.2	-4.4	.7
1975-78 .....	-17.1	19.3	-4.9	-2.7

<sup>1</sup> Remittances, pensions, and other unilateral transfers.

Source: 1978 Economic Report of the President.

*Long run trends.*—The reader will note the difference between the extreme volatility of the short run fluctuations in figure 1, and the persistence of the trends revealed in table 2. Table 2 summarizes the major trends in the United States current account over the last 29 years by indicating multiyear averages of the overall balance and its most important components. And while inflation makes the later balances larger it tells a clear story. In the first half of this period, the overall balance rose, reflecting the steady upward movements in both merchandise and services trade. In the following 14 years, the balance declined as the continued increase in the services surplus was offset by the falling trade balance and a substantial (albeit a declining) balance on remittances and unilateral transfers.

Table 3 gets behind the trade balance movement by indicating the changes in terms of trade (the ratio of export to import prices) and in relative export and import volume growth rates. The early increases in the trade balance were mainly the result of improvements in the U.S. terms of trade. In the mid-1960's, however, the volume of imports grew much more rapidly than that of exports and more than offset the continued terms of trade improvements. Since 1970, the terms of trade decline has been the major source of the deficit's growth. From 1970 to 1978, for example, while imports grew only 4 percent more rapidly than exports in volume, import prices rose about 20 percent more rapidly than export prices.

Of course the relative price and relative volume movements are behaviorally interrelated. Relatively higher U.S. manufactured export prices in the 1960's facilitated the rapid import penetration of foreign manufactured goods, while in the 1970's, cheaper U.S. exports, because of a declining dollar, have been required to offset some of the adverse consequences of the continued growth in the volume of manufactured imports as well as the increased price of oil.

TABLE 3.—QUINQUENNIAL ANNUAL AVERAGES OF U.S. MERCHANDISE TRADE VOLUMES AND PRICES

[1975 equals 100]

Period	Volumes		Prices	
	Exports	Imports	Exports	Imports
1950-54 .....	27	26	43	40
1955-59 .....	35	34	45	41
1960-64 .....	43	43	47	39
1965-69 .....	58	71	51	42
1970-74 .....	82	105	67	60
1975-78 .....	105	126	108	109

Source: International Monetary Fund, International Financial Statistics.

An examination of the multiyear averages reported in table 4 reveals the strength and persistence of trend developments in the composition of trade. In this table, U.S. merchandise trade is divided into end-use category balances. In almost every column the balance figures move smoothly in one direction with foods, feeds and beverages, chemicals and capital goods rising steadily, while balances of trade in consumer goods, automotive vehicles, and for the most part, industrial supplies and materials declined.

The Hecksher-Ohlin theory of international trade predicts that an economy will specialize in the production of commodities which require the relatively intensive application of its more abundant factors of production. The trade patterns of the United States over the past 30 years corroborate the predictions of the theory.<sup>2</sup> The U.S. has sustained growing surpluses in commodities which require the relatively more intensive application of land and skilled labor, while it has incurred growing deficits in commodities which can be manufactured by capital or labor-intensive methods of production or which require resources which have been depleted, e.g., oil.

TABLE 4.—TRADE BALANCE BY END USE CATEGORY  
[Multiyear averages, in billions of dollars]

	Industrial supplies and materials										Foods, feeds, and beverages
	Total	Total	Fuels and lubri- cants	Metals	Chem- icals	Other	Con- sumer durables	Con- sumer non- durables	Auto- motive vehicles	Capital goods	
1950-54..	0.82	-0.96	-0.68	-0.75	0.53	-0.05	0.05	0.45	0.97	2.48	-1.17
1955-59..	3.65	-.54	-.13	-.62	.79	-.58	-.09	.34	.87	3.74	-.67
1960-64..	5.74	-.57	-.95	-.58	1.28	-.31	-.54	.09	.81	5.61	-.34
1965-69..	3.35	-2.42	-1.34	-2.38	1.79	-.49	-1.54	-.48	-.13	7.65	2.27
1970-74..	-1.84	-7.96	-6.98	-4.07	2.87	.21	-4.39	-1.96	-3.66	13.44	2.69
1975-77..	-9.59	-29.86	-30.66	-6.32	5.39	1.74	-6.26	-3.03	-4.35	26.19	7.72

This paper analyzes these trends. In the next section I will provide a brief discussion of developments in U.S. agricultural fuels and manufactured goods trade. Then I will quantify the key factors in the short, medium and long term behavior of manufactured goods trade. In the last section of the historical review, I consider trade in services. The United States has become a mature creditor country with an increased dependence on the rest of the world for goods which are acquired by providing services in return. As I will discuss below, the growing surplus in the service component—which reflects the contributions of the U.S. as a provider of savings, banking services, technology, managerial skills and official and private international liquidity—provides an offsetting influence to the decline in the trade balance. I then turn to the prospects for the medium run. Will these trends continue and if so what will this imply for the current account? I project the current account in 1985 and discuss its implications.

## I. AN OVERVIEW OF MAJOR TRADE COMPONENTS

### *Food*

The natural endowments of the United States make it particularly well suited for agricultural production, and the growth in the net

<sup>2</sup> While most studies have found a U.S. comparative advantage in highly skilled labor, the comparative advantage in capital intensive products is disputed. See W. Branson and N. Monoyios (1977).

export balance for trade in food, feeds and beverages reported in the last column of table 4 reflects the comparative advantage of the United States in this area. Although there have been periods such as the latter parts of the 1950's and 1960's when this balance has declined, in general it has had an upward trend. In the early 1950's, U.S. agricultural imports were particularly concentrated in noncompetitive products such as coffee and cocoa, the demand for which has not kept pace with the rise in income. At the same time, restrictive agricultural policies have hindered the free entry of competitive products (most notably sugar). As a result, food imports share in merchandise imports has shrunk from 18.7 percent in 1950 to 6.4 in 1977. On the other hand, foreign demand for grains and high protein feed has kept pace with the growth in demand for other merchandise exports.

### *Fuels Trade*

The record of the past 29 years also depicts the change in the role of the U.S. from an exporter of fuels (mainly coal) to a large net importer. In the years 1951-57, the U.S. surplus averaged some \$2.5 billion. Thereafter it declined but remained in a fairly steady deficit position through 1970. Then the value of fuel imports rose dramatically: from \$4.9 billion in 1972 to \$28.5 billion in 1975; \$47.4 billion in 1977; and about \$60 billion in 1979. This occurrence reflects the interaction of three factors: Continued growth in U.S. demand for fuels; a decline in domestic supplies; and the huge price hikes that were orchestrated by the OPEC cartel. Domestic production of crude oil declined from 9.4 million barrels a day in 1972 to 8.0 million barrels a day in the middle of 1977. Although total domestic consumption of petroleum products rose by only 14 percent over this period, the entire shortfall had to be made up by increased foreign supply. The share of foreign oil in total domestic consumption rose from 28.7 percent in 1972 to 48.2 percent in the second quarter of 1977.

The coming-on-stream of the Alaskan pipeline in mid-1977 reversed the trend of declining domestic supplies; and in 1978, although overall fuel consumption rose, for the first time in several years, the value of U.S. fuels imports actually dropped.

In 1979, however, political turmoil in Iran led to a substantial increase in world oil prices and by November of 1979, the average unit value for U.S. petroleum products imports of \$23.12 was some 74 percent higher than a year earlier.

## II. CYCLICAL PRICE AND SECULAR FACTORS IN MANUFACTURED GOODS TRADE

Manufactured goods account for approximately two-thirds of U.S. merchandise exports and about one-half of U.S. imports. Because most components in the remainder of U.S. trade (agriculture, fuel and other crude materials—primarily lumber and ores) generally have low income and very low price elasticities of demand and supply, manufactured goods are even more significant than these proportions would suggest in determining the overall responsiveness of the trade balance to changes in incomes and prices.

It is convenient to analyze the U.S. trade in manufactured goods in terms of three factors. Firstly, the state of the business cycle at home and abroad; secondly, changes in the relative prices of American goods and thirdly, longrun trend developments which reflect output growth at home and abroad. These factors can be separated with the aid of a regression analysis.

TABLE 5.—ANNUAL EQUATIONS FOR U.S. MANUFACTURED GOODS TRADE  
(Variables in logarithms, t-statistics in parentheses)

	C	Q/Q* <sup>US</sup>	Q/Q* <sup>ROW</sup>	Q* <sup>US</sup>	Q* <sup>ROW</sup>	RPX	RPM	Standard error	Durbin-Watson
X (1962-77).....	-9.4 (5.4)		1.24 (3.5)		1.30 (33.1)	$\frac{1}{2}$ -1.68 (4.9)		0.03	2.0
M (1963-77).....	-15.5 (3.2)	2.0 (2.8)		3.0 (16.8)			$\frac{3}{2}$ -1.4 (2.4)	.051	2.1

Sources: X is the volume of exports of manufactured goods (standard international trade classifications 5-8) from Department of Commerce data. Q<sup>US</sup> is GNP for the United States measured in 1972 dollars, from Comets Databank; Q\*<sup>US</sup> is Perry's annual estimates of potential GNP (George L. Perry, "Potential Output and Productivity," BPEA, 1:1977, pp. 11-47). Q<sup>ROW</sup> is actual manufacturing output in 6 major industrial countries (ROW) weighted by their 1970 shares in world manufactured goods trade; Q\*<sup>ROW</sup> is derived by similarly weighting the Artus estimates of the potential manufactured goods output of these countries. RPX is the ratio of unit values of U.S. exports of manufactured goods (from the Department of Commerce) to the United Nations unit value index for exports of manufactured goods (from various issues of United Nations, "Monthly Bulletin of Statistics"). M is the volume of manufactured goods imports adjusted to exclude automobile imports from Canada. Prior to 1968 it is formed from quantity indexes of imports of semifinished and finished manufactured goods. The numerator of RPM is the import-unit-value index for manufactured goods (standard international trade classifications 5-8). The 1963-67 values were estimated using coefficients from a 1968-77 regression of the import-unit-value index on finished and semifinished manufactured goods. The denominator is the U.S. manufactured goods wholesale price index with refined petroleum products removed. Both are from the Department of Commerce. RPM is multiplied by a tariff variable, which reflects the Kennedy Round reductions and 1971 import levy (obtained from Peter Hooper of the Federal Reserve System).

A set of equations estimated over the period 1962-77 on United States manufactured goods trade is reported in table 5. The volume of manufactured goods exports X was explained by three determinants designed to capture the major short, medium (1-3 years), and long-term influences on the volumes of manufactured goods trade. Exports X were explained by three independent variables: The ratio of actual to potential output in "the rest of the world" (Q/Q\*)<sup>ROW</sup>; distributed-lagged values of the ratio of the prices of United States manufactured goods to the United Nations index of unit values of manufactured goods exports (RPX); and the level of potential output in "the rest of the world" (Q\*<sup>ROW</sup>). Similarly, United States imports of manufactured goods (M) were related to the ratio of actual to potential GNP in the United States (Q/Q\*<sup>US</sup>), a distributed lagged value of the ratio of unit values of manufactured goods multiplied by a tariff variable to the price of domestic manufactured goods excluding refined petroleum products (RPM) and U.S. potential GNP (Q\*<sup>US</sup>). All variables are entered as logarithms so that the coefficients may be interpreted as elasticities.

### *Cyclical Effects*

Input volumes are very sensitive to the state of the business cycle. Changes in the demand for inventories heavily influence trade flows, and shortages that result from bottlenecks at home are met with purchases of foreign goods. The effects of changes in the business cycle on trade volumes are indicated by the coefficient on the (Q/Q\*). When

an economy experiences a boom this ratio will normally rise since actual output will grow more rapidly than productive capacity. Conversely, during a slump actual output renders resources idle so that  $(Q/Q^*)$  will decline. Each 1 percentage point rise in the ratio of actual to potential output will raise U.S. manufactured goods imports by about 2 percent. On the other hand, the similar magnitude of the coefficients of  $Q^*$  and  $Q/Q^*$  in the export equations suggest that output alone is a sufficient explanatory variable for U.S. manufactured exports. Thus a synchronized expansion in which  $Q/Q^*$  in the United States moved at the same rate as  $Q/Q^*$  abroad would result in a decline in the manufactured goods balance. *A fortiori*, an expansion in the United States unaccompanied by growth abroad leads to an even greater decline.

### *Price Effects*

A major influence on medium run (1-3 year) trade movements in manufactured goods is relative prices. Since manufactured goods are typically sold in markets characterized by imperfect competition, the prices of U.S. goods will differ from those of foreign competitors and thereby affect the volume of U.S. goods that will be bought and sold. In what follows, I will first discuss the major changes in relative U.S. prices over the past 27 years, and then report on what the effects of these changes have been upon the volume of imports and exports of manufactured goods.

As table 6 indicates, the relative price of U.S. manufactured commodities has passed through several phases. Through 1970, U.S. prices increased relative to those of other countries with most of the rise concentrated in the early 1950's and the late 1960's. (This is reflected in the multiyear averages in columns one and two.) Since 1970, however, the pattern has been more varied, with the most important changes coinciding with exchange rate changes. Rather than moving to offset changes in prices measured in domestic prices (as is suggested by the purchasing power parity theory of exchange rates) the remarkably parallel movement in the relative U.S. exports prices and the U.S. effective exchange rate suggests that measured in domestic currencies, export unit values in the United States have been quite similar to those abroad and that the exchange rate has been an important factor in changing relative price competitiveness (compare columns 1 and 4).

### *Productivity Cost and Price Competitiveness*<sup>3</sup>

The reason frequently given for the decline in U.S. relative price (and nonprice) competitiveness is that manufacturing productivity growth has been more rapid abroad than it has been in the United States. And in fact over the period 1950-77 output per man-hour in manufacturing rose at an average annual rate of 5.2 percent in other major industrial countries whereas it rose by 2.4 in the United States. But this does not constitute a full explanation. Over the same period the rise in wages abroad measured in U.S. dollars increased by so much more than those in the United States that relative U.S. unit labor costs in manufacturing actually declined by 35 percent.

<sup>3</sup> This section draws heavily on Lawrence (1979), in which the dualism in foreign economies is analyzed in greater depth.

TABLE 6.—INDICATORS OF THE U.S. COMPETITIVE POSITION

Year (average)	PX <sup>US</sup>	PWPI <sup>US</sup>	SULC <sup>US</sup>	E*
	PX <sup>UN</sup> †	PM <sup>US</sup>	SULC <sup>ROW</sup> ‡	
	(1)	(2)	(3)	(4)
1950-54	91			
1955-59	95	91	116	
1960-64	94	97	112	
1965-69	97	102	105	
1970	100	100	100	100
1971	98	96	94	97
1972	93	92	84	90
1973	85	86	73	82
1974	85	80	70	84
1975	87	78	67	82
1976	92	81	72	87
1977	88	91	71	85

Sources: Derived from official series of the Department of Commerce, Bureau of Labor Statistics, the Federal Reserve Board, the United Nations and the International Monetary Fund. Standard unit labor costs were estimated using the method described by Charles L. Schultze, "Falling Profits, Rising Profit Margins, and the Full Employment Profit Rate," (BPEA 2: 1975), pp. 449-69. The cyclical variables used in this estimation were those of Jacques R. Artus.

Symbols:

PX<sup>US</sup>—unit-value index of U.S. exports of manufactured goods.

PX<sup>UN</sup>—United Nations unit-value index of exports of manufactured goods.

PM<sup>US</sup>—unit-value index of U.S. manufactured goods imports.

PWPI<sup>US</sup>—producer-price index for finished goods.

E\*—Federal Reserve Board effective dollar exchange rate.

SULC<sup>US</sup>—U.S. standard unit labor costs.

SULC<sup>ROW</sup>—standard unit labor costs of 6 major industrial countries (ROW—Canada, France, Germany, Italy, Japan, United Kingdom) weighted by 1970 shares in world manufactured goods trade.

Table 7 reports data compiled by the Department of Labor on unit labor costs in manufacturing in the major industrial countries. Taken at face value, the data are surprising; particularly since the U.S. has fared so poorly in manufactured goods trade while Japan, Germany, and Italy have done so well. They indicate that, over the period 1960-1977, unit labor costs in United States manufacturing rose at an average annual rate of 3.4 percent, while those in Japan (measured in United States dollars) were up 8.3, Germany 8.4, and Italy 7.0 percent. In recent periods, this disparity is even greater. From 1970 to 1977 unit labor costs rose annually 6.1 percent in the United States, 17.1 percent in Japan, 13.3 percent in Germany and 10.6 percent in Italy. Since these data are index numbers they could simply reflect the fact that absolute costs (and prices) abroad were initially much lower than those in the United States—while rising at faster rates they increased less in absolute amounts. But, if this explanation is valid, one would expect to see prices abroad behaving in a similar fashion; as table 8 indicates, they have not.

U.S. export prices tracked standard unit labor costs quite closely until the OPEC price hike in 1973 raised the relative price of materials inputs (and thus the margin between prices and value-added in manufacturing).

On the other hand, the German, Italian, and Japanese data indicate marked downward movements in the ratio of export prices to standard unit costs.

What is the explanation for the strong negative trends in the behavior of export prices relative to those of other prices in manufacturing in Japan, Germany, and Italy?



TABLE 7.—UNIT LABOR COSTS IN MANUFACTURING FOR MAJOR EXPORTING COUNTRIES

[In U.S. dollars]

Year average	Canada	Japan	France	Germany	Italy	Sweden	Netherlands	United Kingdom	United States
1950 to 1954	91	87	87	65	72	63	54	64	77
1955 to 1959	103	87	89	70	75	76	63	81	90
1960 to 1964	96	90	90	88	87	87	77	91	96
1965 to 1969	98	103	99	99	99	98	98	96	100
1970	112	113	97	126	119	105	109	106	117
1971	116	131	103	143	136	116	121	118	118
1972	122	160	118	164	152	133	139	127	118
1973	127	195	146	212	173	149	174	133	123
1974	148	237	157	236	183	165	198	160	143
1975	167	285	203	270	245	217	248	200	152
1976	187	285	191	258	213	241	240	185	158
1977	184	327	202	293	234	259	272	200	168

Source: U.S. Bureau of Labor Statistics.

TABLE 8.—RATIOS OF MANUFACTURED GOODS EXPORT UNIT VALUES TO MANUFACTURING COSTS, 1960-77

[1970=1.00]

	Average					Post-oil price increase				
	1960-62	1963-65	1966-68	1969-71	1972	1973	1975	1976	1977	
United States:										
PXSULC <sup>1</sup>	0.96	0.97	1.00	0.99	0.98	1.01	1.22	1.23	1.22	
PXUC <sup>2</sup>	NA	.99	1.02	1.00	1.00	.99	1.11	1.15	1.15	
Japan:										
PXSULC	1.45	1.22	1.13	1.00	.88	.85	.91	.91	.94	
PXUC	NA	1.00	.96	.98	.86	.84	.77	.74	.76	
Germany:										
PXSULC	1.24	1.15	1.11	1.01	.90	.88	.93	.95	.94	
PXUC	NA	1.08	1.05	1.00	.90	.88	.90	.92	.91	
United Kingdom:										
PXSULC	1.04	1.01	1.01	1.00	.93	.96	.96	1.03	1.15	
PXUC	NA	.97	1.01	1.00	.97	.96	.95	.96	1.03	
Italy:										
PXSULC	1.45	1.19	1.12	1.00	.91	.84	.94	1.00	1.09	
PXUC	NA	1.08	1.05	1.00	.90	.89	.90	.91	.95	
France:										
PXSULC	1.04	.96	.95	.98	.94	.92	.98	.99	1.01	
PXUC	NA	.92	.95	.99	.97	.95	.96	.97	1.00	
Canada:										
PXSULC	.95	.99	1.00	.98	.94	.95	1.00	.97	.99	
PXUC	NA	.97	.96	.99	.96	.92	.94	.95	.92	

<sup>1</sup> PXSULC=ratio of U.N. export unit value index for manufactured goods to index of standard unit labor costs. Standard unit labor costs were estimated using the method described by Charles L. Schultze in "Falling Profits, Rising Profit Margins, and the Full-Employment Profit Rate," "BPEA 2:1975," pp. 449-469.

<sup>2</sup> PXUC=ratio of U.N. export unit value index for manufactured goods to OECD index of total unit costs for manufacturing.

NA=Not available.

Sources: Organization for Economic Cooperation and Development, "OECD Economic Outlook: Occasional Studies" OECD, July 1978), table 2, and U.S. Bureau of Labor Statistics, and U.N. Monthly Bulletin of Statistics, various issues.

Several alternative hypotheses can be advanced. The first is that firms manufacturing for export in these countries have been prepared to cut their profit margins. This explanation is credible as a short run response to competitive pressures, but it is scarcely a strategy that one would expect to be followed over a longer period. Profits would have to have been implausibly large initially (relative to value-added) for exporters to afford to cut export prices relative to costs by between 1 and 2 percent a year. Recently there is evidence that German and Japanese export firms have had to reduce their profits margins, but during the 1960's it is difficult to believe that in these economies the export sector expanded in the face of large and increasing declines in profit margins.

A second explanation could be government export subsidies. While subsidies could explain the appearance of a one-time decline in export prices the trend observed here would imply that such subsidies were growing over time to the point where they amounted to an implausibly large percentage of the export price. From 1961 to 1973, for example, German manufactured goods export price index declined 16 percent relative to the German manufactured goods wholesale price index. A subsidy of 16 percent to manufactured goods exports would amount to 2.8 percent of the German GNP or 11.5 percent of government expenditures.

A more reasonable explanation is that the cost data are poor reflections of the costs of manufacturing the particular commodities that are exported. Actual unit costs for export goods have risen less rapidly than those in other industries and export firms have therefore been able to lower their relative prices while at the same time expanding profitably. Productivity in the "export sectors" of these economies has been considerably more rapid than productivity in the rest of manufacturing while this has not been the case for the United States. In fact, in the case of Japan it is possible to show that costs in Japanese export industries have risen much more slowly than the rest of manufacturing simply by reweighting the industry costs by their export shares.<sup>4</sup>

Because foreign manufactured exports compete with U.S. products both in the United States and in third-world markets, changes in their prices relative to those of U.S. manufactured goods will be the major determinant of U.S. international price competitiveness. Since the price of exports has declined relative to the price of total manufactured goods in some countries (while this has not been the case in the United States), for U.S. products to maintain their international price competitiveness the average price of U.S. manufactured goods has had to rise less rapidly than the average in other countries. If this relationship persists, comparisons of relative wholesale or consumer prices between the United States and foreign economies will not be accurate measures of U.S. price competitiveness.

### *Exchange Rates*

While divergent movements in sectoral productivity and changes in factor costs were the important factors behind relative price changes in the 1950's and 1960's, exchange rate changes have been a major source of fluctuations in the 1970's. Rather than moving simply to offset movements in relative costs, the effective exchange rate of the dollar has been instrumental in changing the relative price competitiveness of U.S. goods. A comparison of the movement in the exchange rate in table 6 (column 4) with the decline in relative standard unit labor costs (column 3) suggests that about half the drop in relative U.S. unit labor costs over the period 1970-74 was due to lower inflation in the United States and about half to the exchange rate change. U.S. price competitiveness can be improved, either by devaluations of the dollar or by considerably lower inflation rates in domestic costs; but the fact that relative U.S. export and import prices failed to decline by the full extent of the reduction in relative unit costs suggests that

<sup>4</sup> See Lawrence (1979), p. 206.

the trend of higher relative productivity in export industries abroad continued through the 1970's.

In the equations reported in table 5, I have estimated the effects of relative price changes on the volume of manufactured goods imports and exports. The coefficients have been entered with a distributed lag. The sum of the coefficients (and each individual coefficient) is expected to be negative. The equations indicate that in the long run the volume response is elastic for both imports and exports and they both have long run elasticities in the range of 1.6.

Thus assuming an initially balanced position, decline in relative U.S. manufactured goods prices will improve the manufactured goods trade balance. In the short run, however, the response is not elastic; so that a devaluation (which raises the U.S. dollar price of U.S. imports) might actually give rise to a decline rather than an improvement in the trade balance measured in U.S. dollars—the so-called J curve effect.

The equations suggest that the lags in the responsiveness of trade volumes to prices are quite substantial. In the first year after prices change, the volume effects are likely to be minimal and it will take almost two years before the major effects are felt. This implies that exchange rates (and other measures which lower relative prices) should be given adequate time to operate and that, in explaining movements in the trade accounts in a particular year, one should consider the lagged effects of price changes that have occurred at any time over (at least) the past three years.<sup>5</sup>

### *Secular Effects*

The major momentum in the trend movement of the balance in manufactured goods trade is captured by the coefficients on potential output at home and abroad. Each 1 percent increase in United States potential Gross National Product has been associated with a 3 percent increase in the volume of manufactured goods imports. On the other hand, each percentage point increase in output abroad has been associated with only a 1.3 percent rise in U.S. manufactured goods exports. Given the annual growth rates in United States potential GNP of 3.7 percent and in the potential output of the "rest of the world" (as represented by the six largest foreign industrial countries) of 6.0 percent, these relationships implied annual growth rates of 11.5 percent for U.S. manufactured goods imports but only 7.8 percent for U.S. manufactured goods exports over the period 1960-77.

This difference between the output elasticity coefficients for U.S. imports and exports, referred to in this paper as the H/M effect, was first underscored by Houthakker and Magee (1969) in a seminal paper which fitted equations similar to those in table 5 to total U.S. import and export functions for the period 1951-66. The income elasticity of 1.5 they found for U.S. imports was substantially higher than the income elasticity of 1.0 for U.S. exports.

Some economists have interpreted these coefficients as income elasticities of demand and have argued that equal rates of growth in the U.S. and the rest of the world imply a declining rate of growth in

<sup>5</sup> In 1977 for example, an explanation for the decline in the U.S. trade balance was the loss in competitiveness in 1975 and 1976. For a full discussion see Lawrence (1978).

the trade balance. Assuming that import and export values are initially equal, the Houthakker-Magee estimates would require a U.S. growth rate two-thirds that of "the rest of the world" to maintain a trade balance. But there are reasons to question such an interpretation and the slow-growth policy prescription it implies.

In the first place, if the high import-income elasticity simply reflected a high income elasticity for the kinds of goods the United States imports, U.S. consumption of import-type goods made at home should also have increased far more rapidly than income. However, when the components of U.S. consumption expenditures that correspond to the major import end-use categories are related to U.S. income they have elasticities ranging from one (in the case of consumer goods) to one and a half (in the case on consumer durables) (as compared with the elasticity of 3.0 on  $Q^*US$ ). Similarly, the potential demand for the kind of goods the United States exports does not explain U.S. export performance. In fact, market-shares analysis indicates that world trade in the types of goods the United States exports—many of which are high-technology items—has actually grown more rapidly than world trade in manufactured goods in general.<sup>6</sup>

In the second place, to give a pure demand-side interpretation of these import functions requires the assumptions that (a) imports and home produce commodities are imperfect substitutes and (b) that supply is infinitely elastic. But domestically produced commodities are likely to be close substitutes for imports of many producer goods (such as chemicals and metals) and consumer goods (such as clothing and shoes). In these cases, the coefficient on the income term in an import function will actually be an excess demand elasticity derived from the home demand and supply functions. The coefficient on potential income in the conventional import function for undifferentiated products is better expressed as a reduced form parameter that picks up the combined effects of domestic supply and demand rather than as an income elasticity of demand in the sense it is used in consumer theory. If imports are the difference between total demand and domestic supply, the coefficient could reflect declining growth in home supply in addition to growing demand.

Third, in theory, given preferences and information, only income and relative prices affect demand where imports are imperfect substitutes. But when a foreign producer penetrates a new market he is likely to invest substantial resources in familiarizing the market with his product. It will take time to establish a service capability, acquire a reputation, and pry customers loose from their old familiar habits. These effects will not be reflected in the price but they will shift the demand curve. It is reasonable to suspect that the penetration pattern will take the form of the familiar logistic or S-shaped curve that characterizes most adoption processes. The likely phases are a struggle to obtain a foothold, a period of rapid growth and a tapering off toward a long run trend share. If such penetration has a strong trend element it will therefore be picked up by the income coefficient but such effects cannot persist indefinitely. The U.S. import coefficients reflect such penetration behavior.

<sup>6</sup> This is shown in Ballassa (forthcoming). See also C. Aho and R. Carney for a detailed application of market shares analysis (1978).

Thus rather than picking on just demand-side developments, the coefficients on the  $Q^*$  variables are actually capturing the complex set of long run factors that have led to the secular decline in the U.S. manufactured goods trade balance. Economic theory suggests that national trade performance will be heavily influenced both by the relative abundance of factors of production, and the production technologies that are available at home and abroad. Several studies have established that the United States has tended to export commodities that require the relatively intensive use of skilled labor and are manufactured with new production techniques. The U.S. imports commodities that require relatively intensive use of capital and unskilled labor inputs and are manufactured with more routine methods of mass production.

United States trade became increasingly specialized along these lines over the postwar period. In the early 1950's, the United States had surpluses in each major manufactured-goods end-use category. Over time, however, trade performance in these categories diverged. While growing surpluses were sustained in chemicals and capital goods, consumer durables, consumer nondurables, and automotive products moved into deficit in 1955, 1965, and 1968 respectively. In addition, although losing shares overall, the United States shares in world exports of products which have high skilled labor and research and development inputs declined by less than its shares in exports of capital and labor intensive products.

As indicated in tables 9 and 10, changes in relative factor endowments in the United States and the rest of the world account for some of this pattern of trade performance. The United States comparative advantage in high technology products has grown over time. As a result of faster income growth and higher saving rates, capital per man-hour abroad grew much more rapidly than in the United States. But the growth in the per capita educational experience in the United States adult population (a proxy for human capital) was about as rapid as that in other industrial countries.

TABLE 9.—RATE OF GROWTH OF NONRESIDENTIAL FIXED CAPITAL STOCK PER MAN-HOUR  
[Annual average compound growth rate—average of gross and net stocks]

	1870-1913	1913-50	1950-70	1970-77
Canada.....	NA	<sup>3</sup> 1.8	3.6	2.7
France.....	NA	(1.8)	5.2	8.0
Germany.....	(2.1)	(.9)	5.9	7.1
Italy.....	<sup>1</sup> [2.3]	[2.6]	4.9	[7.3]
Japan.....	<sup>2</sup> 2.0	[2.9]	<sup>5</sup> 6.8	<sup>3</sup> 8.4
United Kingdom.....	.6	.8	4.0	4.4
United States.....	2.6	1.8	2.7	1.8
Arithmetic average.....	1.9	1.8	4.7	5.7

NOTES.—All figures are adjusted to eliminate the impact of geographic change. Figures in round brackets refer to net stock only, figures in square brackets to gross stock only.

<sup>1</sup> 1882-1913.

<sup>2</sup> 1880-1913.

<sup>3</sup> 1926-50.

<sup>4</sup> Refers to private stock.

<sup>5</sup> Net stock refers only to the private sector.

<sup>6</sup> 1970-76.

Source: Angus Maddison "Long Run Dynamics of Productivity Growth," Banca Nazionale Del Lavoro Quarterly Review March 1979, p. 19.

TABLE 10.—CHANGE IN AVERAGE PER CAPITA EDUCATIONAL EXPERIENCE OF THE POPULATION AGED 25-64  
[Annual average compound growth rate]

	1950-60	1960-70	1970-80
Belgium.....	0.6	0.8	0.9
Canada.....	.6	.8	1.0
Denmark.....	.3	.5	.6
Finland.....	NA	NA	NA
France.....	.5	.6	1.0
Germany.....	NA	.5	.2
Italy.....	1.1	1.4	1.6
Japan.....	1.1	1.1	.8
Netherlands.....	.4	.7	1.0
Norway.....	.3	.6	1.2
Sweden.....	NA	.8	1.2
United Kingdom.....	.3	.4	.6
United States.....	.8	.9	.9
Arithmetic average.....	.6	.8	.9

Sources: Derived from "Educational Statistics Yearbook", vol. 1, OECD, Paris, 1974, and "Education, Inequality and Life Chances", OECD, Paris, 1975. The figures are derived from census material with adjustments to enhance the comparability of the classification by level of education. Angus Maddison, "Long Run Dynamics of Productivity Growth," Banca Nazionale Del Lavoro Quarterly Review, March 1979, p. 24.

Although it did better in exports of skilled-intensive products, the U.S. performance in these areas failed to offset the overall decline in the manufactured goods trade balance. A competitive advantage based upon superior technology or newly innovated products is inherently transitory. With time, other nations acquire the technologies or develop alternative methods of producing new products. To remain ahead, the United States has had to find new techniques and products, at a pace which offset this diffusion process. Since it is more difficult to innovate than it is to mimic, not surprisingly the U.S. technological lead has been continuously eroded.

In addition to the spread of technology there were other dynamic factors enhancing foreign manufacturing capabilities more rapidly than those in the United States. Because they began at much lower stages of development, foreign economies had tremendous scope for enhancing productivity by shifting resources to more productive sectors, improving the efficiency of resource allocation and benefitting from economies of scale. In many countries gains were reaped by shifting resources into high productivity manufacturing sectors, while in the United States, on the other hand, resources were attracted into the services sector. The removal of barriers to trade—particularly the formation of the European Common Market—and the rapid growth in domestic incomes allowed foreign firms to achieve the economies of scale already enjoyed by firms in the wealthy and more integrated U.S. market.

The tendency for the U.S. trade balance in manufacturing to decline, and for productivity growth rates in the United States to be lower than in other industrial countries are both long-lived phenomena that reflect the economic development and technological diffusion that has occurred since the Second World War. Much attention has recently been focused on the role of an alleged drop in the rate of U.S. technological innovation in both the declining U.S. trade balance and the slowdown in U.S. productivity growth since 1973. It is difficult to measure innovation, however; and, in any case, for the purposes of trade performance what matters are the relative rates of technological

innovation in the United States and the rest of the world rather than the absolute productivity growth rate in the United States. In fact, as table 11 suggests, the recent declines in U.S. productivity growth rates are part of a global development which has, if anything, reduced the degree to which U.S. productivity growth has lagged behind that in other countries.

Nonetheless, as tables 11 and 9 report, on average foreign productivity continues to grow more rapidly than that in the United States, and capital per man-hour continues to grow more rapidly abroad. This suggests that the forces behind the secular decline in the U.S. manufactured-goods trade balance could continue into the 1980's.

TABLE 11.—INTERNATIONAL GROWTH RATES OF OUTPUT PER HOUR IN MANUFACTURING

	(1) 1950-73	(2) 1973-78	(1-2) Slowdown
United States.....	2.7	1.7	1.0
Canada.....	4.2	2.5	1.7
Japan.....	9.7	3.5	6.2
Denmark.....	5.2	4.7	.5
France.....	5.3	4.8	.5
Germany.....	5.8	5.1	.7
Italy.....	6.6	2.6	4.0
Sweden.....	5.3	1.5	3.8
United Kingdom.....	3.1	.2	2.9
Average (excluding USA).....	5.7	3.1	2.6

Source: U.S. Department of Labor, Bureau of Labor Statistics, Office of Productivity and Technology, "Output per Hour Hourly Compensation, and Unit Labor Costs in Manufacturing, Eleven Countries, 1950-78," (July 10, 1979).

In summary, the analysis here has indicated that the U.S. manufactured goods trade balance is extremely sensitive to the state of the business cycle at home and abroad. Over the long run, however, more fundamental changes are at work. Throughout the postwar period, the manufactured goods trade balance has tended to decline as a result of fundamental changes in technology and foreign factor endowments. Even though U.S. manufactured goods wholesale prices rose less rapidly than those abroad in the period prior to the dollar devaluations in 1971, the relatively slower increase in foreign export-industry costs led to a deterioration in United States trade competitiveness. In the 1970's, the dollar devaluations have been effective in changing the relative price of U.S. manufactured exports and importables, leading to an improvement in U.S. traded manufactured goods prices relative to 1970 levels which has partially offset the secular decline in the trade balance.

While United States manufacturing productivity growth has declined since 1973, an even greater decline is evident in the growth in productivity in other major industrial countries. Nonetheless, several factors point in the direction of a continuation of previous trends. Other countries continue to enjoy productivity gains that are more rapid than those in the United States; their export industries have lower cost increases than their manufacturing sectors in general; their growth in capital per man-hour continues to exceed that of the United States, and their absolute productivity levels remain below that in the United States.

## III. THE SERVICES ACCOUNT

Over the postwar period, primarily as the result of United States earnings from direct foreign investment, the services component of the current account has sustained a growing surplus. While the share of service imports in the total value of imports of goods and services declined from 40 to 22 percent from 1960 to 1977, exports of services have grown as rapidly as exports of goods, with services accounting for 34 percent of total exports of goods and services in 1977.

The services account is conveniently analysed in two parts: Receipts and payments for items such as military sales (peculiarly classified as services), travel, transportation, and fees and royalties, referred to here as nonincome services; and receipts and payments on United States foreign assets and liabilities, referred to here as income services.

*Nonincome Services*

The balance on nonincome services has not shown a strong trend behavior. Regressions similar to those fitted for manufactured-goods trade confirm that the elasticities of the volume of nonincome services trade with respect to potential output in the United States and the rest of the world were such as to ensure a fairly steady balance in trade in these services. (The ratio of the import elasticity of 1.7 to the export elasticity of 1.1 was almost exactly equal to the inverse of the ratio of the corresponding growth rates in potential output.) The major changes that have occurred in the nonincome services balance have been those in military sales and expenditures. The balance on military transactions declined in the 1960's from a \$2.8 billion deficit in 1960 to a \$3.4 billion deficit in 1970. Reflecting a reduction in real military expenditures abroad and the rapid growth in U.S. arms sales in the 1970's, this balance had risen to a surplus of \$1.3 billion by 1977.

TABLE 12.—RECEIPTS AND PAYMENTS ON U.S. FOREIGN ASSETS AND LIABILITIES, 1960-77

[In billions of dollars]

Year	Direct investment			Indirect investment			U.S. Government receipts			Total balance
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1960	4.2	0.4	3.8	0.6	0.5	0.1	0.3	0.3	0.0	3.9
1965	6.7	.7	6.0	1.4	.9	.5	.5	.5	.0	6.5
1970	9.9	1.0	8.9	2.7	3.6	-.9	.9	1.0	-.1	7.8
1973	19.1	1.8	17.3	4.3	4.0	.3	.8	3.8	-3.0	14.6
1975	20.1	2.5	17.6	7.6	5.8	1.8	1.1	4.5	-3.4	16.0
1977	23.6	3.1	20.5	10.9	6.2	4.7	1.4	5.5	-4.1	21.1

NOTE.—Direct investment=fees and royalties from affiliated foreigners plus direct investment.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, (BEA) "Survey of Current Business," June 1978, table 1: U.S. International Transactions.

*Investment*

Receipts and payments on U.S. foreign assets and liabilities are reported in table 12. These totals portray the United States as a provider of savings, know-how, banking services, and official and



private international liquidity. They have also been affected by policy actions aimed at controlling capital mobility and interest rates as well as cyclical developments at home and abroad.

Overall, the balance (column 10) has an upward trend because of the dominant movement of the balance on direct investment income (which has been adjusted to include the receipts and payments of fees and royalties to corporate affiliates). The underlying trends in the other two categories are different. The balance on indirect investment income (column 6) has had three phases. It rose during the early 1960's, declined from 1965 through 1970 and then increased through 1977. The balance on government receipts and payments (column 9) has steadily declined.

#### *Direct investment income*

At any point in time, investment income earnings depend partly upon the size and composition of previous capital outflows. Table 13 indicates the major changes that have occurred in the international investment position of the United States over the period 1960-77. U.S. direct investment abroad has been substantially larger than foreign direct investment in the United States. Motivated by cheaper production facilities abroad, and a desire for superior access to foreign markets, American entrepreneurs have used the managerial skills and knowledge generated in the home market to establish production facilities abroad. The declaration of the convertibility of the major European currencies in the late 1950's and the formation of the European Common Market induced many U.S. corporations to establish manufacturing facilities in Europe in the early 1960's. As a result, the annual value of direct investment abroad grew more rapidly than foreign direct investment in the United States. Since the mid-1960's, however, the percentage rise in foreign direct investment in the United States has been more rapid than U.S. direct investment abroad although the dollar value remains much smaller.

TABLE 13.—U.S. FOREIGN ASSETS AND LIABILITIES VALUED AT YEAR END

[In billions of U.S. dollars]

Year	Direct investments <sup>1</sup>		Stock <sup>2</sup>		Other portfolio <sup>3</sup>		Government <sup>3</sup>		Total <sup>4</sup>	
	Assets	Liabilities	Assets	Liabilities	Assets <sup>5</sup>	Liabilities <sup>6</sup>	Assets	Liabilities <sup>7</sup>	Assets	Liabilities
1960.....	31.9(.48)	6.9(.17)	4.0(.06)	9.3(.23)	8.6(.13)	14.9(.36)	16.9(.26)	9.8(.24)	66.2	40.9
1965.....	49.5(.47)	8.8(.15)	5.0(.05)	14.6(.25)	16.9(.16)	21.2(.36)	23.4(.22)	14.2(.24)	104.9	58.8
1970.....	78.2(.52)	13.3(.12)	6.6(.04)	27.2(.25)	36.8(.24)	45.7(.43)	32.2(.21)	20.6(.19)	151.0	106.8
1973.....	101.3(.49)	20.6(.12)	10.0(.05)	33.5(.19)	58.2(.28)	62.8(.36)	38.8(.19)	58.0(.33)	208.1	174.9
1975.....	124.1(.44)	27.7(.13)	9.6(.03)	35.3(.16)	103.4(.37)	82.6(.37)	41.8(.15)	75.6(.34)	278.9	221.2
1977.....	148.8(.41)	34.1(.11)	10.1(.03)	39.7(.13)	153.5(.42)	104.9(.34)	49.6(.16)	132.6(.43)	362.0	311.3

Composition of other portfolio categories of assets and liabilities

	Bank		Nonbank		Bonds		
	Assets	Liabilities	Assets	Liabilities	Assets	Liabilities	
1970.....		13.8	29.4	8.5	8.8	14.4	7.5
1973.....		26.7	38.5	13.8	11.7	17.8	12.6
1975.....		59.8	58.7	18.3	13.9	25.3	10.0
1977.....		92.6	78.2	21.8	13.3	39.2	13.4

<sup>1</sup> Book value.

<sup>2</sup> Current value.

<sup>3</sup> Government liabilities include: U.S. Government securities plus other U.S. Government liabilities plus other foreign official assets plus U.S. Treasury securities.

<sup>4</sup> Total assets—Total—U.S. Official reserve assets.

<sup>5</sup> Other portfolio assets—U.S. private assets—direct investments—stocks.

<sup>6</sup> Other portfolio liabilities—Foreign assets in United States—Government—direct investment—stocks.

Note.—Shares in total assets and liabilities in parentheses.

Sources: (1) U.S. Department of Commerce, Bureau of Economic Analysis (BEA), "Survey of Current Business," August 1978, vol. 58, No. 8; October 1971. (2) BEA unpublished data.

*Portfolio Income—Private*

The greater variability in the net balance on portfolio income reflects a host of factors. The decline in the balance of \$1.5 billion between 1965 and 1970 was due to a combination of a declining net asset position and declining relative yields. In the late 1960's, tight monetary policies in the United States encouraged capital inflows into the United States. At the same time, interest rate ceilings (regulation Q) on domestic deposit rates encouraged Americans to lend in the Eurodollar market—a development which allowed foreign capital markets to serve as financial intermediaries and which led to an uncharacteristic narrowing of the difference between yields on U.S. foreign portfolio assets and liabilities. Numerous regulations, of questionable effectiveness with regard to their goal of improving the balance of payments shackled the operation of the U.S. capital market in the 1960's.<sup>7</sup> However, the removal of capital controls coupled with the task of recycling the OPEC surplus to countries in need have enhanced the international intermediary role played by the U.S. capital market. As indicated in table 13, in 1970 the liabilities of the U.S. private sector in indirect investment other than corporate stocks exceed its assets by \$8.9 billion. Since that time however (and most dramatically since 1973) this difference has turned into a growing positive position. At the end of 1977, private liabilities amounted to \$104 billion while the corresponding assets were \$153 billion.

*Portfolio Income—Public*

At the same time as private Americans have increased their portfolio-net-investment position, reflecting the expansion in international monetary reserves, there has been a particularly rapid increase in the holdings of U.S. Government securities by foreign official agencies. At the end of the 1960's, as the Bretton Woods system came under stress, foreign private holders fled from the dollar resulting in a dramatic rise in official holdings. U.S. Government liabilities to foreign official agencies rose from \$17 billion at the end of 1970 to \$44.4 billion at the end of 1971 and \$52.9 billion in 1973. A second period of rapid growth surrounded the intervention to support the dollar in 1977 and in that year official dollar holdings exploded from \$73.6 billion to \$106 billion. These developments have led to a deficit in the balance on government receipts and payments (in 1977) almost as large as the private indirect investment income surplus.

*The Composition of the U.S. Foreign Investment Position*

Since the composition of its assets and its liabilities are very different, simply looking at the changes in its net value gives a misleading picture of the earnings potential of the U.S. international investment position. The U.S. capital markets function as a bank for "the rest of the world". They provide foreigners with short-term and easily marketable securities while they make long-term investments abroad of a less liquid nature. At the end of 1977, U.S. assets were far more concentrated in direct investment (41 percent) and long-term portfolio investment (16 percent) than were its liabilities. Conversely, foreign

<sup>7</sup> See J. Hewson and Sakibara (1975) for the empirical evidence on this point.

holdings of stocks (13 percent) and short-term private assets accounted for substantially greater proportions of U.S. liabilities than the same U.S. asset categories. The largest single liabilities component were U.S. Government liabilities (94 percent of which were held by foreign official agencies, mostly in highly liquid short-term securities).

At the end of 1977, (excluding official reserves) U.S. assets were reported at \$362 billion, some 16.3 percent larger than U.S. liabilities. Yet in 1977, the income earned on those assets (some \$35 billion) was about 43 percent larger than the payments on U.S. liabilities. These official data on the international investment position should not be taken at face value because the valuation methods for the assets themselves, as well as the income earned from them, differ across the components. They are biased towards overstating the relative yields to the United States from investment abroad.

A major source of the bias is the use of historic cost book-value data for direct investment assets and liabilities. This failure to take account of changes in valuation resulting from inflation and (in the case of U.S. assets abroad) exchange-rate changes, results in a much greater understatement of U.S. direct investment assets abroad (valued at \$148 billion on a historic cost basis at the end of 1977) than of foreign direct investments in the United States (with a comparable value of \$34 billion at the end of 1977). The true net investment position of the United States is substantially greater than these figures suggest.

In the official calculations of earnings from corporate stocks, only (estimations of) dividend payments are included, and that part of the yield represented by retained earnings (which is presumably reflected in higher asset values) is neglected. Since the value of foreign holdings of U.S. corporate stocks is substantially larger than the value of foreign corporate stocks owned by Americans, this leads to an understatement of earnings on U.S. liabilities relative to earnings on assets.

The relative yields on particular components of the investment position are important determinants of the movement of the services income balance. The actual returns to direct investment, which are flawed because of the valuation methods mentioned above, put the average return to direct investment from 1960 to 1977 at 15.4 percent. On the other hand, the return to direct investment in the United States by foreigners has averaged 8.4 percent. Stekler has estimated, however, that the real (inflation corrected) return to U.S. direct investment abroad in 1977 ranged between 8.0 percent in manufacturing and 10.0 in petroleum.

It is likely that the actual yields on direct investment in the United States is closer to the yield on U.S. investment abroad than the historic cost data suggest. Over the period 1960 to 1972, for example, the ratio of earnings from direct investment abroad to the value of changes in the value of direct investment abroad was very similar to the value of the same ratio for foreign direct investment in the United States.

While the dividend yields on foreign and U.S. corporate stocks have also been quite similar (both averaged 2.8 percent for the period 1970-77), a greater spread is evident in other portfolio investment. On average, United States assets abroad yield a return of 6.7 percent over the period 1970-77 while U.S. (nonstock) liabilities paid foreigners only a 5.05 percent return. As the loans of U.S. banks are the single most important asset, while their borrowing is the most important liability, the spread ensured by profitable banking practices explains

the main source of this differential. This differential, combined with the propensity of foreigners to hold relatively more of their American assets in the form of U.S. corporate stocks implies that the recorded balance on indirect investment income would rise even if U.S. liabilities to foreigners in these categories increased at the same rate as U.S. foreign assets.

On the other hand, U.S. Government assets, some of which have taken the form of concessionary loans which were made when interest rates were relatively low, have not risen as fast as yields on U.S. Government liabilities, which are typically short term securities. As a result the growing surplus on private direct investment income and the growing public balance deficit reflect the behavior of relative yields in addition to total values.

While not as volatile as the trade balance, the income service payments are also susceptible to cyclical and exchange rate changes, cyclical expansion abroad raises direct investment income abroad, and, similarly, expansions in the United States raise foreign earnings in the United States. Movements in interest rates will also affect the balance. A rise in short term rates relative to long term rates will cause a deterioration because a much greater value of liabilities than assets have yields that are linked to short term rates. In addition, higher interest rates induced by tighter monetary policy in the United States will encourage capital inflows and induce a decline for this reason as well.

U.S. direct investments abroad and corporate stock investment represent claims to assets whose U.S. dollar value will change with a change in the value of the dollar. Estimates suggest that direct investment earnings will rise by more than 1 percent for each percentage point increase in the effective dollar exchange rate. This is due to the increased sales because of improved competitiveness of American components and to the effects that devaluation has on the dollar prices of final goods sold by U.S. companies. On the other hand, most of U.S. indirect investment assets and liabilities are denominated in dollars so they do not change when the exchange rate changes. Given the dominance of direct investment the evidence suggests that when measured in U.S. dollars, a dollar devaluation should increase the balance on income services.

### *Conclusion*

The U.S. services balance has been dominated by the cumulative effects of net U.S. foreign investment. While the growing balance on portfolio investment income has been matched by a growing deficit on U.S. government payments, the earnings from U.S. direct foreign investment have moved the balance into a substantial surplus.

The U.S. income services balance should continue to grow in the years to come. Although it has grown more rapidly than U.S. direct investment abroad in recent years, the annual flow of foreign direct investment in the United States (\$3.4 billion in 1977) remains considerably lower than the corresponding flow of U.S. direct investment abroad (\$12.2 billion in 1977). It would take large net capital inflows into the United States to raise the earnings potential of foreign direct investment assets in the United States (with income of \$3.1 billion in 1977) to that of U.S. direct investment abroad (with incomes of \$23 billion in 1977).

## IV. AN EXPERIMENTAL PROJECTION OVER THE MEDIUM RUN

Forecasting is a hazardous task for any economist and forecasting trade and current account balances is particularly dangerous. Willett has catalogued attempts by the OECD Economic Outlook to forecast the current account of the United States about 12 months in advance and found that over the period of 1969 to 1975 these erred by between \$19.2 and \$1.1 billion with a mean error of \$6.2 billion.<sup>8</sup> International Economists have a similarly poor record in detecting long run trends. In the mid-1950's, for example, several books and numerous articles were published explaining what was believed to be a chronic and permanent structural flaw in the international economy—the large United States current account surplus.<sup>9</sup> And in a paper similar to this one written in 1970 for the Commission on International Trade and Investment, Houthakker made his forecast for the 1975 trade balance assuming that wholesale prices in the United States would rise over the period 1970–75 at an average rate of 2 percent while prices abroad would rise at 2.8 percent.<sup>10</sup>

Partly because I have been chastened by the experience of my predecessors, but more importantly as I believe that it is unlikely that any of the outcomes that I will project here could actually come about, I have chosen to provide a set of projections rather than forecasts. These are designed to explore what a continuation of current trends imply about the future and thereby to highlight areas in which some adjustments of the trends will be required.

To perform this exercise I have deliberately tried to avoid predicting dramatic changes in the *status quo* either in the form of new policies or of shifts in the historic behavior functions. Inflation rates continue at rates similar to their historic averages and, once the effects of the recent dollar devaluation are accounted for, traded goods prices are similar in the United States and abroad. Growth rates conform to current estimates of long run potential. The projections for U.S. agricultural exports and fuels imports draw upon several studies made by commodity specialists in these areas. The remainder of the forecast is based upon annual equations with parameters which have been estimated using the past two decades as a sample period. While the U.S. current account is extremely sensitive to the state of the business cycle at home and abroad, the projections abstract from cyclical fluctuations with the assumption that, after some deviations in the early part of the period, both the United States and “the rest of the world” grow smoothly on their long run potential growth rates. Probably the strongest assumption made here, however, is that the effective exchange rate of the U.S. dollar remains at its December 1978 level.

I have tried to choose an optimistic base case, but also to provide some estimate of how sensitive the results are to changes in the underlying assumptions. In particular, the effects of different growth rates and inflation rates are explored. An evaluation of these results follows a discussion of the assumptions underlying the projections.

<sup>8</sup> T. D. Willett (1977), pp. 140–41.

<sup>9</sup> See D. MacDougall (1957).

<sup>10</sup> See H. S. Houthakker (1971).

*Forecasting Methodology*

The forecast of the current account derives partly from studies by specialists of primary-commodity trade and partly from a set of equations which estimate the behavior of the remaining components of the current account. The equations relate import and export demands for goods and services to cyclical and secular activity variables as well as to relative prices. The stocks of assets that are required to estimate the income components of the current account are themselves estimates derived from equations which predict U.S. assets and liabilities as a function of wealth and relative return proxies. The returns on portfolio assets and liabilities are assumed to be equal to those in 1978 while an equation relating the return on direct investments to the state of the cycle abroad is used to forecast the returns from U.S. direct investment.<sup>11</sup>

*Output Growth Paths*

Although its causes have not been fully identified, the recent slowdown in the U.S. productivity appears to be more permanent than was initially thought and several studies have revised the estimates of U.S. potential GNP. In its 1979 edition, the Economic Report of the President and the Council of Economic Advisors have revised their estimates of the growth rate of U.S. potential GNP over the period 1973-83 to 3 percent a year. This represents a substantial markdown from the 3.55 percent estimate in the 1977 Report which had itself been a downward adjustment to previous potential output estimates of 3.82 percent per year. Data Resources Incorporated provided an estimate for the period 1973-80 of 3.4 percent and recently marked this estimate down. In light of these studies I have chosen to consider growth path scenario of 3.0, 3.25 and 3.5 percent per year for the United States. In each case I assume that in 1985 the capacity utilization levels will be similar to those in 1978.

It is more difficult to obtain consistent estimates of foreign growth potential and I have chosen to rely upon estimates by Artus for potential output in manufactured goods production similar to those used in the manufactured trade equations previously reported. His estimates for the major industrial countries (Belgium, Canada, France, the Netherlands, United Kingdom, Sweden, Germany, Italy, Japan) weighted by their 1970 shares in world-manufactured-goods trade indicate a slowdown in the growth rate of foreign potential output from its 8.4 percent average over the period 1960-70 and 5.3 percent average over the period 1970-75 to 4.5 percent per year over the period 1975-80. Scenarios of growth at rates of 3.5, 4.0, and 4.5 will be simulated. As there is a high level of unutilized capacity in these countries, however, each scenario assumes a rate of expansion 1 percent faster than potential output in 1979, 1980, and 1981.

In 1978, U.S. manufactured goods achieved a gain in relative price competitiveness of about 6 percent. In 1979, it is assumed that U.S. finished goods will rise by 7 percent while the delayed effects of the

<sup>11</sup> A complete set of these equations is available from the author upon request.

devaluations will result in a 9 percent rise in the U.S. dollar measures of foreign manufactured goods prices.

For most of the simulation scenarios I assume that after 1979 there will be no further change in U.S. relative price competitiveness. Prices of traded goods measured in dollars will rise at 6 percent in both the United States and the rest of the world. The analysis will indicate how sensitive the manufactured goods trade balance would be to alternative price scenarios.

### *Special Sectors*

U.S. exports of foods, feeds and beverages in 1977 (the latest year for which complete information was available) were considerably above what many consider to be their long run trend value. Exports of grains and vegetable oils and oilseeds, which accounted for three quarters of this category, had a total value of \$15.3 billion. Using its world grain/oil seeds/livestock (GOL) model to generate several scenarios, the United States Department of Agriculture (USDA) has forecast 1985 U.S. exports of these commodities.<sup>12</sup> Alternative I which "assumes a modified continuation of trends and basic agricultural and trade policies around the world" projects that in 1985 the value of these exports (measured in 1977 dollars) will actually decline to \$14.63 billion. This estimate indicates the unusual strength in the volume of cereals and the price of oilseeds in 1977. The estimates of 33 million tons for wheat exports and 40 million tons for coarse grains still represent increases of 87 and 94 percent respectively over their 1970 volumes.

For my base case, however, I have chosen to rely upon the more optimistic scenarios envisaged under Alternative II in the USDA study because I believe that Alternative I has particularly low forecasts for grains trade with Eastern Europe and with China. In addition, studies by other commodities experts foresee stronger oilseeds prices. Alternative II models "high income growth that generate substantially higher levels of world import demands." It predicts cereals exports of 116 million metric tons (MT) and higher oilseed and cereals prices. Together the average annual real increase is 5.7 percent per year. The assumption that the remaining commodities remain a constant proportion of total foods and feeds yields a forecast of \$48.65 billion for food, feeds, and beverages in 1985 dollars.

While an equation is used to forecast foods and feeds imports, it is necessary to make some adjustments to current prices that are not compatible with long run equilibrium. In particular, by 1985 the beverage markets should be clear of the shadow cast by the 1975 frost in Brazil which drove the price of coffee and its substitutes to extraordinary heights while the world sugar market should have recovered from its current situation of excess capacity. I have therefore incorporated declines in the price of coffee, measured in 1977 dollars, from \$2.40 to \$1 per pound and tea from \$1.72 to \$0.68, and assume that sugar prices will rise from 8.9 cents to 15.5 cents a pound (in 1977 dollars). These provide an estimated 15.5 percent reduction in the relative price of the food and feeds import unit value index, which is substituted into the food impact volume equation.

<sup>12</sup> See U.S. Department of Agriculture (1978).



*Fuels Imports*

The five state-of-the-art projections of U.S. fuels imports in 1985 (oil plus liquid natural gas measured in oil equivalent) used for this study fall within a fairly narrow range of between 11.8 and 13.4 millions of barrels per day (MBD) in 1985.<sup>13</sup> These projections are based on GNP forecasts (with a mean growth rate of 3.77) that are inconsistent with the growth scenarios envisaged here, and have been adjusted downwards under the assumption that a) the marginal energy-income elasticity is 0.75 and b) all reductions in energy consumption take the form of reductions in oil imports. When the mean of these forecasts is converted to the more inclusive balance of payments basis with a 3 percent growth rate assumed for GNP, it entails U.S. fuels imports of 11.62 million barrels a day in 1985. The average annual rise in oil import volumes of 3.3 percent per year implied by this projection for the period 1979-85 suggests that oil import volumes will be growing more slowly than import volumes of other commodities.

It is noteworthy that several forecasts of energy consumption predict a substantial effect deriving from the mandated fuel economy standards on United States automobiles. As a result, even if the economy is to grow along a smooth trend through 1985, most of the oil import growth will occur in the early 1980's, a period during which the overall current account balance should be boosted by the delayed effects of recent improvements in U.S. relative price competitiveness.

Much greater uncertainty is attached to projections of the 1985 price of oil. A base case estimate would foresee no change in the real price of oil after currently announced changes for 1979 prices have been implemented. This would entail a petroleum products price of \$21.56 a barrel in 1985; and, at a 3 percent GNP growth rate, the total value of oil imports would be \$91.4 billion. A GNP growth rate some 0.5 percent higher per year would entail imports valued at \$100.18 billion.<sup>14</sup>

A greater than expected improvement in energy conservation could make a significant impact on these estimates. If the U.S. is able to reduce consumption by just 1 percent relative to the volumes forecast here (assuming that oil imports reflect all this conservation) there would be a reduction in the value of oil imports of \$3.5 billion. Similarly, a 5 percent reduction would save \$17.55 billion with a growth rate of 3 percent and \$17.8 billion at a rate of 3.5 percent. And the overall current account is likely to improve by a similar order of magnitude. (While lower U.S. oil imports would affect U.S. exports to OPEC countries, it is unlikely that this feedback coefficient is greater than 0.16.) In addition, smaller volumes of U.S. imports increase the likelihood of lower oil prices.

The powerful effects of fuels conservation on oil imports stems from the "scissors effect" working in reverse. With total U.S. energy consumption at 44 MBD in 1985, a 1 percent saving would mean a 3.8 percent reduction in imports.

<sup>13</sup> CIA, "The International Energy Situation Outlook to 1985," (April 1977). Exxon, "Energy Outlook 1978-90," (May 1978). Energy Information Administration Annual Report to Congress (April 1978). Congressional Research Service, "U.S. Energy Supply and Demand 1976-85," (March 1978). General Accounting Office.

<sup>14</sup> Note, however, footnote 1 of this paper regarding higher oil prices.

The projections above have been combined to provide a base case scenario reported in table 14, which assumes potential growth paths of 3 and 4.5 for the United States and "the rest of the world" respectively. The base case scenario includes a number of assumptions which raise the projected balance on goods and services: while U.S. growth averages only 3 percent, growth abroad rises at 5.5 percent per year in 1979, 1980, and 1981 and averages 4.5 percent per year thereafter. The USDA's optimistic scenario for agricultural exports has been used, and no rise in the real price of oil has been assumed. Nonetheless, the projection indicates a deficit on the overall goods and services balance of \$17.5 billion. The major negative component of the balance comes from crude materials and reflects the substantial value of U.S. oil imports. On the other hand, the United States does have projected surpluses in food, manufactured goods, and both income and nonincome services.

The projections imply that the U.S. economy is headed toward a substantial current account deficit in 1985. While the United States will derive a substantial income from its past investments abroad, this will not suffice to offset the negative trade balance. Although the trend in agricultural goods trade will continue toward surplus and the H/M effect discussed above will be partially offset in the medium run by the recent improvements in relative U.S. price competitiveness, the effects of the depletion of U.S. domestic energy sources dominate both the trade and the current account outcomes. With no additional adjustments, the negative current account balance implies that the United States will be decreasing its net claims on foreigners.

A rise in the price of oil could change these scenarios substantially. Assuming the 3 percent growth path and no change in consumption and other energy supplies, an increase in the real price of oil of 2 percent per year from 1980 to 1985 would increase the value of fuels imports by 10.6 billion. Since the price rise would affect total OPEC revenues, a rough estimate suggests that the U.S. current account would decline by about half that amount.

### Projections for 1985

TABLE 14.—A BASE CASE FORECAST OF THE U.S. GOODS AND SERVICES IN 1985

(In billions of current dollars)

	Exports	Imports	Balance
Foods, feeds, and beverages.....	48.65	25.6	23.1
Crude materials.....	24.9	109.6	-84.74
Manufactured goods.....	243.5	239.2	4.3
Nonincome services.....	61.3	59.7	1.6
Income services.....	84.1	45.9	38.2
Trade balance.....	317.05	374.4	-57.34
Balance goods and services.....	462.9	480.0	-17.5

### The Effects of Different Growth Paths

Overall, the estimates of both nonoil primary commodity and services trade are not highly sensitive to the differences in growth paths at home and abroad. Oil imports are the main source of change in the primary goods component, increasing by \$8.8 billion when the growth path is 0.5 percent per year higher. Manufactured goods trade,

however, is the major source of the overall variation in the current account induced by growth rate changes. The effect of a decline in the growth path abroad by 0.5 percent reduces 1985 exports by \$6.60 billion, while an additional 0.5 increase in United States growth raises imports by \$15.3 billion.

As indicated in table 15, lower growth abroad and higher growth in the United States will require considerably more adjustment and a 4 percent path abroad, combined with a 3.25 path at home, leads to a \$19.5 billion further decline in the current account balance.

TABLE 15.—THE EFFECTS OF DIFFERENT GROWTH PATHS ON THE CURRENT ACCOUNT BALANCE AND ITS MAJOR COMPONENTS

[In billions of 1985 dollars]

GROW..... GUS.....	Primary commodities balance			Manufactured goods balance		
	4.5	4.0	3.5	4.5	4.0	3.5
3.0.....	-61.7	-61.8	-62.0	+4.53	-2.07	-8.37
3.25.....	-66.9	-67.0	-67.1	-3.117	-9.717	-16.02
3.5.....	-72.35	-72.5	-72.6	-10.77	-17.37	-23.67
	Trade balance			Balance on goods and services		
3.0.....	-57.2	-63.9	-70.4	-17.4	-24.57	-34.5
3.25.....	-70.0	-76.7	-83.2	-31.1	-38.42	-45.4
3.5.....	-83.1	-89.9	-96.3	-45.3	-52.5	-59.6

NOTES.—GUS=average annual growth rate of  $Q^{US}$ . US. GROW=average annual growth rate of  $Q^{ROW}$ .

### Different Price Paths

Table 16 reports on a simulation of manufactured goods trade balance under the assumption that the United States is able to enjoy a relative price improvement along the base-scenario path (Case A). Two polar cases are reported; one in which U.S. prices grow at only 5 percent rather than 6 percent from 1980 to 1985 (Case B) and the other in which inflation abroad increases at 7 percent (Case C). In Case B, the result is an improvement of the manufactured goods balance by 8.34 billion while in Case C the improvement is 9.64 billion. These illustrate the substantial effects that price adjustments achieved by a lower U.S. inflation rate could make towards lowering the deficit.

TABLE 16.—SIMULATIONS OF 1985 MANUFACTURED-GOODS TRADE BALANCES WITH BASE-CASE GROWTH RATES AND ALTERNATIVE PRICE SCENARIOS

[In billions of 1985 dollars]

Simulation	A	B	C
Value of exports.....	244.0	242.3	256.9
Value of imports.....	239.5	229.4	242.7
Balance.....	4.5	12.9	14.2

## V. IMPLICATIONS OF THE PROJECTIONS

I have emphasized the strength of the trends behind the movements in the United States current account over the past three decades. A continuation of these developments will result in further current

account deficits for the United States in the 1980's. This discussion of the projection is divided into three parts. The first questions whether the model upon which the projections were based will continue to predict trade behavior, the second discusses the implications of the projection, and the third deals with appropriate policy responses.

### *Will History Repeat Itself?*

The equations that have served as the basis for our analysis are best considered to be "reduced form" specifications that provide a statistical summary of a "historical relationship, rather than functions that successfully capture a structural relationship that will not change over time. How relevant are they as guides for predicting future behavior?

One may object that the regressions are heavily influenced by a catch-up phenomenon that cannot continue forever. An economy that is the most highly advanced technologically is constrained in its productivity growth (deriving from technological change) by the rate at which better techniques become available; an economy that has not yet taken full advantage of existing technology can enjoy productivity growth at a much faster rate until it too has reached the technological frontier. The postwar development of many industrialized countries undoubtedly reflected this phenomenon so that future productivity growth abroad might not proceed at the rate it has in the past.

The evidence reported in table 11 indicates that in fact the decline in labor productivity growth since 1973 in the other major industrial countries has been larger on average than the decline in the United States. On the other hand, productivity growth in these countries continues to exceed that in the United States, and foreign manufactured export sectors continue to be able to improve their price competitiveness by more than is indicated by indicators of relative manufacturing costs. From 1975 to the second quarter of 1979 for example, the International Monetary Fund reports that while U.S. wholesale prices in manufacturing declined by 5.8 percent relative to those in other industrial countries, manufactured-goods export-unit values in the United States showed no change.

It is unlikely, therefore, that the catch-up process is complete and it is uncertain that the disparities in productivity growth rates will soon slow down, particularly as the less developed countries join the ranks of the industrial countries. In addition, only part of the change in comparative advantage stems from changes in and transfers of technology; and changes resulting from changing supplies of factors of production will continue.

The world economy has moved from the fixed (but adjustable) exchange rates of the Bretton Woods system to the flexible system introduced in 1973. Centered, as it was, around the U.S. dollar, the Bretton Woods system was particularly poor in facilitating adjustment to "fundamental disequilibrium" in the U.S. balance of payments. And there is reason to believe that these delays, which would be smaller in the post-Bretton Woods system, tended to exacerbate the H/M effect.

As the degree of secular overvaluation of the dollar became greater, more and more American industries found they could not compete

internationally. In the United States this channeled resources into (nontradeables) sectors (such as services) which were not subject to overseas competition. It also lowered the return to those factors of production (human capital in particular) with which the United States has been relatively intensively endowed, encouraging the migration of these factors (e.g. managerial know-how) in the form of direct foreign investment to economies where returns were higher. At the same time, the opposite situation was taking place abroad. Investors learned that the highest returns accrued from the export sectors and firms discovered foreign markets presented highly profitable opportunities. Foreign resources were therefore heavily channeled into tradeable goods sectors and an outward looking attitude paralleled the inward shift that had occurred in the United States. To some extent, the process was self-reinforcing: foreign markets allowed producers abroad to enjoy the productivity gains that stemmed from economies of scale in production and the embodiment of modern technology in new equipment; the shrinking markets of U.S. producers denied them these advantages.

The dollar devaluations of 1971 and 1973 and the demise of the Bretton Woods system should have changed this situation, but cyclical developments since 1973 have prevented the emergence of the expected shifts in investment patterns. While the United States has enjoyed a period of sustained growth since 1975, the stagnation of foreign markets has made U.S. investment for exports unattractive. In addition, the undervaluation of several foreign currencies under the Bretton Woods system led to an overinvestment in their tradeable-goods sectors. And while changes in relative costs will determine the location of new productive capacity, this will only take place when existing plants are being fully utilized. On the other hand, the rapid expansion in certain developing countries has provided a major source of competition for U.S. producers of consumer goods and basic industrial materials.

The omission of developing countries from the model used here could be serious. If the 1980's see a shift in the locus of growth toward the nonoil developing countries which have a high propensity to absorb resources, the current account for the United States might be larger than indicated here. Large OPEC surpluses, however, would shift the current account in a downward direction.

In summary, there are many factors which could change these projections. There are several reasons why the current account deficit projected here might be too large. Foreign industrial economies may have exhausted the benefits of relative backwardness; the floating rate systems may have enhanced U.S. competitiveness; faster growth in developing countries could bolster the U.S. current account. Conversely, the global diffusion of technology will continue, U.S. productivity growth has declined, foreign traded goods industries continue to have excess capacity and OPEC surpluses could be large. Given the state of the art, none of these complex factors can be adequately modelled. But the fact that the tendencies uncovered by Houthakker and Magee on data from 1951 to 1966, continued through the 1970's, provides substantial evidence of the persistence of the postwar trends.

*Is a Large U.S. Current Account Deficit Sustainable?*

The findings here, together with those of other forecasts of the 1985 current account, suggest that the United States will continue to have a substantial trade deficit in the 1980's. This prediction will undoubtedly lead some to invoke the mercantilist responses that the Nation's well-being requires a trade surplus and that any and every means should be used to achieve it. But such arguments should be rejected as false. Trade in services is as important as trade in goods. Given this country's relative abundance of highly skilled and educated labor, its managerial know-how, its assets abroad, and the dominant role that services play in the domestic economy, it is to be expected that the United States will run trade deficits and service account surpluses. Indeed, the very size of the services surplus constrains the size of the trade deficit.

While for some analytical purposes (such as revealing areas of comparative advantage) balances in particular components of trade in goods and services are useful, there is no reason why it is efficient for the country to aim at achieving particular numerical objectives for either the trade balance or the current account. In particular, there is nothing natural or appropriate about a zero balance and no reason why the value of exports should be equal to the value of imports—by commodity category, by trading partner or in total. Indeed, it is precisely because monetary exchange removes the need for bilateral balancing that it is superior to barter in facilitating specialization.

Just as there are times in life when it is appropriate to be accumulating debts (such as studentship) or decumulating assets (such as retirement or a temporary emergency), so there are periods during a nation's economic development when a current account deficit requires no adjustment. A developing economy with relatively scarce capital, typically has insufficient domestic savings to meet its investment needs, and it absorbs capital from abroad. It may also be appropriate for an economy experiencing a deficit as a result of a temporary recession in its trading partners to finance the resulting shortfall rather than to add to a contractionary tendency by cutting back its own expenditure. But the possibilities of financing a large U.S. deficit are limited. The history of the past three decades has revealed that on balance capital has flowed from the United States rather than to it. And a substantial proportion of the inflow took the form of the official holdings of foreign central banks. It is unlikely that a slow growing and wealthy country like the United States will find itself the recipient of net capital inflows at current yields.

*Appropriate Adjustment Policies*

If it should turn out that the current account deficit projected here is too large to be supported by capital inflows at current yields, adjustments will be called for. Policy measures taken (or not taken) in the United States will play a major role in determining how this adjustment will take place. Of course, the consequences of any policy measures for other economic objectives such as growth, inflation, the

distribution of income and employment will have to be weighed, but in this discussion I will concentrate on measures that might be taken if a particular current account outcome should prove to be incompatible with balance of payments equilibrium and/or with other major policy objectives.

When a person discovers that his current expenditures exceed his income he has several choices: (a) he can finance this deficit by (1) increasing his indebtedness, or (2) selling some of his assets; or (b) he can adjust the deficit by either (1) working harder and raising his income, or (2) spending less. Of course, if he decides to borrow more he may find that people are only willing to lend at higher rates of interest than he currently pays. Similarly, if he sells some of his assets or more of his labor, he might have to lower prices to induce others to buy. These same options confront the Nation.

In the short run, a current account deficit could be financed. Part of the adjustment could result from policies which raised the yields on investment in the United States either through fiscal incentives on foreign investment or by raising U.S. interest rates relative to those abroad. But while such measures might successfully induce a substantial once-and-for-all stock adjustment, their effects on continuing inflows are likely to be much smaller. Relying solely upon high real interest rates would also have an adverse effect on growth and capital formation. Such policies would require a continuous (and nonsustainable) raising of the yields to foreign investment in the United States. Taking a longer run view, therefore, suggests that ultimately there is no way of avoiding some adjustment to the relationship between current incomes and expenditures. The person who borrows must eventually run a surplus to pay it off, and while a person approaching death can simply run down his assets, this is not an option to the Nation.

There are two complementary ways of analyzing the current account. The first starts from the definition of the current account as the difference between national income and expenditures. A current deficit, for example, implies that an economy is absorbing more goods and services than it is producing and must be financed by borrowing from abroad. Conversely, a current account surplus implies that income exceeds expenditure and that the economy is lending abroad. This perspective leads to a consideration of how macroeconomic aggregates such as consumption, investment and savings have changed national net indebtedness and to policies which affect expenditure decisions using monetary and fiscal instruments.

The second approach (which was adopted in the historic analysis of this paper) considers the current account as the difference between exports and imports (of goods, services and transfers). This definition leads to an examination of the microeconomic underpinnings of the current account and to a consideration of how changes in incomes, relative prices, relative factor endowments and productivity influence international flows of goods, services and gifts. (This approach leads to the use of instruments such as changes in exchange rates, tariffs, quotas, taxes and subsidies to influence the allocation of expenditure and production decisions.)

Since both these approaches ultimately explain the same aggregate—the current account—they are clearly interrelated. Any change in the

current account will usually involve both a switch in the composition of goods and services produced and consumed at home and abroad and a change in the relationship between income and expenditure. A sound policy to adjust the current account, therefore, involves a coordinated use of instruments to change both the composition and the levels of production and expenditure.

*Macroeconomic policies.*—Since the current account is the difference between national income and expenditure, viewed from the macroeconomic perspective either income will have to be raised or expenditure reduced (not absolutely—but relative to what it would otherwise be, given income). As considerable uncertainty surrounds the projections of U.S. productivity growth, the potential output forecast here could be too low. There could be some opportunity to raise income by raising productivity. But since the projections do assume that the United States is fully utilizing its resources (i.e., that the economy is on its long run potential output path) they rule out the possibility of raising income by increasing employment. In the absence of effective productivity-raising measures, most of the adjustment will have to take the form of reduced expenditures on goods and services. Accomplishing this task in the most efficient way is the major challenge presented by this projection to United States policymakers.

Reductions in expenditure could come out of private and/or public consumption and/or investment and will probably have to come out of all of these categories. It will be tempting and perhaps politically expedient to reduce private investment and to postpone the adjustment in current standards of living. But a preferable long run strategy would be to place the major burdens of adjustment upon both government and private consumption. While the overall posture of both fiscal and monetary policies will have to be relatively restrained, using fiscal policy to bear most of the tightening role would be one way of achieving a maximum amount of private capital formation.

If both fiscal and monetary policies are more restrained, the foreign sector will have to provide more of the stimulus toward achieving full employment. If the track forecast by the projection above is correct, an improvement in relative United States price competitiveness would be a major element in the adjustment process. This could be achieved either by a devaluation of the dollar, given the inflation path in the United States and the rest of the world, or a relatively lower inflation rate in the United States, given the exchange rate and inflation rates in the rest of the world. An improvement in the relative U.S. inflation performance (that is not offset by a dollar appreciation) would have the virtue of inspiring greater confidence in the dollar as an asset. At the same time, however, like a devaluation it would lower U.S. living standards. U.S. export prices would be rising less than U.S. import prices, and devaluation would only work if Americans did not attempt to recoup these reductions in living standards in the form of higher wages and prices. It would take us too far afield to provide a comprehensive treatment of anti-inflationary policies, but the role of a lower U.S. inflation rate in its international adjustment cannot be overstressed.

The two- to three-year lags with which the relative price effects operate are a major drawback. In retrospect, some of the dollar



changes since 1971 have turned out to have been inappropriate and have had to be reversed. And there is a danger therefore that private and public participants in the market will allow shortrun considerations to divert their attention from the long run fundamentals.

On the other hand, the current regime does have the advantage of flexibility and the ability to avoid the long run structural problems that were a feature of the Bretton Woods System. Schemes to permanently fix the dollar in terms of other currencies should be avoided.

*Microeconomic policies.*—As the microeconomic view of the current account reminds us, the efficient allocation of resources is an important element in enhancing productivity.

There are those who will react to the emerging current account deficit by becoming disillusioned with free trade. They will argue that the United States has suffered from competition in the marketplace and will advocate the use of tariffs, quotas, or other selective protective devices to reduce the volume of imports. Perhaps this disillusionment reflects the fact that economists may have oversold free trade by promising things that it cannot deliver. Free trade does not guarantee that the gains accruing to a country from trade will not decline over time. Just as a country which was the world's sole producer of a rare metal could find that discoveries abroad lowered its monopoly returns, so a loss in the United States technological lead can reduce U.S. gains from trade. But because the gains from free trade are diminishing does not imply that they are zero or that prohibitions on trade will lead to a preferable outcome. Gains from specializing in the production of goods and services that the United States can produce relatively well and exchanging them for goods and services others can produce relatively well are still to be had. And those who respond to a loss in the competitiveness of a particular industry by advocating its protection are adding insult to injury by compounding that loss with increased inefficiencies and additional distortions to trade.

While a tariff designed to protect a particular industry might well be successful both in maintaining domestic employment and in preventing a decline in the current account balance, it will have its costs. In the first place, U.S. consumers of that product will lose the benefits they could derive by obtaining it from a cheaper source; second, the U.S. exporters who use that product directly (or indirectly as an input) will find their costs rising relative to those of their international competitors; and in the third place, U.S. exporters would have benefited from an alternative way of correcting the problem—by improving overall competitiveness through lower relative U.S. prices. Protecting particular groups punishes the productive at the expense of the unproductive. By imposing tariffs, policymakers are favoring particular producer groups instead of allowing the market to apply the same competitive changes to all industries in a much more equitable and efficient manner.

Policy should assist adjustment rather than freeze existing production patterns. Unfortunately, the political system in which single plants are major providers of employment in particular congressional districts gives a disproportionately strong voice to those who represent maintenance of the status quo. Of course, it is incumbent upon other countries to follow the rules of the game; and there are legitimate

cases in which the export promotion practices of other countries have a detrimental effect upon U.S. producers. But for the most part, the strength of the trends we have observed over the past 30 years indicates that there is something much more fundamental than governmental subsidies to export industries behind the competitive forces. It is folly to perpetuate industries which can no longer compete.

Declines in U.S. competitiveness in particular sections impose considerable burdens upon workers and owners of affected industries and society should assist the people involved to make the adjustments to other kinds of activities. There is a case for granting temporary adjustment assistance but wherever possible this should aim at inducing a reallocation of producers into other activities rather than at maintaining them in their current activities and should be done in the form of temporary subsidies to the producers rather than in the form of higher prices which impose costs on both consumers and producers.

If some argue that the solution lies in turning away from international trade, others will find merit in subsidizing particular activities such as research and development and capital formation; in improving information flows through export promotion; in removing some of the shackles upon producers at home (in the form of environmental and other regulations) and abroad (in the form of the various restraints upon the permissible behavior standards for U.S. corporations abroad, and in restrictions upon sales of military and nuclear equipment); or in increasing the U.S. energy self-sufficiency. But while there are undoubtedly strong social benefits to the promotion of some of these activities, one of which may be an increase in the current account, an efficient social response to the deficit should be centered upon those sectors in which the costs of responding are smallest rather than those which are the largest contributors to either exports or imports. This is something that the market system will do automatically. Simply because the United States has a comparative advantage in high technology products does not make the current account effects of a dollar spent on this activity greater than a dollar spent in subsidizing an import-competing industry. Simply because the United States has a substantial energy deficit does not imply that a dollar spent on energy conservation will necessarily be the best way of increasing the current account.

A strong case can be made for the governmental promotion of research. As those generating knowledge will not appropriate the full social benefits of their findings, there is reason to believe that a private market system will allocate insufficient resources to research activities. But while some of the money spent in encouraging research and development will lead to increased exports this need not automatically occur. Much of the U.S. R. & D. effort has been devoted to the development of military technology which is not to be sold abroad. The distinction between invention and innovation is important. While subsidies to research and development may encourage the discovery of new technologies, it will not guarantee that the economic application of such technologies will take place in the United States. This will depend upon relative production costs here and abroad, and will be affected by the real value of the dollar. A more competitive dollar will induce companies to take advantage of the highly skilled U.S. labor force and locate here.

Much emphasis and publicity have been given to the argument that American manufacturers are inward looking and are unaware of the many profitable export opportunities. Firms have been castigated for their parochial attitudes and export-promotion drives have been launched. While such activities might have an effect upon a few corporations which are marginal exporters, they cannot be relied upon. They rest upon a premise that is incorrect. The U.S. failure to sustain market shares does not reflect an ignorance of the profitability of export opportunities. In fact it reflects an awareness that at previous exchange rate levels it was more profitable to manufacture many of the products abroad than it is in the United States.

In the energy area, there remains much to be done. The most important requirement is to raise energy prices so that they reflect their true social opportunity costs. The refined petroleum entitlements system and the practice of encouraging imports of natural gas at much higher than interstate ceilings are blatantly inefficient, because consumers do not pay and producers do not earn the marginal value of their products. U.S. energy products should reflect world prices. In fact, the argument could be made that the true opportunity cost of each barrel of oil is *higher* than its price since lower volumes of imports might force the cartel to lower the price of oil while larger imports might lead them to raise it. Setting this argument, and other objectives of a political or strategic nature aside, with a given world price of oil there is no reason why adjustment to the current account should entail placing more effort in saving a dollar's worth of expenditure on oil than it should upon adjusting by increasing exports or decreasing imports of some other commodity. In fact, as the responses of domestic energy supply and demand both seem to be particularly inelastic with respect to price, it is reasonable to expect that the adjustments could be more efficiently made by reducing U.S. consumption and increasing production in other commodity areas.

The most powerful influence upon performance in trade are relative costs. Piecemeal programs may well boost the current account but they cannot replace this fundamental adjustment. Increased expansion in modern capacity, increased expenditures on Research and Development, and a drive to find new markets (or to recapture old ones) will all take place, when firms discover they can undersell their competitors by manufacturing in the United States. An improvement in relative U.S. costs would provide the incentives for allocating more U.S. resources to the production of tradeable goods, while a reduction in aggregate domestic expenditure would free the products made in these sectors for foreign consumption.

### CONCLUSION

Although the U.S. current account has been extremely volatile in its short run fluctuations, over the long run the components of the current account have had strong and persistent trends. The secular decline in the overall balance reflects fundamental changes in international specialization as a result of the diffusion of technology, changes in factor endowments and the depletion of natural resources. Foreign economies have experienced particularly rapid productivity gains in

their export sectors; and, even when U.S. manufacturing costs have matched those in foreign manufacturing, U.S. international price competitiveness has deteriorated. While the United States has sustained a growing surplus in its services trade as a result of the substantial income received from U.S. direct investment abroad, this has not been sufficient to offset the trade balance declines. Changes in the exchange rate have been effective in altering the current account balance and in offsetting these fundamental changes, but they have required a lag of between two and three years to have most of their impact.

Although the dollar devaluations in 1977 and 1978 have improved U.S. price competitiveness, an optimistic projection of the 1985 current account suggested the reappearance of a substantial deficit which would probably not be sustainable. To adjust, national economic policy should aim at efficiently achieving the necessary reduction in expenditures relative to income and in reallocating resources toward the production of tradeable goods.

Exchange rate changes, measures designed to improve productivity, conserve energy, and lower the inflation rate will all require a considerable period to take effect. It is imperative that policy not be diverted by the temporary relief afforded by cyclical developments in the early 1980's into ignoring the need for long term adjustment. In particular, measures that ignore the strength of the trends and attempt to protect declining industries must be avoided.

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# THE TRADE ACT OF 1974 AS A VEHICLE FOR ADJUSTMENT

By Stanley Nehmer

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## SUMMARY

Throughout the 1970's, the U.S. industry has faced increased competition from imports. The growth in imports has ranged from relatively labor intensive items from developing countries to high technology goods such as computers and semiconductors. With the growing sophistication of the Advanced Developing Countries and the determination of Europe and Japan to move further in the direction of high technology exports, U.S. industry may face even greater pressures in the decade ahead.

Foreign trade has boosted U.S. income and brought American consumers a broad variety of relatively inexpensive goods. For many workers, expanding markets for U.S. exports have brought fatter pay-packets and bright prospects for the future.

But imports have also imposed some definite adjustment costs on the American economy. Jobs associated with exports have not risen

as rapidly as the number of jobs displaced by imports. For individual workers who have lost their job to imports, the adjustment process can be long and costly. In many cases, the combination of low skills and a lack of geographic mobility make it difficult to find any alternative employment at all.

If imports of manufactures continue to rise rapidly in the future, it will make it more difficult for the United States to generate a trade surplus in manufactures that can help offset the large deficit in raw materials and petroleum.

Past legislative attempts to deal with the problem of import injury to industries and workers have been very inadequate. The Trade Expansion Act of 1962 contained a very strict definition of import injury. As a result, affected workers and firms received virtually no assistance under the Act. Standards were liberalized in the Trade Act of 1974, but the results have been only somewhat better. Of the 38 cases considered by the International Trade Commission since January 3, 1975, only 7 industries received any import relief.

There is a definite need for a new approach to allow the economic adjustments that flow from trade to be made over a reasonable period of time. In particular, escape clause procedures will need to be modified if they are to become a more effective vehicle of adjustment for industry and labor. Nine proposals to modify these statutes are presented in the conclusions of this paper.

Provide emergency import relief.

Permit multilateral agreements as a form of import relief.

Provide for an appeal process for negative decisions of the International Trade Commission (ITC).

Extend the congressional override provision.

Eliminate the "national economic interest" proviso involved in Presidential review of ITC decisions.

Extend the maximum time period for import relief.

Eliminate adjustment assistance as a remedy in "escape clause" cases.

Reduce the time for reapplication to the International Trade Commission.

Do not require reductions in import relief during the period such relief is in effect.

## I. INTRODUCTION

For some 30 years the Congress has provided for an escape clause to permit an industry suffering from serious injury, or the threat thereof, to receive temporary relief to give that industry sufficient time to adjust to new conditions of international competition. The escape clause is consistent with Article XIX of the General Agreement on Tariffs and Trade. No other country provides as detailed a procedure, together with public hearings, as does the United States prior to the imposition of restrictions on imports. The most recent formulation of the escape clause appears in Sections 201, 202, and 203 of the Trade Act of 1974 (Public Law 93-618). In addition, the Trade Act of 1974 introduced into the concept of import relief a "market disruption test" with regard to imports from Communist countries only. This is embodied in Section 406 of the Trade Act of 1974.

The purpose of this study is to evaluate the application of the Trade Act of 1974 with regard to the provisions dealing with import relief. An effort will be made to demonstrate how the 1974 legislation has

changed government policy with regard to import relief from that established under the preceding legislation, the Trade Expansion Act of 1962. The study will examine specifically the effectiveness of orderly marketing agreements and other import remedies as means of assisting industries to adjust to new conditions and competition. Finally, the study will consider the implications of the statute for future policy and make some recommendations for revisions in the statute. It is not within the scope of this paper to deal with the unfair trade statutes.

Consideration of the import relief provisions of the Trade Act of 1974 (other than those relating to such unfair trade practices as foreign subsidies or dumping) is particularly timely. Although the Carter Administration presented to the Congress on June 19, 1979 the results of the Multilateral Trade Negotiations, including the various international codes of conduct negotiated in Geneva and the implementing legislation, the code on international safeguards, which was in the process of negotiation during the Multilateral Trade Negotiations, was not concluded. When such negotiations are completed, this code will be submitted to the Congress for its approval. The legislation to implement an international safeguards code will of necessity, have to deal with the escape clause provisions of the Trade Act of 1974. Except for some technical revisions, the implementing legislation submitted on June 19, 1979 does not deal with the escape clause procedures.<sup>1</sup>

## II. IMPORT RELIEF UNDER THE TRADE EXPANSION ACT OF 1962

### *A. Background*

There has been an escape clause provision in trade legislation since 1951.<sup>2</sup> The conventional wisdom is that until the Trade Expansion Act of 1962 (P.L. 87-794), the escape clause worked reasonably well. The criteria were fair and equitable, and relief occasionally was granted.<sup>3</sup> The 1962 legislation introduced new provisions, however, which made the escape clause a significantly less effective vehicle for relief to industries seriously injured by imports.

It should be noted that the escape clause has been tied closely to the requirements of Article XIX of the General Agreement on Tariffs and Trade. Section 1(a) of Article XIX states:

If, as a result of unforeseen developments and of the effects of the obligations incurred by a contracting party under this Agreement, including tariff concessions, any product is being imported into the territory of that contracting party in such increased quantities and under such conditions as to cause or threaten serious injury to domestic producers in that territory of like or directly competitive products, the contracting party shall be free, in respect of such product, and to the extent and for such time as may be necessary to prevent or remedy such injury, to suspend the obligation in whole or in part or to withdraw or modify the concession.

Thus it was thought that, to be consistent with the provisions of GATT, the escape clause had to be tied to injury related to trade concessions previously granted. One of the key aspects of the escape clause through the Trade Expansion Act of 1962 was the relationship

<sup>1</sup> House of Representatives, 96th Congress, first session, House Document No. 96-153, June 19, 1979.

<sup>2</sup> The concept of an "escape clause" was first included in a bilateral trade agreement between the U.S. and Mexico in 1943, followed by similar provisions in subsequent trade agreements. The Trade Agreements Extension Act of 1951 made it mandatory to include an escape clause in all trade agreements. The first Tariff Commission "escape clause" investigation was completed in August 1948.

<sup>3</sup> U.S. Senate, Committee on Finance, Report on the Trade Reform Act of 1974, (subsequently enacted as the Trade Act of 1974), Report No. 93-1298, November 26, 1974, p. 119.

of previously granted trade concessions to injury caused to an American industry. Furthermore, the Trade Expansion Act required that increased imports of the article which had received duty concessions had to be the major factor of the cause or threat of serious injury to the domestic industry, a threshold of injury not required by GATT.

The Trade Expansion Act was considered during 1962 in the contest of efforts by the Kennedy Administration to continue U.S. leadership in working toward a liberalized and expanded system of world commerce. President Kennedy, in his 1962 State of the Union Address, indicated that the enactment of this legislation "could well affect the unity of the west, the course of the cold war, and the growth of (our) Nation for a generation or more to come."<sup>4</sup> The trade deficits which developed in the latter part of the 1960's, accelerating into the 1970's, did not exist when the Trade Expansion Act was considered by Congress. The U.S. was still a strong world economic power with significant trade surpluses. The ability of low-wage developing countries to develop substantial export markets, particularly in the United States, had not yet been realized, with the major exception of textiles and apparel. And in these two cases, the import problem was considered solved through the negotiation of the Long Term Cotton Textile Arrangement, part of a seven point program of assistance to the domestic textile apparel industry announced by President Kennedy in May 1961.

Thus, when President Kennedy submitted the trade legislation to Congress on January 25, 1962, the concerns for the possible adverse impact of imports on domestic industry were minor compared to the concerns to increase exports and to retain world economic leadership. In the President's message he said:

If the authority requested in this act is used, imports as well as exports will increase; and this increase will, in the overwhelming number of cases, be beneficial for the reasons outlined above. Nevertheless, ample safeguards against injury to American industry and agriculture will be retained. Escape-clause relief will continue to be available with more up-to-date definitions. Temporary tariff relief will be granted where essential.<sup>5</sup>

For the first time, provisions to assist firms and workers who might be damaged by increased import competition, namely trade adjustment assistance, were introduced into this legislation. Various programs of adjustment assistance were recommended and subsequently enacted to provide for assistance to those firms and workers who could meet the test, namely, that increased imports of items subject to previously negotiated trade concessions were in major part a cause or threat of serious injury to the domestic industry.

## *B. Key Provisions*

### 1. TARIFF COMMISSION INVESTIGATIONS AND REPORTS

The actual process for seeking relief under the TEA was complicated. Any firm, group of workers, or industry seeking a revision in duty or adjustment assistance was eligible to file a petition for import relief or adjustment assistance with the Tariff Commission. The Commission was then required to determine whether, as a result "in major

<sup>4</sup> John F. Kennedy, "Message to Congress Relative to the Reciprocal Trade Agreements Program," House Document No. 314, 87th Congress, 2d session, January 25, 1962, p. 1.

<sup>5</sup> *Ibid.*



part" of a duty concession granted under trade agreements, an article was being imported into the United States in such increased quantities as to cause, or threaten to cause, serious injury to the domestic industry producing an article which was like or directly competitive with the imported article. The concept of "in major part" meant that imports had to be a cause of injury greater than the sum of all other causes.

The Commission was to determine if increased imports of the article which had received duty concessions were the major factor which had caused, or threatened to cause, serious injury to the industry or firm involved. In its findings, the Commission was to consider all relevant economic factors, including the idling of productive facilities, inability to function at reasonable profit margins, and unemployment or underemployment in the industry or firm. The Commission could not conduct an investigation on the same subject until one year had elapsed after the Commission submitted its report to the President.

The Tariff Commission was to conduct public hearings to afford interested parties the opportunity to present evidence and to be heard.

In cases where the Tariff Commission found injury, it was required to determine a specific duty level which would prevent or remedy injury. If the Commission found injury from imports but did not recommend imports relief, firms and workers in the industry nevertheless remained eligible to apply for adjustment assistance, which was considered a remedy from injurious imports, although not import relief.

The Commission was to report to the President its findings on industry investigations for duty relief within six months, and on petitions for adjustment assistance within 60 days after the case was opened.

## 2. PRESIDENTIAL ACTION AFTER TARIFF COMMISSION DETERMINATION

On receiving an affirmative injury report from the Commission, the President could invoke the escape clause in trade agreements and raise duties to 50 percent above the 1934 rates, impose a tariff-rate quota, impose quantitative import restrictions (quotas), negotiate orderly market agreements (OMA) with foreign countries, or mandate any combination of the remedies. In addition, or as an alternative, the President could authorize adjustment assistance to firms or workers. Any firm eligible for adjustment assistance needed certification from the Secretary of Commerce, while workers needed certification from the Secretary of Labor.

The President was required to act on the Commission's recommendation within 60 days, although he was not bound to accept the Commission's recommendation. In those cases where the President did not accept the Commission's recommendation, he was to report his reasons to Congress. A majority vote of the total membership of both houses of Congress could overrule the President within 60 days of receipt of the President's report. Such Congressional action would put into force the imposition or increase in duty or other import restriction recommended by the Commission. However, no such override actions occurred during the twelve years that the escape clause provisions of the Trade Expansion Act were in effect.

The President's action in escape clause cases under the TEA could extend for a period no longer than four years. On the advice of the Tariff Commission and the Secretaries of Labor and Commerce that such action would serve the national interest, the President could reduce or terminate escape clause action before the conclusion of the period of import relief.

The TEA provided that the President could automatically renew increases or impositions of duties or other import restrictions for an additional four year period, providing the President determined that the extension was in the national interest. Also, the injured industry could petition to renew the escape clause relief. After conducting new public hearings, the Tariff Commission was to advise the President of the probable economic consequences of terminating the relief.

### *C. Utilization of Escape Clause By Industry and Labor*

During the 12 years that the Trade Expansion Act of 1962 was in effect, the Tariff Commission concluded 28 cases. This compares with the 113 cases completed by the Commission in the preceding 14 years. Of the 28 escape clause cases under the Trade Expansion Act of 1962, after unanimous negative findings in the first 13 cases, the Commission found affirmatively for the industry in only 3 cases and was evenly divided in 6 cases. Thus, 9 cases out of 28 were submitted to the President for action. This compares with 33 affirmative determinations and eight split decisions during the 14 years prior to the enactment of the Expansion Act of 1962. Of the nine cases considered by the President under the 1962 legislation, the President provided a remedy in only six cases, four of which represented import relief through increased duties. During the preceding 14 years, the President provided a remedy in 15 of the 41 cases submitted to the White House.

The six cases in which the President provided a remedy for the industry involved the following: (1) pianos and parts, (2) sheet glass, (3) barbers' chairs, (4) marble and travertine products, (5) earthenware, (6) ball bearings. In four of the six cases, the President provided for increased duties as well as adjustment assistance in some of those cases. Thus only 4 of the 28 cases resulted in import relief for the industry involved.

The details of the 28 cases and their disposition can be found in table 1 of this study.

One of the most notorious escape clause cases under the Trade Expansion Act was that dealing with nonrubber footwear. The case was initiated by President Nixon, the first and only time that an escape clause case was initiated by a President. The Commission split evenly in its decision with regard to all nonrubber footwear except work and athletic footwear and slippers. No action was ever taken by the President in this case because the escape clause set no deadline for Presidential action when the Tariff Commission submitted a split decision. The President's failure to take action in the nonrubber footwear case, despite the fact that he had initiated the case, became a major issue in Congressional consideration of a revised escape clause in the Trade Act of 1974.

*D. Shortcomings of Import Relief Under the Trade Expansion Act of 1962*

After the Kennedy administration had submitted trade legislation to Congress in 1962, a number of circumstances changed so significantly that an escape clause procedure became a necessity. These factors included the international economic position of the United States; the adverse impact on the American economy of increasing imports in a growing range of products, particularly from low-wage countries; and the ineffectiveness of the adjustment assistance procedures. Yet the restrictions in the escape clause of the 1962 legislation made it virtually impossible to deliver effective relief to industries injured by imports.

During this period, productive and export capacities abroad were expanding. Even developing countries, particularly in the Far East, were organizing modern industries with mass-production techniques and low-wage bases which assumed formidable competitive positions in world markets. The economic activity of foreign nations made inroads into the traditional surplus position of the U.S. balance of payments.

The combination of the enhanced economic position of U.S. trading partners and the U.S. inflation of the sixties increased significantly the competitive impact of imports on U.S. domestic producers. The rigid test of the escape clause provision under the Trade Expansion Act, i.e. the need for causal relationships between duty concessions and serious injury by imports, did little to assist U.S. labor and industry. The rate of increase of U.S. imports in some product areas led to adjustments in the U.S. economy which were undesirable as they were unacceptable.

Throughout the sixties (and the seventies) the U.S. remained the most accessible market to foreign producers. U.S. duties, subject to continued reductions under the various trade agreement programs, remained at the lowest average level of any major industrialized country. Some restrictions in the agricultural area were exceptions, but these were part of U.S. domestic agricultural policy. In general, the flexible and open United States policy toward international trade was in sharp contrast to many other countries which had moved more slowly in opening their domestic markets. The escape clause procedure under the Trade Expansion Act, with its stringent requirements for import relief, did not offer continuing adjustments to meet changing economic conditions. The record of escape clause cases noted in the previous section demonstrates the weak response which U.S. industry and labor received. Dynamic developments in the world economy required temporary measures to avoid inappropriate and uneconomic adjustments. Under the Trade Expansion Act, U.S. domestic producers were not afforded a realistic opportunity to adjust to competitive forces.

### III. IMPORT RELIEF UNDER THE TRADE ACT OF 1974

#### A. Background

Between the passage of the Trade Expansion Act of 1962 and the Trade Act of 1974, the U.S. economy moved through several phases. The respectable pattern of growth of the 1950's and early '60's was followed into the '70's by staggering inflation, record budget deficits, and balance of trade and payments deficits. In the early seventies, the massive runs against the dollar collapsed the fixed parity between the dollar and gold, ending the fixed exchange system.

By making imports more expensive and exports relatively less expensive, the dollar devaluations added to U.S. inflationary pressures and created shortages of certain raw materials. In addition, the U.S. economy suffered from economic growth in Western Europe, Japan, and developing countries. Even the Communist countries' relative share of world trade expended vigorously in the sixties and seventies.

Superimposed on these problems was the dislocation in the U.S. economy created by the sharp rise in the price of crude oil. Deep concern about the economy by decision-makers in both government and business sectors prompted restrictive fiscal and monetary policies. The overall deterioration in the U.S. business outlook curtailed investment in capital equipment and spending for research and development.

At the same time, industries and their workers injured by growing imports were not able to secure effective import relief under the existing escape clause.

The ineffectiveness of the escape clause of the Trade Expansion Act of 1962 at a time when a rapid growth in imports led to a contraction in domestic production and employment resulted in growing criticism of the 1962 legislation and pressure to revise the escape clause procedure. When President Nixon sent his proposed trade bill to Congress in April 1973, he reflected on the weak performance of the existing escape clause procedures. He said:

Damaging import surges, whatever their cause, should be a matter of great concern to our people and to our government. I believe we should have effective instruments readily available to help avoid serious injury from imports and give American industries and workers time to adjust to increased imports in an orderly way.<sup>6</sup>

When President Ford signed the Trade Act of 1974 on January 3, 1975, he followed this theme:

Under the Act, the Administration will provide greater relief for American industries suffering from increased imports and more effective adjustment assistance for workers, firms, and communities.

The legislation allows us to act quickly and to effectively counter foreign import actions which unfairly place American labor and industry at a disadvantage in the world market.<sup>7</sup>

<sup>6</sup> Weekly Compilation of Presidential Documents, Vol. 9, No. 14, April 9, 1973, p. 343.

<sup>7</sup> Weekly Compilation of Presidential Documents, Volume 11, No. 1, January 6, 1975, p. 10.

The legislative history dealing with Sections 201 to 203 of the Trade Act of 1974 makes it clear that both the Senate and the House agreed that there was a need to relax the criteria for determining injury to a domestic industry. There was a further need to provide more effective import relief to industries adversely affected by imports. Unfortunately, the performance under the Trade Act of 1974 has been widely different from both the promise of the Executive Branch and the legislative history developed by Congress.

### *B. Key Provisions*

#### 1. "ESCAPE CLAUSE" (SECTIONS 201, 202, AND 203)

To a large extent the procedures under the escape clause of the Trade Act of 1974 follow those under the predecessor Trade Expansion Act of 1962. The name of the Tariff Commission was changed to the International Trade Commission. The new legislation continued the provisions for the Commission to conduct public hearings and afford interested parties the opportunity to present evidence. The Commission's report is due not later than six months after the filing of the petition or the request for an investigation. In affirmative findings of injury, the Commission is required to determine the imposition or increase of any duty or import restriction on the article which is necessary to prevent or remedy the injury. No longer does the Commission decide to hold investigations concerning the eligibility of industries, firms or workers who apply for adjustment assistance; this function is transferred directly to the Secretaries of Commerce and Labor.

The major change in the escape clause in the Trade Act of 1974 relates to the criteria to determine injury. The Trade Act eliminates the causal link between duty concessions from trade agreements and injury from increased imports. In the determination of injury under the Trade Act, increased imports must be a substantial cause, that is a cause more important than any other cause, rather than the major cause as in the Trade Expansion Act, which was a cause greater than all other causes combined. This important change in the criteria for injury was designed to liberalize the access to import relief for industries adversely affected by imports.

In findings of serious injury, the Commission was directed to consider the significant idling of productive facilities in the industry, the inability of a significant number of firms to operate at a reasonable level of profit, and significant unemployment or underemployment within the industry. The Commission was to consider other factors in findings of threat of serious injury: a decline in sales; a higher and growing inventory; and a downward trend in production, profits, wages, and employment, or increasing underemployment in the domestic industry concerned. With respect to substantial cause, the Commission was to examine an increase in imports, either actual or relative to domestic production, and a decline in the share of the U.S. domestic market held by U.S. producers.

The relevant economic factors are considered against the trend of increased imports. The Commission must assess the effect that increased imports would have if the flow of imports were to continue without restriction. It is necessary to consider these factors in rela-

tion to increased imports because they could result from a variety of other causes, such as changes in technology or consumption preferences, plant obsolescence, or poor management.

In an entirely new provision under the Trade Act, the Commission was directed to determine which domestic industry produced an article like or directly competitive with an imported article. For the domestic producer who also imports, the Commission was required to consider only the domestic production of the industry in question. In the case of a domestic producer who manufactures more than one article, the Commission was to treat as part of the domestic industry only that portion or subdivision of the industry which produces a like or directly competitive article.

These definitions neatly identify an industry within a multiproduct or conglomerate situation. If the specific product area is not identified, the relative size and affluence of a large multinational corporation may incorrectly indicate that an industry is healthy even though smaller producers, who may be the mainstay of U.S. domestic production, are seriously injured by imports.

In a similar situation, when a U.S. corporation has several independent operating divisions in scattered geographic areas, only some of these divisions produce the domestic article in question. In its investigation and finding, the Commission was to exclude from the determination of what constitutes the industry those divisions of a corporation in which the domestic article is not produced. These clarifications under the Trade Act are intended to assist smaller industrial units which produce a more restricted group of products.

To assist the President in making his determinations under Sections 202 and 203, the Commission was directed to investigate and report on efforts made by firms and workers in the industry to compete more effectively with imports. The Commission studies an industry to determine if it has made efforts to become more competitive through research and development, capital expenditure to improve facilities, and other measures to upgrade productivity.

In a new provision under the Trade Act, the Commission was required to notify promptly the appropriate agency when, in the course of its investigation, the Commission has reason to believe that increased imports were attributable in part to circumstances outside of its jurisdiction. Instances of such investigations come under the purview of the Antidumping Act of 1921, the countervailing duty statute (Section 303 of the Tariff Act of 1930), the unfair import practices statute (Section 337 of the Tariff Act of 1930), or other remedial provisions of law. This provision is designed to assure that the United States will not invoke the escape clause in needless situations. It also provides that the U.S. will not become involved in granting compensatory concessions or inviting retaliation in situations where there is an appropriate remedy for which there would be no basis for claims of compensation or retaliation.

In affirmative findings of serious injury, the Commission is to determine the imposition or increase of any duty or import restriction which is necessary to prevent or remedy the injury. As a change from the prior legislation, the Trade Act allowed the Commission to recommend adjustment assistance to remedy injury whenever such assistance was determined to be a more effective remedy than import relief.

The Commission may not reopen an investigation on the same matter unless one year has elapsed after its report to the President. However, the Commission may make an exception by determining that good cause existed to open an investigation in less than one year.

The Trade Act requires that the President provide import relief whenever the Commission determines that increased imports have been a substantial cause or threat of injury to a domestic industry. Two exceptions permit the President to withhold relief when the Commission recommends that adjustment assistance offers a satisfactory alternative or the President determines that import relief is not in the national economic interest. Although import relief is made optional, the President would be required in the case of every affirmative finding to evaluate the extent to which adjustment assistance has been or could be made available. The import relief which the President can deliver under the Trade Act includes an increase in import duties, tariff-rate quotas, quantitative restrictions (quotas), the negotiation of orderly market agreements, or a combination of these.

The President is required to evaluate the extent to which firms and workers in the industry have been seriously injured by increased imports. At his discretion, the President may direct the Secretary of Commerce and the Secretary of Labor to give expeditious consideration to petitions for adjustment assistance. On receiving an affirmative finding of injury from the Commission, the President must act on the recommendation within 60 days.

The Trade Act expanded the scope of adjustment assistance by acknowledging that it had been ineffective in the past, even though no general detailed report on the results of the program under the Trade Expansion Act was presented to Congress. In a sense, the expansion of the adjustment assistance program highlights the unmanageability of U.S. trade policy under the Trade Act. Improved adjustment assistance is a reaction to the instability in trade policy that inflict injury on the U.S. economy. It makes the need to take initiatives to reach the goal of a healthy U.S. industrial economy by compensating for the injury to U.S. industries and employment from imports.

In determining whether to provide import relief, and in what method and amount, the President must take into account several considerations under the new provisions of the Trade Act. He must seek information and advice from the Secretaries of Labor and Commerce on the experience of adjustment assistance for the industry in question. The President must also study the probable effectiveness of import relief to promote adjustment for the injured industry. For this, he reviews the current efforts of the industry to adjust to import competition, and other considerations relative to the position of the industry in the U.S. economy. Calculating the economic and social costs incurred by taxpayers, communities, and workers in the absence of import relief is supposed to give the President some idea of the severity of the situation.

Without overlooking the American consumer, the President gauges the effect of import relief on the U.S. market. Factors for consideration are price, availability of the imported article versus the domestic like or competitive article, and competition in the U.S.

market for the article. The geographic concentration of imported products marketed in the United States is also considered.

The effect of import relief on U.S. international economic interests is an essential criterion for the President's attention. It is important for the President to understand the impact that an import restriction or modification on behalf of U.S. industries and firms will have on U.S. international obligations. The President also considers the extent to which foreign suppliers delivers the particular article to the U.S. market because of restraints on markets of third countries.

On the day on which he proclaims import relief, including the decision to negotiate an orderly market agreement, the President must transmit to Congress a document setting forth his action. If his action differs from the recommendation of the Commission, the President must state the reason for such difference. Should the President proclaim that import relief is not in the U.S. economic interest, he must transmit to Congress the reasons for his determination and outline the steps he will take, beyond adjustment assistance, to help the industry overcome serious injury and to find productive employment for the workers.

When the President's action differs from the recommendation of the Commission or when he does not provide import relief, a voting majority of both Houses of Congress can overrule the President and put into effect the import relief recommended by the Commission. Congress must take action within 90 days after the President's determination is transmitted. To date, there has been no Congressional override of the Presidential escape clause decision under the Trade Act of 1974.<sup>8</sup>

An increase in duty cannot exceed a level which is 50 percent ad valorem (that is, 50 percentage points) above the existing rate at the time of the proclamation. In a new provision under the Trade Act, any quantitative restriction or orderly market agreement proclaimed by the President must restrict future imports to a level which does not exceed the imports of the most recent, representative period as determined by the President.

The import relief proclaimed by the President takes effect 15 days after the import relief determination date, but with one exception. An orderly market agreement must take effect within 90 days after the import relief determination date.

The Trade Act provides for fair and efficient administration of any quantitative restriction proclaimed by the President. Regulations govern the entry or withdrawal from warehouses of articles covered by an orderly market agreement. The imports of foreign countries named in the agreement and, in a new provision under the Trade Act, those outside the agreement, are monitored. In the case of orderly marketing agreements with one or more countries, accounting for a major part of U.S. imports of the article covered by such agreements, the President may restrict imports from countries not parties to such agreements.

The President can provide import relief for a period of up to five years, which is one year longer than under the Trade Expansion Act.

<sup>8</sup> It should be noted that Attorney General Griffin Bell has questioned the constitutionality of such a Congressional override provision.



The President may extend relief for "one 3-year period."<sup>9</sup> On advice from the Commission, the President makes a determination to extend relief when such action lies in the U.S. economic interest. Taking into account all relevant economic factors and the progress of the industry concerned, the Commission advises the President as to the probable economic effects of extension, reduction, or termination of the import relief. In a new provision under the Trade Act, the President must consider both the probable effectiveness of an extension of import relief as a means of promoting adjustment and the effect on consumers. Relief is renewed at a level no greater than the level in effect immediately before the extension.

## 2. MARKET DISRUPTION FROM COMMUNIST COUNTRIES (SECTION 406)

The Trade Act of 1974 introduced a new provision concerning relief from market disruption caused by imports from Communist countries. Congress believed that exports from Communist countries could be directed so as to flood domestic markets within a shorter time period than could occur under free market conditions. In the view of the Senate Finance Committee:

The Committee is also particularly concerned that the U.S. could become dependent upon Communist countries for vital raw materials such as oil, gas, nickel, chromium, manganese and others. If traditional, dependable sources of such materials, whether they are domestic or foreign, are suddenly forced out of business by substantial imports of such materials from communist countries, it could result in market disruption, or the threat thereof, for the domestic industry either producing or utilizing such articles.<sup>10</sup>

The provisions of Section 406 on market disruption track fairly closely the procedures under the escape clause, with some differences.

First, instead of "injury," the finding with regard to trade from Communist countries is that of "market disruption." The definition of market disruption in Section 406(e)(2) of the Trade Act of 1974 is as follows:

Market disruption exists within a domestic industry whenever imports of an article, like or directly competitive with an article produced by such domestic industry, are increasing rapidly, either absolutely or relatively, so as to be a significant cause of material injury, or threat thereof, to such domestic industry.

Thus, the definition appears to establish a lesser threshold for triggering action than exists under the escape clause. Second, the International Trade Commission has three months instead of six months in which to complete its investigation. Third, the Commission may not recommend adjustment assistance as the remedy in Section 406 cases, as it may do in escape clause cases. Fourth, if, at any time, the President finds that there are reasonable grounds to believe that imports from a Communist country are creating market disruption for a domestic industry, he shall request the Commission to initiate an investigation. If the President further finds that emergency action is necessary, he may put into effect any of the import relief measures provided for under the escape clause. The emergency action taken by the President must cease if the Commission makes a negative deter-

<sup>9</sup> Although clearly stated as "one 3-year period" in the statute, this has recently been interpreted by the White House to mean "up to 3 years" in the case of stainless and alloy tools steels where the import relief was extended by President Carter on June 13, 1979 for only 8 months. This change is one of the "technical" amendments to the Trade Act of 1974 in the Trade Agreements Act of 1979 to implement the results of the Multilateral Trade Negotiations.

<sup>10</sup> U.S. Senate, Committee on Finance, Report on the Trade Reform Act of 1974, Report No. 93-129, November 26, 1974, pp. 210-211.

mination or if the Commission makes an affirmative determination at the same time as the President's emergency action becomes effective.

The Senate Finance Committee's report states that after an affirmative finding by the Commission, the President must take positive action to remedy the market disruption with regard to imports from the country or countries which are found to cause the disruption.<sup>11</sup> Since this provision is not in the statute itself, the Executive Branch does not recognize it as binding on the President. Precedent already exists under Section 406 for the President to review the Commission's determination and to decide against import relief.

### 3. REVIEW OF COMMISSION RECOMMENDATIONS WITHIN THE EXECUTIVE BRANCH

It has been said that every escape clause (or market disruption) case is essentially two cases. There is the case which is investigated by the International Trade Commission which includes public hearings, questionnaires submitted to the domestic industry and to import interests, prehearing and posthearing briefs, and public transcripts of the record. This investigation is truly held in the "sunshine."

However, after the Commission makes an affirmative determination, or an evenly split determination as to injury, the case moves to the Executive Branch where the procedures are anything but in the "sunshine." The first step after a case is received by the Executive Branch, that is, referred to the President for his decision, is a notice published in the Federal Register soliciting the views of the public with regard to the factors which the Trade Act enumerates for the President to consider before he makes his decision. There are nine such factors in Section 202 of the Trade Act which the President must take into account in addition to other considerations he may deem relevant. These factors, discussed above, go beyond those which the Commission must consider.

After briefs covering these points are submitted to the Trade Policy Staff Committee, which is chaired by an official of the Office of the Special Representative for Trade Negotiations, the case goes "underground." A working group of the Trade Policy Staff Committee is established to consider the report of the Commission and the briefs which are submitted pursuant to the notice in the Federal Register. Recommendations are then made to the Trade Policy Staff Committee by the different agencies represented on the working group. The Committee considers the matter and then submits its recommendations to the Trade Policy Review Group. If a consensus cannot be reached by the time the case is considered by the Trade Policy Review Group, or if any agency requests a meeting of the Trade Policy Committee, the matter is considered at that level. Representation on the Trade Policy Review Group is generally at the Under Secretary or Assistant Secretary level. Representation at the Trade Policy Committee is supposed to be at the Cabinet level. The Economic Policy Group, chaired by the Secretary of the Treasury, may also be seized with consideration of the problem.<sup>12</sup> Finally, the recommendations of

<sup>11</sup> *Ibid.*, p. 212.

<sup>12</sup> "The Economic Policy Group (EPG) shall be the exclusive vehicle for overseeing the formulation, execution, and presentation of the Administration's domestic and international economic policies." White House press release, June 1, 1979.

the interagency apparatus are transmitted to the President by the Special Representative for Trade Negotiations. At the White House this issue is within the province of the Assistant to the President for Domestic Affairs and Policy. It then goes to the President for final decision.

At no time during the course of the interagency consideration of the Commission's recommendation, from the working group level of the Trade Policy Staff Committee to the Cabinet-level Trade Policy Committee or Economic Policy Group, does the public know what matters are considered in formulating the recommendations to the President. During this entire process, the merits of the case may be argued all over again, but without the parties to the case being involved. It is true that during this procedure, which can last up to 60 days, representations are made to the different agencies and to the White House primarily by members of Congress, and in some cases by the domestic industries, unions, import interests, and foreign governments concerned, but rarely is there any feedback as to the way in which the matter is being considered within the Executive Branch.

Thus, the "first" case under the escape clause is in the "sunshine" before the International Trade Commission. The "second" case on the same product goes virtually "underground" when it goes to the Executive Branch until the President makes his final decision and public announcement. It is not at all clear that Congress ever intended that an industry petitioning under the escape clause would have to overcome two hurdles—one completely open and the other completely closed.

### *C. Record of Escape Clause Cases*

As previously stated, the import relief possible under the escape clause includes duty increases, tariff-rate quotas, quantitative restrictions (quotas), orderly marketing agreements, or a combination of the foregoing. The President may also recommend expedited consideration of adjustment assistance in lieu of import relief.

The escape clause is an important means of dealing with problems faced by industries and their workers arising out of growing and injurious imports. Its effective implementation would reduce a tremendous strain on relationships between industry, workers, the Executive Branch, and Congress.

Notwithstanding the promises made by the Executive Branch and the intent of Congress, import relief under the escape clause of the Trade Act has been sparse indeed. A summary of escape clause investigations conducted under the Trade Act appears in table 2.

Of the 38 escape clause investigations completed under the Trade Act to date, the Commission made these determinations: 21 affirmative findings, 14 negative findings, and 3 split findings, the latter also submitted to the President for decision. In several of the affirmative determinations, the Commission found affirmatively for only part of the industry. Of the 24 affirmative or split findings of injury which the Commission referred to the President for his decision, only 7 have resulted in import relief. The seven industries involved are: specialty steel, nonrubber footwear, color television receivers, CB radio transceivers, high-carbon ferrochromium, industrial fasteners (nuts, bolts

and screws), and clothespins. In five cases, adjustment assistance was granted instead of import relief.

It should be noted that four of the seven industries were each the subject of more than one case before import relief under the Trade Act was granted. The nonrubber footwear and high-carbon ferrochromium industries were involved in two cases each. The industrial fasteners' industry was involved in three cases before import relief was granted as a result of the third case. The clothespin industry was unsuccessful in its effort to secure import relief under Section 406 of the Trade Act, but did receive import relief under the escape clause,

In three of the seven cases—specialty steel, color television receivers, and nonrubber footwear—the President negotiated orderly market agreements (OMA's) with certain foreign countries. In the case of specialty steel, the President negotiated an agreement with Japan and imposed quotas on imports from all other countries. In the case of nonrubber footwear, orderly marketing agreements were negotiated with Korea and Taiwan. In the case of color TV's, an OMA was initially negotiated with Japan and subsequently OMA's were negotiated with Korea and Taiwan under the President's authority to negotiate further OMA's with other countries. The President imposed quotas on all countries in the case of clothespins, but limited the relief to lower-valued clothespins. Tariffs were increased on imports in the other three cases: CB radios, high carbon ferrochromium, and industrial fasteners. The increased duty in all three of these cases applied to imports from all countries under the most-favored-nation treatment principle followed by the United States.

Although the statute permits import relief for up to 5 years, none of the seven industries has received import relief for more than 4 years, with the imposition of four year relief occurring in only one case, nonrubber footwear. In all other cases, import relief was granted for a period of three years. The statute permits an extension of import relief for one 3 year period. The first petition for an extension of import relief, submitted by the specialty steel industry, resulted only in an 8 month extension with greatly increased quota levels.

There have been four cases under Section 406, three of which were on a single article, clothespins.<sup>13</sup> The Commission found affirmatively in only one of the four cases, involving clothespins from the People's Republic of China. The President rejected import relief in that case. The Commission then initiated an escape clause action on clothespins which led to an affirmative finding of injury. In this case, import relief was granted by the President.

Appended to this report are detailed case studies on three "winners" of import relief: specialty steel, nonrubber footwear, and color TV receivers. These studies discuss the impact of imports on each of these industries and the effects of import relief.

In the sections which follow an effort will be made to analyze the different types of import relief and the strength and weaknesses of the import relief provisions of the Trade Act of 1974 together with some recommendations for future policy and legislation.

<sup>13</sup> A fifth case involving anhydrous ammonia from the Soviet Union was the subject of a petition filed with the Commission on July 11, 1979.

#### IV. AN EVALUATION OF THE IMPORT RELIEF PROVISIONS OF THE TRADE ACT OF 1974

##### *A. Relative Effectiveness of Different Types of Import Relief*

Import relief under the escape clause (or market disruption clause) of the Trade Act of 1974 has been limited, if not minimal.

First, import relief has been granted in only 7 cases out of the 38 which have been completed.

Second, no industry has received import relief for the maximum period of five years provided in the Trade Act of 1974. This represented an increase of one year in the maximum allowed in the escape clause of the Trade Expansion Act of 1962. Only one industry out of seven received import relief for as much as four years while the other six industries received import relief for three years.

Third, only two industries received comprehensive quantitative import relief—specialty steel and clothespins, although only lower-valued clothespins were covered by import quotas. Since the import relief in the latter case is relatively recent, no evaluation can yet be made as to its effectiveness.

With regard to specialty steel, there is no question that the quantitative import relief had a significant effect on the specialty industry's recovery within the three year period granted by President Ford. However, even in that case, the recovery of the industry is expected to be short-lived because the petition for extension of relief for an additional three year period was rejected by President Carter in favor of an eight month extension only, with quota levels substantially expanded over those which existed during the initial 3-year period.

Fourth, in the case of the two industries—nonrubber footwear and color TV receivers—which received import relief through orderly marketing agreements with certain foreign supplying countries, it has become clear that the partial nature of the relief has not brought about their recovery or their adjustment to new conditions of competition. The orderly marketing agreements on nonrubber footwear negotiated with Taiwan and Korea resulted in significant reductions in imports from these two countries, but because of substantial increases in non-rubber footwear imports from other countries, total imports in 1978 were at their highest level in history, and domestic production at the lowest level of the post-World War II period. In the case of the orderly marketing agreement on color TV's with Japan, a similar situation resulted.

Imports of color TV's, both complete and incomplete, covered by the orderly marketing agreement, declined. But imports of incomplete receivers not covered by the OMA and imports of both complete and incomplete color TV receivers from other countries increased significantly. The result here indicates the need to negotiate additional orderly marketing agreements on color TV's with Korea and Taiwan. Furthermore, employment in the domestic TV industry has not recovered, nor has the industry's profitability.

Fifth, in the three cases where tariffs were increased—CB radios, high carbon ferrochromium, and industrial fasteners—the increases were essentially nominal and limited to three years.

In the seven cases where import relief has been granted, three different forms of import relief have been used: increased tariffs,

quotas, and orderly marketing agreements. Only tariff-rate quotas have not been utilized under the Trade Act of 1974 as a means of providing import relief.

Based on the experience under the Trade Act to date, a key question is whether any form of import relief can be effective in returning to good health an industry seriously injured by imports. The answer lies not with the import relief mechanisms but rather with the restricted nature of the relief, either the limited period of time for which it has been granted, the limited number of countries covered by orderly marketing agreements, or the limited increases in tariff levels. The bottom line in this evaluation is that different forms of import relief can be effective depending upon the circumstances on a case-by-case basis. However, the trade policy thrust of those who recommend action to the President and, indeed, the trade policy biases of the President himself, may be the main determinants of whether or not a particular type of import relief will be effective. Following is a brief evaluation of the different means of import relief provided in the Trade Act of 1974.

Tariff increases generally represent a less certain form of import relief than either quantitative restrictions (quotas) or orderly marketing agreements. If the price differential between imports and domestically produced goods is greater than the increase in the tariff, then only higher cost foreign supply will be constrained through the tariff mechanism. Thus, the level of the increased tariff plays a key role. As has been noted, the Trade Act of 1974 permits an increase of 50 percentage points above the current tariff level as a means of import relief. Since most U.S. tariffs are well below the 20 percent ad valorem level, an increase in the tariff of 50 percentage points represents a substantial increase in tariff levels. Under present or foreseeable U.S. trade policy, the odds of either the International Trade Commission recommending or the President proclaiming a tariff increase of as much as 50 percentage points, are small. Where the International Trade Commission has recommended increased tariffs, it generally has not exceeded an increase of 30 percent, which in itself could represent a substantial increase in tariff levels. Where the resident has acted to utilize the tariff mechanism for import relief, it generally has not exceeded an increased tariff of 15 percentage points.

Yet the use of a tariff has the advantage of not freezing supplying countries in their current share of imports, which could be the case with quotas allocated on a country-by-country basis. Furthermore, the use of tariff increases as a means of import relief would not preclude, to the same extent as quotas, the newer, developing country suppliers from increasing their relative import shares in the U.S. market, nor would such tariff increases prevent the more efficient foreign suppliers from making relative gains in U.S. market share. Likewise, a tariff-increase remedy would not have the effect of discriminating between higher-valued and lower-valued imports. Where quantitative import data may not be available to fix quantitative limits under quota, the use of increased tariffs could be a viable alternative. Finally, if a prime objective of the import relief is to raise prices of a large domestic inventory overhanging the U.S. market, as was the case with CB radios, then an increase in the tariff could have a beneficial effect almost immediately.

The use of quantitative restrictions or quotas by themselves does not correct a situation of serious injury from imports. The level of the quota, and whether or not it is divided among the major supplying countries with lesser supplying countries competing under a "basket" quota, are the prime determinants of the effectiveness of the quota remedy. Clearly, quantitative restrictions are called for as the means of import relief where the growth of imports exceeds the "adjustment capacity of the corresponding domestic industries or at any rate threatens other unacceptable damage."<sup>14</sup>

It is useful to quote a statement on the choice of remedy by a former member of the International Trade Commission, Italo H. Ablondi, in his determination in the color television receiver escape clause case in 1977. He said:

The quota is the economically viable remedy regardless of whether the surge of imports was an exceptional, one-time occurrence or is, in fact, an accelerating trend, so long as the size of the quota is reasonably related to prior import trends. If the surge proves to be an aberration, then a reasonable quota should have little or no adverse impact on demand for or prices of either foreign or domestic color receivers. However, if the surge in imports is indicative of a sharply accelerating new trend, then a quota will directly and unequivocally halt the surge in imports.

A tariff is not a satisfactory remedy in cases where unrestrained growth exceeds adjustment capacity, whether the change is aberrant or not. Should the surge prove to be a one-time occurrence, then consumer prices of both imports and domestic production have been increased needlessly by the tariff. If the surge is the forerunner of an accelerating trend, then increased tariffs may not be sufficient to bring an immediate halt to the trend.

The usual rationale for choosing a tariff over a quota does not apply in the case of severe injurious market disruption. A tariff is generally preferable because it rations demand through the price mechanism, yet does not sever the linkages between domestic and international prices completely. However, in those cases where the acceleration of imports is so extreme that adequate timely adjustment by the domestic industry is impossible, these linkages appear to have already been severed. Thus, measures other than modification of the price mechanism are justified.<sup>15</sup>

It should be noted that Section 203 of the Trade Act provides that any quantitative restriction shall permit import levels not less than those "during the most recent period which the President determines is representative of imports of such article." This provision was interpreted by the Senate Finance Committee not to be construed to mean that there could not be any cutback in imports from the level existing when injury is found to exist.<sup>16</sup>

The Trade Act permits quotas to be established on the basis of quantity or value. Quotas based on value could result in serious loopholes, since there are many ways for exporters and importers to undervalue the restricted product. Furthermore, a value-based quota could create pressure on foreign suppliers to focus their shipments more heavily on low-unit value products which, in many cases, might be in the price range of the greatest injury from imports. This could push U.S. producers completely out of certain product lines.

Tariff-rate quotas represent another form of import relief provided in the Trade Act of 1974, although this has not been used as a remedy in any of the seven cases where import relief has been granted to date.

<sup>14</sup> Delbert A. Snider, "Introduction to International Economics," Homewood, Illinois, 1971, Page 157 quoted in United States International Trade Commission, Publication 808, March 1977, Page 59.

<sup>15</sup> U.S.I.T.C. Publication 808, March 1977, Pages 59-60. In the statement by Commissioner Ablondi, he quotes from Jan Tumlir, "In Search of A New World Economic Order," New York, 1974.

<sup>16</sup> U.S. Senate, Committee on Finance, Report on the Trade Reform Act of 1974, Report No. 93-1298, Page 126.

Under a tariff-rate quota, imports of a certain quantity are allowed to enter under existing tariff levels. Any imports above that quantitative level would then be subject to higher tariffs. Although the tariff-rate quota has the advantage of providing the least disruption to the given quantity of imports, that is, the quantity of imports permitted to enter at existing tariff rates, as a remedy it suffers from the need to determine the over-quota tariff rate which would hold the total volume of imports at a level that would remedy the serious injury. This computation is perhaps as difficult to make as under a tariff remedy where a similar judgment may be required. In a remedy involving increased tariffs, all imports are subject to the higher tariff levels, whereas in a tariff-rate quota remedy only the over-quota volume of imports is subject to higher tariff levels. In a tariff-rate quota remedy, more than in an increased tariff remedy, there would be a tendency to set tariffs at levels which would make the under-quota figure the total, or virtually the total, volume of imports.

Finally, the fourth import relief mechanism permitted under the Trade Act of 1974 is the orderly marketing agreement (OMA). As has been noted, this method of import relief has been used with regard to specialty steel, nonrubber footwear, and color television receivers. Essentially, the orderly marketing agreement remedy is discriminatory in that such agreements are not negotiated with all foreign suppliers, but only, at least initially, with the major foreign suppliers. In order for this remedy to be viable, when the President determines that orderly marketing agreements are the chosen form of import relief, he also must determine that if such agreements cannot be negotiated, he will resort to quotas. This latter determination is essential to the successful negotiation of orderly marketing agreements, because the trade policy of many countries, whose exports have been the cause of serious injury to a U.S. industry, calls for acceptance of an orderly marketing agreement only if the alternative is worse. In an orderly marketing agreement, the determination of a recent representative period is also required under the Trade Act. The United States and the foreign country with which it is negotiating are essentially equal bargaining partners. The fact that the President has only 90 days in which to conclude such an agreement puts pressure on both sides to conclude the negotiations within that time frame. While the U.S. negotiators may feel it necessary to make a deal at almost any cost so that the President will not be forced to impose quotas in the absence of a successful negotiation, the threat of the imposition of quotas in the absence of an OMA puts pressure on the foreign government as well.

Section 203 of the Trade Act gives the President the authority to take action with regard to imports from countries not subject to orderly marketing agreements. He can do this either through the negotiation of additional orderly marketing agreements or, where agreements in force account for a major part of U.S. imports of the particular article, through unilateral action to impose quotas. To date this provision has been utilized only in the case of color television receivers. As discussed more fully in the case study, orderly marketing agreements were negotiated on color TV's with Korea and Taiwan subsequent to the original agreement with Japan when it was discovered that imports of uncontrolled Korean and Taiwan color television receivers were increasing their share of the U.S. market as a



result of the restrictions on Japan in the orderly marketing agreement. At present, similar additional OMA's are under consideration in the area of nonrubber footwear because of a similar situation in that industry.

Reference has been made to expedited adjustment assistance for firms and workers as a remedy in escape clause cases, although it is not permitted with regard to market disruption cases. It should be noted that adjustment assistance is not a form of import relief although it is a recognized remedy in escape clause cases.

The history of adjustment assistance, since it was first provided in the Trade Expansion Act of 1962, has not been satisfactory. Perhaps with some exceptions, adjustment assistance for firms and workers has been found to be neither a cure, nor a satisfactory palliative, for the import-related injury sustained by a domestic industry. Although hundreds of thousands of workers have received useful adjustment assistance benefits, such benefits have not restored their jobs.<sup>17</sup> Essentially only a revitalization of the domestic firms comprising the industry can do that.

Unfortunately, even for firms, adjustment assistance has been found to have little effect on their financial and competitive health. Not only has such assistance been fraught with costly bureaucratic delays, but in many cases adjustment assistance has come "too little and too late" to do any good. Furthermore, under the Trade Act of 1974, the maximum loan to a firm which can be made directly by the Commerce Department is \$1 million and the maximum loan guarantee is \$3 million. In many industries such sums are insignificant and cannot provide the assistance necessary to restore the competitiveness of the import-injured industry. This is particularly true in capital intensive industries and those where large research and development expenditures are necessary to generate technological innovations.

An additional form of import relief exists in the form of multilateral agreements, although these are not provided for in the Trade Act of 1974. The sole example of a multilateral agreement as a form of import relief exists in the Arrangement Regarding International Trade in Textiles, known as the Multifiber Arrangement or MFA, negotiated under the aegis of the General Agreement on Tariffs and Trade. U.S. participation in the MFA is authorized under Section 204 or the Agricultural Act of 1956, as amended.

The MFA became effective on January 1, 1974 for a period of four years. It was renewed for an additional four year period effective January 1, 1978. The MFA, which covers trade in textiles, apparel, and other products made from cotton, wool and man-made fibers, is the successor to the Long Term Cotton Textiles Arrangement, also negotiated under the auspices of GATT, which became effective October 1, 1962. The one-year Short Term Cotton Textile Arrangement preceded the LTA.

The MFA provides for two forms of restraint on imports, one taken unilaterally and the other as a result of bilateral negotiations. Unilateral action may be taken if an importing country finds that imports

<sup>17</sup> In the first 4 years of the revised adjustment assistance program under the Trade Act of 1974, 470,725 workers have been certified eligible; 440,479 workers have received benefits; and 299,098 workers were denied eligibility. Benefits paid during this period totaled \$692 million. However, only 16,081 workers entered retraining programs, 2,714 received job search allowances, 1,423 received relocation allowances, and 14,687 received job placements. Department of Labor, Office of Trade Adjustment Assistance, Management Information Report, May 1979.

are causing disruption to its domestic market in a particular product line. The level of restraint may not be less than the level of imports during the first 12 of the 14 months preceding the month in which action is initiated by the importing country. The initial import restraint level may be extended for additional 12-month periods with an annual growth in the restraint level of at least 6 percent.

The MFA also provides that bilateral agreements between an importing and exporting country may be negotiated if "on overall terms" they provide more liberal restraint levels than those that would be established as a result of unilateral action. The provisions with regard to bilateral agreements state that, on one hand, the agreement should "eliminate real risks of market disruption" and, on the other hand, "ensure the expansion and orderly development of trade in textiles and the equitable treatment of participating countries."

The MFA provides for an international surveillance body to supervise the implementation of the arrangement. This body can make recommendations to participating countries but cannot direct action by any country. The MFA, however, calls on all participating countries "to endeavor to accept in full" the recommendations of the surveillance body.

The MFA is a unique international agreement in many respects. It is essentially the only multilateral arrangement which deals with import problems of manufactured products which otherwise would be dealt with on a unilateral basis by governments of importing countries. These would usually be the industrialized countries of the West, where there is a high import sensitivity in a politically active textile industry. The MFA is a unique form of import relief in that importing and exporting countries are generally on an equal footing in working out problems in international trade in textiles and apparel. In effect, importing countries have given up the right to act outside of the MFA, although from time to time there have been deviations from this principle. In the negotiations for the extension of the MFA in 1977, the European Community threatened to jettison the MFA in favor of unilateral action until the inclusion of a provision which permits importing countries to act on the basis of "reasonable departures" from the obligations undertaken under the MFA.

The MFA has not been without its critics. Textile and apparel industries in importing countries have been critical of the high level of import growth and import penetration that has occurred notwithstanding the provisions of the MFA. This has been largely the result of inaction by the governments of importing countries despite their right to take action. Exporting countries have also been critical of the many restraint actions which have been taken either unilaterally or through bilateral agreements under the MFA. However, the textile and apparel industries of many exporting countries now look with favor upon the MFA because its restraint actions have resulted in restricting the entry of new producers and exporters.

Although the MFA is unique, comparable authority exists in Section 121(a)(12) of the Trade Act of 1974. This section states:

(a) The President shall as soon as practicable, take such action as may be necessary to bring trade agreements heretofore entered into, and the application thereof, into conformity with principles promoting the development of an open, nondiscriminatory, and fair world economic system. The action and principles

\* \* \* \* \*  
referred to in the preceding sentence include, but are not limited to, the following—

(12) Consistent with the provisions of Section 107, any revisions necessary to establish within the GATT international agreements on articles (including footwear), including the creation of regular and institutionalized mechanisms for the settlement of disputes, and of a surveillance body to monitor all international shipments in such articles.

To date no action has been taken by the United States to negotiate such international agreements although it is understood that some effort was made to do so early in the Multilateral Trade Negotiations.

*B. Strength and Weaknesses of Import Relief Provisions of the Trade Act of 1974*

To many American industries and workers hurt by imports, the import relief procedures under the Trade Act of 1974 have been no more than a charade. At best, to some, the entire procedure from investigation and hearings by the International Trade Commission to the final determination by the President is uncertain. Many industries believe that they can secure import relief only if they have the political muscle to put sufficient pressure on the Administration. Indeed, there probably has not been an import relief case that has not strained relationships between industry, workers, the Executive Branch and Congress. There has hardly been an escape clause case that has not involved some members of Congress "going to the mat" on behalf of their constituents.

Yet the liberalized escape clause provisions in the Trade Act of 1974 were a cause of serious concern to many who thought that they would bring about a return to protectionism. When the Nixon trade bill was introduced in Congress in 1973, Hobart Rowen, writing in the *Washington Post*, said ". . . the real question that remains unanswered is whether the President, despite the rhetoric of his message, can buy off the protectionist forces—that is to say, whether one can make peace with the devil."<sup>18</sup> The spectre of protectionism has almost always been raised as well when an industry petitions the International Trade Commission for import relief. The fear of protectionism is intensified when the Commission concludes affirmatively that an industry is being seriously injured by imports. And, finally, when import relief is delivered to an industry, as has occurred in only seven out of 38 cases, the President is subject to additional criticism for acting as a protectionist.

Nevertheless, Congress intended, and at least two Presidents promised, that industries and workers injured by imports should receive a degree of protection from injurious imports for a temporary period of time if certain criteria could be met.

One promise of import relief to a specific industry was made on behalf of President Ford, who was in office when the Trade Act was enacted. A commitment was made to Senator McIntyre that if the nonrubber footwear industry were to seek import relief under the escape clause procedures and the International Trade Commission were to find affirmatively in favor of the industry, then the Ford Administration would grant import relief to that industry.<sup>19</sup> Despite that commitment, however, when the Commission unanimously found injury with regard to imports of nonrubber footwear, President

<sup>18</sup> *Washington Post*, April 19, 1973.

<sup>19</sup> Letter to Senator Thomas McIntyre from Ambassador William D. Eberle, Special Representative for Trade Negotiations, December 11, 1974, Congressional Record, December 13, 1974, p. S21439.

Ford reneged on his commitment to provide relief and decided merely to ask the Secretaries of Commerce and Labor to expedite adjustment assistance for firms and workers in the footwear industry.

Concern also exists that foreign policy considerations transcend any objective consideration of import relief under the Trade Act of 1974. Industries recall that in April 1973 Henry Kissinger, then Assistant to the President for National Security, in his Year of Europe speech said ". . . it is the responsibility of national leaders to ensure that economic negotiations serve larger political purposes." Since that time, foreign policy considerations have undoubtedly entered into many Presidential decisions with regard to the 24 affirmative or split-vote cases submitted to the White House by the International Trade Commission.

This background of uncertainty and the record to date underlie the conclusion of many that the present escape clause procedures cannot provide meaningful import relief. The relief has been that industries have become discouraged from filing new cases and have been increasingly critical of the entire procedure. The fact that few cases are pending before either the International Trade Commission or the President is testimony to the cynicism with which American industry and labor view the escape clause procedure today.

A significant part of the problem lies in certain deficiencies in the procedure, as well as in the unwillingness of the Executive Branch to provide import relief beyond that necessary to get an industry "off its back."

There are many specific areas of concern based upon the experience to date under the escape clause procedures of the Trade Act of 1974. These can be summarized as follows:

The fact that escape clause procedures really represent two cases instead of one has led to the feeling that the closed procedures under the so-called "second case," when the Executive Branch reviews the recommendation of the International Trade Commission, undoubtedly involve considerations beyond those spelled out in the statute.

There is no appeal process for negative decisions. Under the present statute, if the International Trade Commission rules negatively in an escape clause case, the decision cannot be appealed by the petitioner. Yet in decisions of other Federal investigatory or regulatory bodies such as the Federal Trade Commission and the Interstate Commerce Commission, it is possible to appeal a negative decision in the courts. Industries receiving a negative determination under the escape clause have no alternative but to reopen the investigation after one year has elapsed.

The Congressional override provision is limited. Although Section 203 of the Trade Act permits Congress, by majority vote of both Houses, to disapprove a Presidential action in initial cases of import relief, thus requiring the President to put into effect the import relief recommended by the International Trade Commission, no similar Congressional override provision exists with regard to reviews or extensions of existing import relief.

The possibility that "expedited adjustment assistance" may be the only result of an escape clause case tends to make a mockery of the entire procedure. No industry or group of workers would

go through the time and expense of initiating an escape clause case in order to receive only adjustment assistance, when firms in an industry can apply directly to the Secretary of Commerce and workers can similarly apply directly to the Secretary of Labor in a simple, virtually costless procedure.

The amount of time it takes to complete the escape clause procedure may be too long for industries severely injured by imports, especially when imports continue to mount while the case is proceeding. No "emergency" procedure exists to deal with truly serious import cases which must be dealt with expeditiously if irreparable harm to the industry and its workers is to be avoided.

The maximum time period for import relief of 5 years initially, with one extension of 3 years, may not be sufficient to permit a domestic industry to adjust. None of the seven industries which has received import relief to date under the Trade Act of 1974 has been granted relief for as much as 5 years. Only one industry has received import relief for 4 years, and the other six have received limited import relief of only 3 years. There may well be situations where authority is needed for extension of import relief beyond that now permitted in the Trade Act.

The import relief mechanisms provided for in the Trade Act may be too restrictive in that they do not include the negotiation of multilateral agreements, such as the MFA on textiles and apparel. It may well be that some cases might best be handled by providing authority for a multilateral solution together with the bilateral orderly marketing agreement approach that is already provided for in the Trade Act.

In summary, the record of escape clause procedures clearly indicates the need for reform and improvement. The results of the Multilateral Trade Negotiations are now in hand with significant tariff cuts in the order of 30 percent on an overall basis, and with new international codes of conduct, whose effectiveness remains to be tested. These factors may intensify the need for a more effective escape clause procedure to solve import problems faced by domestic industries and their workers. Reforms are long overdue and would represent a major contribution to the trade legislation now on the books. Specific recommendations follow in the concluding section of this study.

## V. RECOMMENDATIONS FOR FUTURE POLICY AND LEGISLATION

The record of the limited delivery of import relief to American industries and workers under the Trade Act of 1974 as described above makes clear that a thorough review of import relief provisions in U.S. legislation is now overdue. American industry and its workers have found a wide gap between the promise that a solution to their problems exists in U.S. law and actual performance. The need for fair and equitable treatment of domestic industry and its employees is overwhelming.

American industry faces a stiff challenge without parallel in history, from import competition in an expanding range of manufactured products. Figures based on the certification of workers who lost jobs because of imports, show that during the last four years over 100,000

jobs were lost each year to the increasing market share gained by foreign suppliers in a host of U.S. markets, from low-technology labor-intensive products to sophisticated high-technology products epitomized by integrated circuits and computers. Not even the gain in jobs from increased exports has matched this job loss. Import surges have compounded the multifaceted problems of escalating trade deficits, rampant inflation, and chronically high unemployment.

Simply stated, American industry needs to produce at relatively high levels of output to remain competitive. American workers need jobs. No matter what demands the new international economic order may impose on the United States, the typical American wants employment to support himself and his family. He is willing to compete on fair and equitable terms with others abroad as well as at home. Unfortunately, the typical worker in this country who loses a job to imports produced under different rules of the game does not readily qualify for an opening in another sector of the economy, if such an opportunity exists. Academic arguments for liberal expansion of trade completely overlook the practical plight of the American worker displaced by imports. The American labor force is not a homogeneous whole, but rather a heterogeneous mix of high, low, and unskilled workers who are, in effect, "locked in" to regional areas separated by practical geographical barriers.

Not only does import competition inflict heavy unemployment and underemployment in basic U.S. industries, but it also undermines the ability of the United States economy to generate the export surplus in manufactures necessary to purchase essential raw materials and natural resources. Although oil is not available in sufficient quantities to meet the needs of the American economy, our policymakers talk about the need to restrict such imports; at the same time, these same policymakers are reluctant to take actions to restrict imports of goods produced in this country when such imports create injury to American industry and American workers.

Against the growing U.S. trade with developing countries which generates exports of low-wage, low-technology products, the U.S. industry which produces like or competitive articles faces almost insurmountable odds. Congress pledges economic assistance to developing nations yet neglects the American worker who possesses the identical (or even inferior) skills and education of his "deprived" counterpart in a foreign nation.

Clearly the United States lacks adequate trade legislation to assist American industries and workers injured by import competition. Strong, effective legislation is needed to ease the burden on these American industries and workers and to facilitate, over a reasonable period of time, the economic adjustments essential to strengthening the position of the United States in an increasingly competitive world.

In the following section proposals are made to amend and revise the import relief provisions of U.S. trade statutes so as to meet this objective.

*Provide emergency import relief.*—A "fast track" is desirable to provide import relief faster than that now provided for under the escape clause. An appropriate "fast track" approach would be one which would provide the petitioner with action within 30 days or so from the date of petition; the Commission's findings would be binding without the need for a Presidential decision. The test should be less than

presently has to be met under the escape clause, perhaps the same test as now exists under the countervailing duty and antidumping statutes. On the other hand, this emergency import relief should be limited to no more than perhaps 9 months to 1 year and should not be renewable. The only way in which an industry would be able to secure continuation of import relief would be through a regular escape clause procedure before the International Trade Commission. But while this emergency procedure was in place, the industry would be assured that imports would not increase to the point of "hemorrhaging" that industry while it was arguing for import relief.

*Negotiate multilateral agreements as a form of import relief.*—In addition to the forms of import relief now provided for in the escape clause procedures, it would be desirable to provide authority for the negotiation of multilateral agreements, such as that which exists under the aegis of the General Agreement on Tariffs and Trade with regard to textiles and apparel. Although the concept of orderly marketing agreements has been utilized since the Trade Act of 1974 was enacted, the need to negotiate such agreements on a bilateral basis and, to be effective, with a continuing number of countries, leads to the conclusion that a multilateral agreement to establish international rules for limiting imports under certain circumstances when injury has been found, would now make sense.

*Provide for an appeal process for negative decisions.*—Standard procedure with regard to cases before most federal investigatory or regulatory bodies such as the Federal Trade Commission and the Interstate Commerce Commission is to permit an appeal of negative determinations in the courts. The procedures with regard to investigations and determinations by the International Trade Commission provide for no such appeal process. The only alternative that is open to an industry when it receives a negative ruling by the International Trade Commission is to wait one year to petition for a reopening of the case. In that period of time the industry may suffer further import injury which places it in an even worse position when it again comes before the International Trade Commission.

*Extend the congressional override provision.*—Undoubtedly through an oversight, no Congressional override is possible with regard to reviews or extensions of existing import relief under the escape clause of the Trade Act of 1974. It is possible, therefore, for the President to put import relief into effect and then terminate it at some reasonable period of time, knowing that he cannot be overridden by Congress. This oversight should be corrected.

*Eliminate the "National Economic Interest" proviso.*—If the President is to continue to review affirmative or split-vote determinations of the International Trade Commission, then at the very least the nebulous "national economic interest" provision of the escape clause should be eliminated. The use of this provision has been stretched, if not abused. There have been few legitimate turndowns of import relief by the President based upon the "national economic interest" proviso now in the statute.

*Extend the maximum time period for import relief.*—Authority should exist to permit more than one three-year extension of import relief for certain industries which may require a longer period for adjustment. The maximum now permitted is eight years, but in practice

no industry has received import relief for that long. In the only case to date—specialty steel—where a decision has been made on extension of import relief, the maximum provided was three years and eight months.

*Eliminate adjustment assistance as a remedy in escape clause cases.*—In market disruption cases involving imports from Communist countries, adjustment assistance is not permitted as a remedy; similarly, it should not be permitted as a remedy in escape clause cases. The escape clause is not the proper procedure for firms and workers to seek adjustment assistance. This is not to say that adjustment assistance should be discarded as a supplementary mechanism, but separate and simpler procedures for adjustment assistance exist in the statute without going through the cumbersome procedures of the escape clause.

*Reduce the time period for reapplication to the international trade commission.*—It would make sense for a period of no more than six months to elapse after an industry has applied for and been denied import relief, and no more than one year after an industry has received import relief and it has been terminated, before a petition can be presented to the Commission to initiate a new investigation. This would halve the present unnecessarily long time limits in the Trade Act of 1974.

*Eliminate possible reduction in import relief levels.*—At present, Section 203 of the Trade Act employs hortatory language to suggest that the International Trade Commission may reduce the level of import relief if it extends beyond three years. The same section also provides that if import relief is extended beyond the initial period, the levels of relief in the extended period should be no greater than those that existed at the end of the initial period of import relief. These provisions are unnecessarily inflexible and can work to the detriment of an industry endeavoring to adjust. By eliminating these provisions from the Trade Act, Congress can make it clear that greater discretion is intended with regard to the setting of import levels during the period of import relief.

Although revisions such as those suggested above will be subject to criticism by highly export-oriented industries, by certain agricultural groups, and certainly by multinational corporations as being protectionist, these reforms are long overdue and would represent a major contribution to the trade statutes of this country. These legislative initiatives are constructive and would be well received by a wide range on industry and labor interests. Those who are concerned with jobs and the plight of individual firms and communities throughout the nation should welcome these approaches. The challenge to reform in this vital trade area is here. The question is whether Congress is willing to accept this challenge.



TABLE 1.—SUMMARY OF INVESTIGATIONS UNDER SEC. 301(b) OF THE TRADE EXPANSION ACT OF 1962

Investigation No. TEA-1 and product	Petitioner	Tariff Commission determination	Commission's recommended remedy	President's decision	Effective date and period of import relief
1 Household china, tableware and kitchenware	American Fine China Guild, Inc.	Negative: 6-0	Not applicable	Not applicable	Not applicable.
2 Earthenware, table and kitchen articles	The U.S. Potters Association	do	do	do	Do
3 Hatters' fur	Hatters' Fur Cutters Association of the U.S.A.	do	do	do	Do
4 Softwood lumber	Lumberman's Economic Survival Committee	do	do	do	Do
5 Whisky (except Irish, Irish-type, Scotch and Scotch-type)	Publicker Industries Inc.	do	do	do	Do
6 Umbrellas and parts (except handles)	Umbrella Manufactures and Suppliers Inc and Umbrella Frame Associations, Inc	Negative 5-0	do	do	Do
7 Watches, watch movements and parts of watch movements	Bulova Watch Co., Elgin National Watch Co., and Hamilton Watch Co.	do	do	do	Do Do
8 Mushrooms prepared or preserved	Mushroom Canners Committee and Pennsylvania Canners & Food Processors Association	do	do	do	Do
9 Ice skates and parts thereof	Roller Derby Skate Corp and Nestor Johnson Manufacturing Co.	do	do	do	Do
10 Eyeglass frames and mountings	International Union of Electrical, Radio & Machine Workers	Negative: 4-0	do	do	Do
11 Barbers' chairs	Emil J. Paidar Co., and Koken Co's, Inc.	Negative: 5-0	do	do	Do
12 Broomcorn	Rocky Mountain Farmers Union	do	do	do	Do
13 Canned sardines	Maine Sardine Packers Association, Inc.	do	do	do	Do
14 Pianos and parts	National Piano Manufacturers Association.	Affirmative: Pianos 3-2	Increased duty: 3	Increased duty to 13.5 percent on all pianos and parts thereof, but did not affect staged tariff reduction on grand pianos; adjustment assistance.	Feb. 21, 1970 (3 yr).
15 Glass	American-St. Gobain Corp.; Libby-Owens-Ford Co.; Missouri Glass Co.; and PPG Industries, Inc.	Negative: Parts 4-1 Split: Sheet glass 3-3	Not applicable Increased duty: 3	Not applicable Extended existing escape clause protection of 1962 case by retaining duties on rolled, plate float and tempered glass and increasing the rates on sheet glass; adjustment assistance.	Not applicable. Feb. 27, 1970 (2 yr).
16 Barbers' chairs	Emil J. Paidar Co., and certain labor unions.	Negative: All other glass 4-2 Split: 3-3	Not applicable Quotas: 3; increased duty: 3	Not applicable Adjustment assistance	Not applicable. Do.
17 Umbrellas and metal parts thereof	Umbrella Frame Association of America.	Negative: 3-1	Not applicable	Not applicable	Do.

18	Nonrubber footwear	Letter from President	Negative: Work and athletic footwear and slippers 4-0. Split: All other nonrubber footwear 2-2.	do	do	Do.
19	Billiard balls	Albany Billiard Ball Co.	Negative: 5-0	Not applicable	Not applicable	Do.
20	Marble and travertine products	National Association of Marble Producers.	Split: 2-2	Increased duty: 2	Adjustment assistance; recommends to Congress the elimination of duties on rough and certain semi-finished forms of the stone.	Do. Do.
21	Television cameras	International Union of Electrical, Radio & Machine Workers; International Brotherhood of Electrical Workers; and International Association of Machinists & Aerospace Workers.	Negatives: 5-1	Not applicable	Not applicable	Not applicable.
22	Ceramic articles, including dinnerware	American Dinnerware Emergency Committee.	Negative: Fine china 6-0	do	do	Do.
23	Flat glass	ASG Industries; L-E Glass of Penn Sarken, N.J., Libbey-Owens-Ford; and PPG Industries, Inc.	Split: Sheet glass 3-3	Increased duty: 4	Increased duty to 21-55 percent depending on article.	Apr. 4, 1972 (4 yr).
24	Electron, proton and similar microscopes, diffraction apparatus and certain other parts.	2 U.S. producers	Negative: All other glass 6-0	Not applicable	Not applicable	Do. Do.
25	Brass wind musical instruments and parts thereof.	Selmer Division of Magnavox Co.; Chicago Musical Instrument Co.; E. K. Blessing Co., Inc.; Benge Trumpet Corp.; and United Auto Workers Union, Local 364.	Split: 3-3	Increased duty: 3	Negative	Do.
26	Men's and boys' neckties	Men's Tie Foundation, Inc.	Discontinued	Not applicable	Not applicable	Do.
27	Ball bearings	Anti-Friction Bearing Manufacturers Association, Inc.	Negative: Antifriction balls 2-1	do	do	Do. Do.
28	Ferroalloys	Ferroalloys Association	Affirmative: Ball bearings 2-1	Increased duty: 2	Increased duty to 20 percent on two small diameter sizes of radial ball bearing and to 15 percent and 3.4 cents per pound on larger diameter size radial ball bearings.	May 1, 1974 (4 yr).
			Discontinued	Not applicable	Not applicable	Not applicable.

TABLE 2.—SUMMARY OF INVESTIGATIONS UNDER SEC. 201 OF THE TRADE ACT OF 1974

Investigation No. TA-201 and product	Petitioner	ITC determination	ITC recommended remedy	President's decision	Effective date and period of import relief
1 Birch plywood door skins	Columbia Plywood Corp.	Negative: 5-1	Not applicable	Not applicable	Not applicable.
2 Bolts, nuts and screws of iron or steel	Russell, Burdsall & Ward, Inc.; the Industrial Fasteners Institute; Cap Screw and Special Threaded Products Bureau.	Negative: Small screws 5-0; bolts, nuts, large screws 3-2.	do	do	Do.
3 Wrapper tobacco	Cigar Leaf Tobacco Foundation, Inc.	Negative: 6-0	do	do	Do.
4 Asparagus	California Asparagus Growers Association; Washington Asparagus Growers Association; and certain unaffiliated asparagus growers.	Split: 3-3	Quotas: 3; no remedy: 1	Negative	Do.
5 Stainless steel and alloy steel	Tool and Stainless Steel Committee for Import Relief; United Steelworkers of America, AFL-CIO.	Affirmative: 4-1	Quotas: 4	OMA with Japan; quotas on all other countries.	June 14, 1976 3 yr
6 Slide fasteners and parts	Slide Fastener Association	Split: 3-3	Adjustment assistance: 3	Adjustment assistance	Apr. 14, 1976.
7 Footwear, nonrubber	American Footwear Industries Association; Boot & Shoe Workers Union; United Shoe Workers of America.	Affirmative: (except 6-0 for disposable footwear and zoris).	Increased duty: 3; tariff quota: 2; adjustment assistance: 1.	Adjustment assistance	Apr. 16, 1976.
8 Stainless steel table flatware	Stainless Steel Flatware Manufacturers Association.	Affirmative: 5-1	Tariff Quota: 3; adjustment assistance: 2.	Adjustment assistance	Apr. 30, 1976.
9 Certain gloves	Work Glove Manufacturers Association.	Negative: Rubber, plastic gloves 5-1; leather, cotton gloves 6-0	Not applicable	Not applicable	Not applicable.
10 Mushrooms	Mushroom Cannery Committee of the Pennsylvania Food Processors Association and the Mushroom, Processors Tariff Committee.	Affirmative: 4-1	Adjustment assistance: 3; tariff quota: 1.	Adjustment assistance	May 17, 1976.
11 Ferricyanide and ferrocyanide blue pigments.	American Cyanamid Co.	Affirmative 5-1	Increased duty: 5	Negative	Not applicable.
12 Shrimp	National Shrimp Congress	Affirmative: 3-2	Adjustment assistance: 3	Adjustment assistance	July 7, 1976.
13 Round stainless steel wire	Stainless Steel Industry Committee	Negative: 4-1	Not applicable	Not applicable	Not applicable.
14 Honey	Mid-U.S. Honey Producers Marketing Association, Inc.	Affirmative: 3-2	Tariff quota: 3	Negative	Do.
15 Plant hangers	Knots to You, Inc.	Negative: 6-0	Not applicable	Not applicable	Do.
16 Sugar	Senate Committee on Finance	Affirmative: 5-1	Quotas: 4; tariff quota: 1	Negative	Do.
17 Mushrooms	Special Representative for Trade Negotiations	Affirmative: 4-1	Tariff quota: 3; adjustment assistance: 2	do	Do.
18 Footwear, nonrubber	Senate Committee on Finance	Affirmative: 6-0	Tariff Quota: 4; increased duty: 1; adjustment assistance: 1	OMA's	June 28, 1977 (4 yr).

19	Television receivers color and monochrome, assembled, finished or not-finished, and subassemblies thereof.	COMPACT: Industrial Union Department AFL-CIO; American Flint Glass Workers of North America; Allied Industrial Workers of America; Communications Workers of America; Glass Bottle Blowers' Association of the U.S. and Canada; Independent Radionic Workers of America; International Association of Machinists; International Brotherhood of Electrical Workers; International Union of Electrical Radio & Machine Workers; United Furniture Workers of America; United Steelworkers of America; Corning Glass Works; GTE Sylvania Inc.; Owens-Illinois, Inc.; Sprague Electrical Co.; and Wells-Gardner Electrical Corp.	Affirmative: Color 6-0 Affirmative: Monochrome 3-0	Quotas: 1; increased duty 5 Increased duty	OMA's Not applicable	July 1, 1977 (3 yr) Not applicable.
20	Low carbon ferrochromium	Committee of Producers of Low Carbon Ferrochrome.	Negative: 3-1	Not applicable	do	Do.
21	Cast iron cooking ware	Atlanta Stove Works, Inc.; General Housewares Corp.; and Lodge Manufacturing Co.	Negative: 4-1	do	do	Do.
22	Fresh cut flowers	Growers Division of the Society of American Florists and Ornamental Horticulturists.	Negative: 4-0	do	do	Do.
23	Certain headwear	Empire State Cloth Hat & Cap Manufacturing Association and United Hatters, Cap & Millinery Workers International Union.	do	do	do	Do.
24	Cast iron stoves	Washington Stove Works, U.S. Stove Co., Portland Stove Foundry Co., and Martin Industries.	Split: 2-2	Suspend from GSP treatment: 2	Negative	Do.
25	Live cattle and edible meat products	National Association of American Meat Producers of South Dakota and Meat Promoters from North Dakota, Mont. Wyo.	Negative: 4-0	Not applicable	Not applicable	Do.
26	Cast iron pipe and tube fittings	American Pipe Fittings Association.	Negative: 5-0	do	do	Do.
27	Bolts, nuts and large screws of iron and steel.	U.S. Fasteners Manufacturing Group, United Steelworkers of America, International Association of Machinists & Aerospace Workers.	Affirmative: 3-1	Increased duty: 3	Negative	Do.
28	High carbon ferrochromium	Committee of Producers of High Carbon Ferrochromium.	do	Increased duty: 4	do	Do.

TABLE 2.—SUMMARY OF INVESTIGATIONS UNDER SEC. 201 OF THE TRADE ACT OF 1974—Continued

Investigation No. TA-201 and product	Petitioner	ITC determination	ITC recommended remedy	President's decision	Effective date and period of import relief
29 Citizens band (CB) radio transceivers	E. F. Johnson Co.	Affirmative: 5-1	Adjustment assistance: 3; increased duty: 3.	Increased duty to 15 percent for 1st year, phased down 3 percent during last 2 yrs.	Apr. 11, 1978 (3 yr)
30 Certain stainless steel flatware	Stainless Steel Flatware Manufacturers Association.	Affirmative: 4-2	Increased duty: 4; adjustment assistance: 2; tariff quota: 1.	Negative	Not applicable.
31 Unalloyed, unwrought zinc	Lead-Zinc Producers Committee.	Negative: 5-1	Not applicable	Not applicable	Do.
32 Unalloyed, unwrought copper	Anaconda Co., ASARCO, Inc., Cities Service Co. (Minerals Group), Copper Range Co., Cyprus Mines Corp., Duval Corp., Hecla Mining Co., Inspiration Consolidated Copper Co., Kennecott Copper Corp., Magma Copper Co., Phelps Dodge Corp., and Ranchers Exploration and Development Corp.	Affirmative: 4-1	Quotas: 4	Negative	Do.
33 Bicycle tires and tubes	Carlisle Tire and Rubber Co.	do	Increased duty: 3; adjustment assistance: 1.	do	Do.
34 Certain fishing tackle	American Fishing Tackle Manufacturers and The Tackle Representatives Association.	Negative: Snelled fish hooks; fishing rods and parts; fishing reels and parts 5-0. Affirmative: Artificial baits and flies 4=1.	Not applicable	Not applicable	Do.
35 High carbon ferrochromium	Committee of Producers of High Carbon Ferrochromium (Aircro, Inc., Chromium Mining and Smelting Corp., and Interlake, Inc.)	Affirmative: 4-0	Suspend GSP treatment of artificial baits and flies: 4. Increased duty: 4; Quotas: 1	Negative	Do.
36 Clothespins	ITC	do	Quotas: 4	Quotas on all countries	Feb. 23, 1979 (3 yr).
37 Bolts, nuts, and large screws	House Committee on Ways and Means.	Affirmative: 2-1	Increased duty: 2; no remedy: 1.	Increased duty by up to 15 percent for 3 yrs.	Jan. 6, 1979 (3 yr).
38 Certain sewing machine needles	Torrington Co.	Negative: 5-0	Not applicable	Not applicable	Not applicable.

## APPENDIX

*Case Studies*

## I. SPECIALTY STEEL

*A. Summary*

On petition from the U.S. producers of specialty steel and the United Steelworkers of America (AFL-CIO), an import relief program was established for the domestic specialty steel industry in 1976. It was implemented because the President agreed with the determination of the U.S. International Trade Commission that imports of specialty steel had increased relentlessly and that, as a direct result of that continuous assault, the companies and workers in this industry were suffering serious injury. Although the Commission found that five years of import relief were critically needed to halt the erosion of this essential industry, President Ford established quantitative restrictions only for a three-year period. One year after the imposition of the relief, President Carter opened an investigation to study the effect of terminating the relief program, but the investigation resulted in retaining the original restrictions.

Near the close of the import restraint period, the domestic industry petitioned to extend the relief for three years. In that investigation the Commission advised the President that it was evenly divided on the question of the probable economic effect on the domestic industry of the termination of the import relief. President Carter renewed the import relief for a period of eight months. The U.S. domestic industry believes that the brief extension will most assuredly result in a renewed flood of imports because foreign producers added virtually hundreds of thousands of tons of capacity during the period of import relief and the United States is the only market large enough to absorb such excess production.

*B. Elements of Import Impact*

## 1. EROSION OF DOMESTIC INDUSTRY

Separate and distinct from the carbon steel industry, the U.S. specialty steel industry produces a variety of stainless steel and alloy tool steel products, often in the same plant complex. A typical plant complex in the specialty steel industry generates a flexible product mix, while operating with a common technological and metallurgical base and common melt facilities. The production of semifinished forms accounts for nearly two-thirds of the total cost of any finished form in the specialty steel industry.

Stainless steel is used primarily in the food, chemical, textile, pollution control, and electric power industries. Alloy tool steel is used primarily in processing and producing other metal products. In total, the U.S. specialty steel industry produces over 1,500 identifiable products that are subject to injury by imports.

During the October 1975 escape clause investigation, instead of the usual five-year period, the Commission considered the years 1964-1975 in making a determination of injury due to imports. The broad 11-year period was chosen to avoid a determination based solely on a time of abnormal economic conditions. In the last 8 years of the period, the specialty steel industry experienced unusual market conditions in which government actions distorted the industry's import levels. Further, the industry was adversely affected by many events during this period: the Voluntary Restraint Agreement, two recessions, price controls, and a world nickel strike.

An affirmative finding of injury which in "substantial" cause is due to imports, is based on two major factors, among others: increased imports and increased imports relative to domestic production. According to data supplied by the Commission, total imports of stainless steel and alloy tool steel tripled between 1964 and 1975. Imports as a percent of U.S. domestic production increased from about 10 percent in 1973 to over 20 percent in the first nine months of 1975.

The secular trend in imports for categories of specialty steel products was even more alarming in the calendar year prior to the escape clause investigation. For all stainless steel products, imports represented 11 percent of apparent consumption in 1974, but jumped to over 19 percent in the first nine months of 1975. Imports of alloy tool steel products represented over 19 percent of apparent consumption in 1974, but leaped over 8 percentage points to a level of 27.5 percent in the first nine months of 1975. This severe import problem was seen as a persistent and increasing menace to the specialty steel industry.

At the base of the depressed state of the U.S. specialty steel industry were extremely low levels of capacity utilization. Based on the questionnaire results submitted to the Commission, the 1974 capacity utilization figure for all forms of stainless and alloy tool steel was 79 percent (see table 1). Yet the figure for capacity utilization in 1975 dropped to 42 percent. Large decreases in capacity utilization for each category of specialty steel occurred in 1975.

## 2. DOWNWARD TRENDS IN EMPLOYMENT AND PRODUCTION

In 1974, total employment in the specialty steel industry stood at 32,011 workers, of whom 23,824 were production and related workers (see table 2). By contrast, total employment fell 32 percent to a level of 21,701 workers in 1975. The number of production workers also fell 32 percent in 1975 to a level of 16,102 workers.

The number of man-hours worked by production and related workers was nearly 47.6 million hours in 1974. In 1975 the figure had decreased nearly 40 percent to an historic low of 28.9 million. These significant losses in employment and man-hours translated into extreme hardships for the thousands of employees in the U.S. specialty steel industry who either lost their jobs or suffered cutbacks in salaries.

Total U.S. production of specialty steel, which would eventually become subject to import restraint, stood at a level of over 1.3 million tons in 1974 (see Table 3). By 1975, U.S. production fell 605,000 tons or 46 percent to a level of 723,000 tons. The most serious production losses were in stainless sheet and strip, stainless wire rod and alloy tool steel. U.S. production of alloy tool steel, for example, fell 59,000 tons or 47 percent between 1974 and 1975. These losses in production virtually opened the path for low-priced imports to enter the U.S. market.

## 3. LOW PROFITABILITY WITH CONSISTENTLY INCREASED IMPORTS

The U.S. specialty steel industry reached an historic low profit level in 1975 at a time when imports were approaching their highest level (table 4). In deflated dollar terms, the total U.S. stainless and alloy tool steel industry showed a profit of \$21.6 million in 1975, which was \$187.1 million or nearly 90 percent below the level recorded in 1974. In 1974, the specialty steel industry posted a record year for profits and the comparison with 1975 might appear misleading. In deflated dollar terms, however, the 1975 figure had declined \$105.8 million or 83 percent from the 1973 figure. These figures reveal that the domestic industry was unable to sustain a reasonable level of profits in the face of a steady import surge.

The net operating profit before taxes as a percent of net sales for the U.S. specialty steel industry in 1975 was a meager 2.4 percent, which represented a decline of 10.6 percentage points from the 1974 figure and 7.1 percentage points from the 1973 figure (table 5). These low profit levels restricted capital investment to expand and modernize capacity and dampened the industry's long-term plans.

Against increased levels of imports and the related increased market share for foreign producers, domestic shipments and profits of the specialty steel industry declined tremendously. In the report to the President, the Commission cited two important causes for serious injury, increased imports and the recent recession. It is evident from the Commission's report that increased imports were a more important cause of injury and not less important than the recession.

### *C. Impact of Import Restraints on the U.S. Specialty Steel Industry*

Of the three industries receiving import relief in the form of quantitative limitations, the specialty steel industry has experienced the most beneficial results. The fact that the import limitations on specialty steel applied to imports from all countries while in the other two cases the limitations applied to imports only from certain countries, probably explains why the specialty steel import program has been the most successful.

The statistical and other evidence available clearly indicate that the original import restraint program was effective in promoting the recovery of the domestic specialty steel industry and in facilitating the process of adjustment. However, the process of recovery remains incomplete.

## 1. PRODUCTION

Total U.S. production of specialty steel items subject to import restraint has strengthened substantially since the initiation of the restraint program. Table 3 shows that, in relation to 1975 levels, total production increased from 722.9 thousand tons to 1,101.8 thousand tons in 1977 and 1,253.8 thousand tons in 1978.

This improvement in overall production levels, however, was not shared by all principal product forms. Production of stainless wire rod and alloy tool steel, for example, grew only modestly since 1975, and production in 1978 remained considerably below the levels of 1973-74. Stainless wire rod and alloy tool steel are also the two quota categories in which imports have continued to enter the United States at particularly high rates in relation to historical levels. It is not a surprise, therefore, that the recovery in U.S. production of these items has been proceeding more slowly than production of other items.

In general, the statistics on domestic production of specialty steel serve as a sound indication that the earlier adverse trends in production that the Commission had found to be caused by import-related injury had been reversed, but not restored to levels that would constitute a complete recovery for the industry.

## 2. CAPACITY UTILIZATION

The increased U.S. production of specialty steel, made possible by the import restraint program in combination with a growing U.S. economy, is reflected in the improvement recorded in rates of capacity utilization among domestic producers.

The statistics contained in table 1 show that the rate of capacity utilization for the domestic specialty steel industry as a whole increased from 42 percent in 1975 to 69 percent in 1978. Improvements were also recorded among each of the product forms, except stainless plate. It is important to note, however, that the improvement in utilization rates for producers of alloy tool steel and stainless rod were specifically related to reductions in capacity. Between 1977 and 1978, alloy tool steel and stainless rod experienced capacity reductions of 26 and 18 percent, respectively, which account for most of the improvement in their levels of capacity utilization.

In fact, although the industry generally has improved operating levels since 1975, utilization rates in 1978 remained below rates prevailing in 1974. Moreover, table 1 shows that the rates of capacity utilization in the specialty steel industry remained significantly below the average rate experienced by all U.S. producers of steel mill products, including specialty steel, and by all U.S. private manufacturers. Whereas in 1978, all U.S. steel producers and all private manufacturing establishments enjoyed capacity utilization rates of 85 percent and 81 percent, respectively, specialty steel producers recorded a capacity utilization rate of only 69 percent during the same period. Despite substantial improvements in operating rates, the U.S. specialty steel industry is still producing significantly below reasonable rates of capacity utilization.

## 3. MARKET SHARE

One of the most important effects of the import restraint program has been its stabilization of the share of the U.S. market supplied by imports. The data in tables 6 and 8 show that the rate of growth of specialty steel imports, both as a percent of apparent domestic consumption and in absolute terms in 1977 and 1978 was considerably moderated, and in some cases reversed, in comparison with rates recorded during the earlier years. Such data confirm that the effect of the restraint program was to ease the rate of import growth.

The import restraints, combined with a rather robust growth in U.S. industrial production following 1975, helped domestic producers to expand their shipments and market share from the depressed levels of 1975-76 (see table 7). In calendar 1978, total domestic shipments of specialty steel had strengthened considerably, and shipments of the various product forms responded similarly, although to varying degrees.

The net effect of restraints on imports and growth in U.S. producers' shipments was an expansion in the share of the U.S. market supplied by domestic producers, as shown in table 6. In 1975, imports had supplied more than 18 percent of the total specialty steel market but, by the beginning of 1979, this share had declined to 12.2 percent. Declines also occurred with respect to each of the five categories of products to varying extents.

The reduction in the share of the market supplied by imports after 1976 should not disguise the fact that this decline was not secular. Table 6 indicates that import penetration for all specialty steel in 1978 was near the same level as in the previous year. This was specifically the case for stainless sheet and strip. Import penetration in the stainless plate and stainless bar markets actually increased between 1977 and 1978. In fact, import penetration rates for stainless sheet, strip, bar and alloy tool steel were higher in 1978 than in 1974.



These figures suggest that although domestic producers had recovered significant market share since import restraints were originally imposed, the establishment of the restraints at historically high import levels and continued pressure from a large volume of imports set definite limitations on the pace of recovery. Although domestic shipments were moving in the correct direction, average growth rates of specialty steel shipments for the years 1970 through 1974 still exceeded those of the more recent period. In the case of stainless rod, the 1977-78 growth rate was 8.7 percentage points lower than the 1970-74 average; in the case of stainless sheet and strip, the 1977-78 growth rate was 8.1 percentage points lower. The 1977-78 growth rates for stainless wire rod and stainless bar also experienced a decline from the 1976-77 rate, which coincided with the increase during 1977-78 in the stainless steel bar import penetration ratio.

#### 4. EMPLOYMENT

Employment levels and the number of man-hours worked in the domestic specialty steel industry strengthened considerably during the original period of import relief. The data in table 2 show that between 1975 and the end of 1978, specialty steel producers added about 3,500 employees to their payrolls. More than 2,900 of these additional employees were production and related workers. By the end of 1978, there were 18 percent more production and related employees at work than in 1975.

Among the various product categories, sheet and strip, which is the largest category by volume, accounted by far for the greatest increase in employment, adding more than 2,000 production workers to company payrolls between 1975 and year-end 1978. However, the number of production workers engaged in stainless plate operations in 1978 was only slightly above the number in 1975, having registered declines in 1976 and in 1977, and the number of workers in alloy tool steel operations remained lower in 1978 than in any previous year during the 1970's, except 1977.

These trends are largely reflected in the record of man-hours worked. The estimated number of man-hours worked in 1978 registered significant gains from the 1975 level in every category with the exception of alloy tool steel, which declined by more than 400,000 man-hours from the 1975 level.

The improved employment conditions in the specialty steel industry are also reflected in declining levels of trade adjustment assistance benefits paid to workers in the industry, as shown in the following tabulation.

TRADE ADJUSTMENT ASSISTANCE BENEFITS PAID TO WORKERS IN THE U.S. SPECIALTY STEEL INDUSTRY, 1975 (APRIL TO DECEMBER) TO 1977 AND JANUARY TO OCTOBER 1978

Year	Number of workers receiving assistance	Total amount received
1975 .....	2,832	\$13,915,000
1976 .....	16,033	25,853,800
1977 .....	378	653,000
1978 (January to October).....	0	0

Source: Data supplied by U.S. Department of Labor.

In 1975, 2,832 specialty steel workers received almost \$14 million in trade adjustment assistance benefits. In 1976, the number of workers receiving such benefits mushroomed to more than 16,000, receiving a sum totalling almost \$26 million. Beginning in 1977, however, the number of workers obtaining assistance declined to 378 and in calendar year 1978 (through October) the number of workers receiving trade adjustment assistance was zero.

These statistics strongly suggest that the imposition of import restraints brought about a sharp reversal of the depressed employment conditions that characterized the industry in 1975, when the Commission originally found import-related injury. At the same time, however, despite the improvement in labor market conditions, the total number of production and related workers in this industry remained substantially lower in 1978 than in 1974. Similarly, estimates of the number of man-hours worked in each of the various product forms reveal that this indicator also remained substantially lower in 1978 than in 1974.

*D. History of Import Relief Under the Escape Clause*

Pursuant to section 201 of the Trade Act of 1974, specialty steel companies representing approximately 75 percent of U.S. production and the steel workers union representing more than 70 percent of the industry's employees filed a petition with the Commission on July 16, 1975, seeking import relief. After an exhaustive 6-month investigation, which included almost a full week of public hearings, the Commission determined that import relief was not only justified but critically needed if the industry was to combat the aggressive market penetration of imported steel.<sup>20</sup>

President Ford accepted the Commission's recommendation that relief was urgently needed and on March 16, 1976, announced his decision to negotiate orderly marketing agreements with foreign suppliers of specialty steel and to impose quantitative restrictions on those countries that refused to enter into such agreements.<sup>21</sup> Recognizing that temporary relief would not fully ensure the future of this industry, the President also ordered the Special Representative for Trade Negotiations "to negotiate solutions on a sectoral basis to the problems of cyclical distortions in steel trade \* \* \*."<sup>22</sup>

At the conclusion of the 90-day period permitted under the Trade Act for negotiations, President Ford announced the provisions of the import relief program on June 11, 1976. An orderly marketing agreement negotiated with Japan established agreed-upon import levels for a three-year period, beginning June 14, 1976.<sup>23</sup> Because the European Economic Community and Sweden refused to negotiate, quantitative restrictions were unilaterally imposed on imports from those countries and from the rest of the world.

Despite the fact that the Commission recommended five years of import relief and President Ford implemented a three-year program, President Carter decided to review the effectiveness of the program less than one year after its implementation, thereby undermining one of the primary goals of import relief—temporary certainty in the marketplace. On May 25, 1977, the Commission was asked to conduct an investigation pursuant to section 203 of the Trade Act to determine the probable impact of modification or termination of the import relief program on the companies and workers in the specialty steel industry.<sup>24</sup>

After a second intensive investigation accompanied by another round of public hearings, the Commission reconfirmed its determination that import relief continued to be essential to this industry. In the October 14, 1977 report forwarded to the President, Commissioners Moore and Bedell advised the President that any reduction or termination would have a serious adverse effect on the domestic industry while Chairman Minchew found that an increase in import quantities up to 6.7 percent for both the second and third years of the restraint period would not determine the benefits of the program.<sup>25</sup> Commissioner Ablondi, who had voted against relief in the original determination, found that the industry would not be adversely affected by termination of the program and Commissioner Parker, as in the initial report, abstained from the decision.<sup>26</sup>

Three months later, the President acknowledged the continuing need for import relief for the domestic specialty steel industry and permitted the program to continue as originally established, with only chipper knife steel and R.M. 81 band saw steel removed from coverage.

Because import controls were scheduled to expire on June 13, 1979, the specialty steel industry of the United States and the United Steelworkers of America (AFL-CIO) on November 30, 1978 filed a petition to extend import relief, pursuant to section 203 of the Trade Act of 1974. In the investigation the Commission split evenly in its recommendation to extend import relief. Vice Chairman Alberger and Commissioner Stern advised the President that the termination of the existing quotas on specialty steel would have little, if any, adverse impact on the domestic industry producing like or directly competitive products. The Commissioners based their judgment primarily on two considerations: (1) The industry had adjusted successfully to import competition through the implementation of a

<sup>20</sup> U.S. International Trade Commission, "Stainless Steel and Alloy Tool Steel (TA-201-5)," USITC Pub. 756, 1976, p. 3.

<sup>21</sup> Federal Register, Volume 41, 1976, p. 11269.

<sup>22</sup> Loc. cit.

<sup>23</sup> Federal Register, Volume 41, 1976, p. 34101.

<sup>24</sup> Letter from Robert S. Strauss, Special Representative for Trade Negotiations, to Daniel Minchew, Chairman, U.S. International Trade Commission, May 25, 1977.

<sup>25</sup> U.S. International Trade Commission, "Stainless and Alloy Tool Steel (TA-203-3)," USITC Pub. 8381 1977, p. 4.

<sup>26</sup> Loc. cit.

modernization and rationalization of operations program which made the stainless and alloy tool steel industry highly competitive with foreign producers; and (2) the economic health of the industry was exceptionally good relative to 1974, which was the industry's historic peak year.<sup>27</sup>

Commissioners Moore and Bedell advised the President that termination of the quotas would have a serious adverse economic effect on the domestic industry producing such articles. The Commissioners said that the recovery period of less than 3 years was far too short, the industry had not yet sufficiently adjusted to the new conditions of competition and, despite much effort and progress during the relief period, the industry needed more time to complete the adjustment process.<sup>28</sup>

All four voting Commissioners who participated also suggested that if the President did decide to extend the quotas he might wish to: (1) increase the annual quota amounts; (2) provide for an equitable distribution of the quotas for countries that do not now have separate country quotas; and (3) provide some solution for problems encountered by U.S. consumers of articles under quota that are not produced in the United States or are not produced in sufficient quantities in the United States to meet demand.<sup>29</sup> Chairman Parker did not participate in the investigation.

Taking into account the advice received from the Commission, President Carter determined that extension of import relief for the specialty steel industry was in the national interest. He decided, however, to extend such relief for only eight months as opposed to the industry's request for three additional years. The extension of quantitative limitations on specialty steel applied to articles which entered or were withdrawn from warehouse for consumption during an eight month period beginning June 14, 1979, and ending February 13, 1989.<sup>30</sup> This eight month extension was divided equally into four restraint periods, each lasting two months. The President retained the right to modify or terminate the effective period of the extension. Finally, the President delegated the power to make changes in the quantitative restrictions provided in the extension to the Special Representative for Trade Negotiations.

The President's Proclamation contained new guidelines on the procedure for carryover. Whenever the total country quota quantity for stainless bar or alloy tool is not entered during the restraint period, the President provided that the shortfall enter under these same two items during the following restraint periods and not be counted against the quota quantity for that period. Concerning specific country quota quantities for stainless sheet and strip, stainless plate, and stainless wire rod, the President provided that the shortfall in imports of these items during any restraint period entered under the country quota during the following restraint periods not be counted against the quota quantity. These provisions provide supplying countries with some flexibility in their export shipments to the U.S. market.

Special attention was also given to shortfalls in quota quantities of stainless sheet and strip, stainless plate and stainless wire rod. Under the Presidential Proclamation, the Special Representative for Trade Negotiation will determine, during the second month of the third restraint period, whether any country quota quantity for these three items is unlikely to be used during the remainder of the third period or during the fourth restraint period. In case of an anticipated shortfall, the Special Representative can modify the quota quantities for the item in question by reallocating the shortfall to other suppliers. Such modification would affect articles entered, or withdrawn, from warehouse for consumption on or after December 13, 1979, which is the last day of the third restraint period.

### *E. Conclusion*

Although the production, employment and profits of this industry demonstrate that the import relief program has been effective, these indicators did not prove conclusively that the recovery process was complete. Even the original three years of import relief, as the Commission recognized at the outset, was insufficient time to restore the economic health of a capital intensive, high technology industry. Since the Trade Act prohibits an industry which has received import relief from reapplying for a period of two years, the eight-month extension raises

<sup>27</sup> U.S. International Trade Commission, "Stainless Steel and Alloy Tool Steel," USITC Pub. 968, April 1979, p. 2.

<sup>28</sup> *Loc. cit.*

<sup>29</sup> *Op. cit.*, pp. 23-24.

<sup>30</sup> Federal Register, Volume 44, 1979, p. 34089-91.

doubt as to whether vitality of this industry can be fully restored and its future viability ensured.

At the time the investigation to extend import relief was opened, the import relief program had begun to accomplish what it was created to do: restore the health of the specialty steel industry. However, as the Commission realized in its initial investigation of this capital intensive industry, a 3-year period of import restraints was insufficient for completion of the recovery process. Considering that the conditions which permitted the assault of imports during the mid-1970s did not change, and that foreign producers were still being extensively subsidized by their governments, the U.S. specialty steel industry did not receive adequate import relief in the eight-month extension of the quota. Several import-related issues portend serious difficulties for the industry.

During the period of import relief a new and even more ominous development occurred. There was an enormous expansion of capacity to melt specialty steels, particularly in developing countries. Over one million tons of excess capacity is now in place abroad and there is a real threat that soon after the quantitative limitations are removed this capacity will produce for the unrestricted U.S. market.

Equally important, the second and most critical part of the import relief plan envisioned by the President was not forthcoming. There was no solution on an international scale to the market disruption occasioned by uncontrolled imports. Although some may point to the beginnings of the Steel Committee established by the Organization for Economic Cooperation and Development (OECD) as the fulfillment of that Presidential promise, these tentative arrangements did not establish a specific, much less sanctioning, mechanism to prevent import surges.

Moreover, although nations are required to report trade information to the Steel Committee on a regular basis, the data has been routinely submitted six to eight months late, thereby effectively preventing this consulting group from developing a meaningful warning system. Compounding these operational difficulties, certain developing countries have refused to become involved with the Committee, thus limiting its membership to developed nations. And even some developed countries, namely Canada and Sweden, consider the Committee temporary, unlikely to last longer than a year. Thus, the OECD Steel Committee can hardly be credited with reaching "solutions \* \* \* to the problems of cyclical distortions in steel trade" as promised by the Presidential proclamation. The ability to develop such solutions remains to be seen.

For these reasons, it would have been prudent to extend the import relief program, not only to give this capital-intensive industry sufficient time to complete the recovery process but also to give the government of steel-producing nations a chance to resolve the critical issues still plaguing the international steel trade. In light of the brief extension of the import restraint program, the short-term benefits currently in evidence may be erased by a growth in imports that will greet the termination of import restraints. It is likely that the temporary hiatus from excessive import competition will not produce the long-term gains envisioned by the U.S. International Trade Commission and the President 3 years ago and as mandated by the Trade Act of 1974.

TABLE 1.—CAPACITY UTILIZATION RATES FOR MAJOR SPECIALTY STEEL PRODUCT FORMS, FOR ALL STEEL PRODUCTS AND FOR ALL U.S. PRIVATE MANUFACTURING, 1970-78

Period	Plate	Sheet and strip	Stainless steel rod	Stainless steel bar	Alloy tool steel, all forms	Total stainless and alloy tool steel		Total manufacturing <sup>2</sup>
						Total steel <sup>1</sup>		
1970.....	37	43	54	62	55	46	85	79
1971.....	30	49	52	61	54	49	77	78
1972.....	32	59	65	70	65	58	86	83
1973.....	42	71	80	75	82	70	97	87
1974.....	69	77	85	87	89	79	95	84
1975.....	52	38	42	53	48	42	74	74
1976.....	43	64	52	63	50	60	80	80
1977.....	62	66	46	74	48	64	378	82
1978.....	51	71	72	80	70	69	385	81

<sup>1</sup> From Barry Bosworth, "Capacity Creation in Basic Materials Industries," Brookings Papers in Economic Activity, No. 2, 1976, table 1, p. 304.

<sup>2</sup> Board of Governors of the Federal Reserve System, presented in Economic Indicators: October 1978, prepared for the Joint Economic Committee by the Council of Economic Advisers, p. 17.

<sup>3</sup> 1977 and 1978 estimates are derived from material prepared by the American Iron and Steel Institute.

Source: Compiled from responses to questionnaires of the U.S. International Trade Commission, except as noted.

TABLE 2.—EMPLOYMENT AND MAN-HOURS WORKED IN THE U.S. SPECIALTY INDUSTRY, 1973-78

Year	Stainless sheet and strip	Stainless plate	Stainless bar	Stainless wire rod	Alloy tool steel	Total stainless and alloy tool steel
<b>Total of all persons employed:</b>						
1973					5,982	27,254
1974	15,271	3,130	6,666	734	6,210	32,011
1975	9,288	2,236	5,050	386	4,741	21,701
1976	11,903	2,307	5,249	618	4,690	24,767
1977	11,566	2,253	5,703	656	4,157	24,335
1978	11,788	2,507	5,919	686	4,286	25,186
<b>Production and related workers:</b>						
1973					4,611	
1974	12,439	2,397	4,136	501	4,351	23,824
1975	7,331	1,807	3,255	288	3,421	16,102
1976	9,360	1,715	3,613	439	3,497	18,624
1977	9,302	1,656	4,001	455	3,059	18,473
1978	9,425	1,857	4,152	482	3,100	19,016
<b>Man-hours worked by production and related workers (in 1,000 hours):</b>						
1973						
1974	21,379	3,247	8,751	895	9,322	44,994
1975	21,858	4,977	9,748	1,058	9,942	47,593
1976	12,974	3,266	6,604	428	5,624	28,896
1977	16,767	3,033	7,014	682	6,025	33,521
1978	17,816	3,044	8,701	917	5,628	35,506
1978	18,849	3,580	8,546	961	5,210	37,146

Source: International Trade Commission data.

TABLE 3.—U.S. PRODUCTION OF SPECIALTY STEEL SUBJECT TO IMPORT RESTRAINT, 1973-78

[In 1,000 short tons]

Year	Stainless sheet and strip	Stainless plate	Stainless bar	Stainless wire rod	Alloy tool steel	Total stainless and alloy tool steel
1973	763.8	83.2	150.7	58.4	114.1	1,170.2
1974	820.0	144.3	176.2	63.3	124.5	1,328.4
1975	417.3	111.8	100.1	28.3	65.5	722.9
1976	743.0	95.9	119.5	36.2	68.7	1,063.3
1977	754.2	106.1	142.5	31.5	67.5	1,101.8
1978	859.9	133.0	148.1	39.9	72.9	1,253.8

Source: International Trade Commission data.

TABLE 4.—NET OPERATING PROFIT OR (LOSS) BEFORE TAXES OF THE U.S. SPECIALTY STEEL INDUSTRY IN CURRENT DOLLARS AND IN DEFLATED DOLLARS 1973-78

[In thousands of dollars]

Year	Sheet and strip	Stainless plate	Stainless bar	Stainless wire rod	Alloy tool steel	Total stainless and alloy tool steel
<b>Current dollars:</b>						
1973 <sup>1</sup>	85,498	8,602	15,893	(1,406)	18,777	127,364
1974 <sup>2</sup>	150,492	26,900	35,841	4,969	26,062	244,264
1975 <sup>2</sup>	(10,434)	18,431	7,003	980	13,553	29,533
1976 <sup>3</sup>	39,094	12,090	2,419	177	19,638	73,418
1977 <sup>4</sup>	82,868	5,386	24,278	792	21,952	135,276
1978 <sup>4</sup>	121,028	6,441	41,436	973	32,836	202,714
<b>Deflated dollars:</b>						
1973 <sup>1</sup>	85,498	8,602	15,893	(1,406)	18,777	127,364
1974 <sup>2</sup>	128,565	22,981	30,619	4,245	22,265	208,675
1975 <sup>2</sup>	(7,631)	13,480	5,121	717	9,913	21,600
1976 <sup>3</sup>	26,854	8,305	1,662	122	13,489	50,431
1977 <sup>4</sup>	52,389	3,405	15,349	501	13,878	85,522
1978 <sup>4</sup>	70,027	3,727	23,975	563	18,999	177,290

<sup>1</sup> Based upon experience of 16 U.S. producers.<sup>2</sup> Based upon experience of 17 U.S. producers.<sup>3</sup> Based upon experience of 19 U.S. producers.<sup>4</sup> Based upon experience of 20 U.S. producers.

Source: U.S. International Trade Commission data in current dollars and "deflated" on the basis of the U.S. Price Index for Metal Working Machine Equipment, category 113: 1973=100.

TABLE 5.—NET OPERATING PROFIT OR (LOSS) BEFORE TAXES AS A PERCENT OF NET SALES OF THE U.S. SPECIALTY STEEL INDUSTRY, 1973-78

[In percent]

Year	Stainless sheet and strip	Stainless plate	Stainless bar	Stainless wire rod	Alloy tool steel	Total stainless and alloy tool steel
1973 <sup>1</sup>	11.0	12.0	6.2	(4.8)	9.4	9.5
1974 <sup>2</sup>	13.8	17.8	10.4	11.3	10.7	13.0
1975 <sup>2</sup>	(1.7)	13.2	2.9	2.9	7.2	2.4
1976 <sup>3</sup>	4.0	7.0	1.0	.4	8.3	4.4
1977 <sup>4</sup>	8.3	4.8	8.0	2.1	9.3	8.0
1978 <sup>4</sup>	10.2	4.5	11.4	2.2	10.3	9.9

<sup>1</sup> Based upon experience of 16 U.S. producers.<sup>2</sup> Based upon experience of 17 U.S. producers.<sup>3</sup> Based upon experience of 19 U.S. producers.<sup>4</sup> Based upon experience of 20 U.S. producers.

Source: U.S. International Trade Commission.

TABLE 6.—IMPORTS OF SPECIALTY STEEL AS A PERCENT OF APPARENT DOMESTIC CONSUMPTION, 1973-78

[In percent]

Year	Stainless sheet and strip	Stainless plate	Stainless wire rod	Stainless bar	Alloy tool steel	Total stainless and alloy tool steel
1973	6.2	12.6	45.0	11.9	19.7	11.4
1974	7.9	8.5	47.9	15.0	19.3	18.1
1975	13.8	14.2	67.0	21.8	27.0	15.2
1976	10.8	17.1	54.2	16.6	29.1	12.3
1977	9.3	7.3	42.9	15.6	24.8	12.2
1978	9.3	8.4	41.9	16.3	24.3	

Source: International Trade Commission and Department of Commerce data.

TABLE 7.—U.S. DOMESTIC SHIPMENTS OF SPECIALTY STEEL ITEMS SUBJECT TO IMPORT RESTRAINT, 1973-78

[In 1,000 short tons]

Year	Stainless sheet and strip <sup>1</sup>	Stainless plate	Stainless wire rod	Stainless bar	Alloy tool steel	Total stainless and alloy tool steel
1973	734.9	82.0	21.0	155.8	97.8	1,091.5
1974	825.3	140.2	25.8	168.5	104.6	1,264.3
1975	440.7	109.7	10.5	111.8	71.3	743.6
1976	692.4	93.7	17.4	120.9	69.1	993.5
1977	728.5	98.6	23.0	139.0	68.0	1,057.0
1978	826.1	129.8	25.4	152.9	74.1	1,208.3

<sup>1</sup> Includes a certain quantity, perhaps as much as 150,000 short tons annually, of grade 409 stainless. Whereas the domestic industry considers grade 409 to be stainless steel since it usually contains more than 10 percent chromium, most imports of grade 409 are not subject to the present restraint program. This is because the U.S. Tariff Schedules define stainless steel as containing a minimum of 11.5 percent chromium.

Source: International Trade Commission and Department of Commerce data.

TABLE 8.—U.S. IMPORTS OF SPECIALTY STEEL ITEMS SUBJECT TO IMPORT RESTRAINT, 1970-78

[In 1,000 short tons]

Year	Stainless sheet and strip	Stainless plate	Stainless wire rod	Stainless bar	Alloy tool steel	Total stainless and alloy tool steel
1970.....	88.8	8.3	13.9	15.2	17.3	143.6
1971.....	107.2	10.3	13.4	16.2	12.6	159.7
1972.....	59.6	17.1	13.0	18.5	14.8	123.1
1973.....	44.7	11.3	16.8	20.1	23.1	115.9
1974.....	64.9	12.4	22.1	27.9	23.9	151.1
1975.....	66.0	17.5	16.9	29.2	24.2	153.7
1976.....	78.3	18.6	20.1	23.1	26.7	166.9
1977.....	70.5	7.5	16.8	25.2	21.3	141.4
1978.....	80.7	11.4	17.7	27.3	22.8	159.9

Source: International Trade Commission and Department of Commerce data.

## II. NONRUBBER FOOTWEAR

### A. Summary

The import problems of the domestic nonrubber footwear industry are of long standing and still appear largely unresolved despite the import relief program announced by the President in April 1977. The President's action culminated two decades of effort by the firms and workers in this industry to seek relief both under the escape clause of the former Trade Expansion Act and the revised escape clause of the Trade Act of 1974. Two of the 38 Section 201 investigations conducted to date by the International Trade Commission have dealt with nonrubber footwear. They also resulted in the first two unanimous affirmative findings of injury by the ITC.

As his remedy in the second case, the President opted for a mechanism different from that recommended either by the industry (i.e., quantitative restrictions) or by the International Trade Commission (i.e., tariff-rate quotas). The President chose orderly marketing agreements (OMAs) with principal suppliers. Accordingly, separate agreements were negotiated with Korea and Taiwan effective June 28, 1977 which were intended to restrain imports over a four year period.

These two countries together accounted for about 54 percent of total shoe imports in 1976. As a result of the agreements, nonrubber footwear imports from the two countries have declined significantly. This should have provided the industry with a breathing spell and afforded it an opportunity to adjust to import competition. It had been hoped that the OMAs would lay a firm basis for increased production to create jobs for displaced shoe workers.

However, increased shipments from noncontrolled suppliers have largely offset the decline in imports from Taiwan and Korea, so that a high rate of import penetration continues. For this reason, production and employment conditions in the shoe industry have not shown significant improvement. Thus, the effectiveness of the footwear import relief program as it is currently framed is being questioned.

### B. Elements of Import Impact

#### 1. EROSION OF FIRMS AND PLANTS

Import competition has altered radically the structure of the industry and its marketing and distribution patterns. Until the late 1960s, most domestic footwear production facilities were located in the New England and Middle Atlantic regions. However, the inroads made by low-wage, low-cost imports in the domestic market caused many firms either to cease domestic operations or to attempt to lower costs by relocating in lower wage areas. As a result, Southern and Western states like Missouri, Arkansas, and Tennessee have become major producers. However, shoe production is carried on in some 36 states in the East North Central and South, and West regions.

There has been a steady and sharp decline in the number of producing firms and plants. At the time of the 1967 Census of Manufacturers, nonrubber footwear was produced by 675 companies in some 1,000 plants. Today, there are probably less than 350 companies and 700 producing plants. [Industry sources estimate that between 1968 and 1978, there were 589 plant closures and 298 plant openings so that the net plant exits totaled 291.]

In comparison with other U.S. manufacturing establishments, the typical shoe manufacturing plant is a small scale enterprise. However, there has been a trend toward consolidation of plants and a heavier concentration of output among the larger firms. The output of firms producing nonrubber footwear may vary from as little as 1,000 pairs or less per annum to about 20 million pairs per annum.

In 1975, about 50 percent of total domestic production was accounted for by 21 companies. By comparison, in 1969, the same 21 firms, with output of over 4 million pairs per annum, accounted for 37 percent of total output.

To a substantial degree, the growth of imports has been the result of expanded overseas purchases by shoe retailers and the net effect has been to give retailers much more market influence. Many observers believe that such a shift in marketing characteristics has made the domestic manufacturer a captive of the domestic retailer. In its Section 201 investigations, the International Trade Commission confirmed that footwear retailers follow a merchandising practice of "backward pricing," i.e., retailers first set pricing points for the kinds of shoes they will sell and then try to buy at the lowest possible cost to place shoes within these price brackets. This has contributed to an increased flow of imports into the United States since, as the ITC has acknowledged, the "limited" ability of domestic producers to continue to supply their customers with footwear in the usual price categories while introducing changes in style or construction eventually forces producers to raise prices or discontinue low-end categories.<sup>31</sup>

## 2. DOWNWARD TRENDS IN PRODUCTION AND EMPLOYMENT

The domestic industry's share of the relatively stagnant per capita consumption [which for the past 25 years has exceeded 4 pairs only once—in 1968] has been declining. Prior to 1968, the footwear industry's peak output year, production had shown an irregular but moderate upward trend. The record production in 1968 of 642.4 million pairs was probably assisted by the market style changes which occurred that year.

Since 1968, production declined without interruption except for 1 year (1976) and this decline has continued in spite of the President's import relief program. Production in 1978 was actually the lowest in 43 years at 389.9 million pairs, slightly below 1977 production.

The impact of declining output has been to lower the industry's total production capacity as a consequence of plant closings and to raise levels of idle capacity in existing plants. In the peak production year of 1968, the industry operated at nearly 83 percent of full capacity. Total plant capacity stood at 776 million pairs in 1968 and only 542 million pairs in 1977. On this basis, idle capacity was about 30 percent of the industry's total capacity. No significant change in this percentage occurred in 1978.

Employment has tended downward in consonance with production. Between 1968 and 1978 there was a displacement of 68,300 production workers and an overall reduction in total employment of some 77,600 employees, representing a decrease of a third of the labor force in a decade. In contrast, overall U.S. manufacturing employment increased by almost 3 percent in this period.

The reduction in employment is, of course, reflected in the unemployment trends. The unemployment rate in the nonrubber footwear industry rose to almost 13 percent in 1975 before leveling off at approximately 11 percent in 1976 and 1977. In 1978, unemployment dropped to somewhat over 8 percent, still higher than the national average.

Average weekly earnings and average hourly earnings have gradually increased for the typical nonrubber footwear employee, although wage scales are low relative to other industries. In 1978, average weekly earnings per worker amounted to \$138.47 and average hourly earnings were \$3.75. Both figures compare poorly with the average for all U.S. industrial workers. The hourly figure for nonrubber footwear workers was 61 percent of the \$6.17 per hour average for all manufacturing industries and the weekly figure was 56 percent of the \$249.27 for all U.S. manufacturing industries.

## 3. HIGH PRODUCTION COSTS AND LOW PROFITABILITY

Labor input plays a major role in the production of nonrubber footwear and, therefore, wage rates constitute a major cost variant in production costs. In the United States, labor cost, in fact, represents over 30 percent of the final cost of production. Input of raw materials accounts for well over 40 percent of domestic production costs.

<sup>31</sup> USITC Publication 799, February 1977, pp. 79-80.



The significance of heavy labor-intensiveness and reliance on domestic raw materials is that U.S. nonrubber footwear production costs are substantially above foreign production costs, especially in the developing countries where wage rates are at exceedingly low levels and where overall production costs of producers for export markets may benefit from direct or indirect government subsidy programs.<sup>32</sup>

Such disparities, reflecting higher relative costs of U.S. vis-a-vis foreign labor, leather and other raw material inputs, have enabled foreign suppliers to capture an ever-increasing share of the domestic market. The wage-cost disparity between U.S. and foreign shoe production is reflected in the results of a Bureau of Labor Statistics study (unpublished) which compared total hourly compensation of production workers in leather and leather products industries in seven selected countries as of mid-year 1976. The study showed that estimated hourly compensation (including fringe benefits) was U.S., \$4.25; Brazil, \$.63; Korea, \$.46-.50; and Taiwan, \$.47-.49.

In its escape clause report to the President dated February 8, 1977, the International Trade Commission observed that, while wage rates vary according to country, "all foreign wages are substantially lower than U.S. wages." The report estimated that in 1975, hourly earnings in Korea and Taiwan averaged 14 percent of the U.S. rate—a factor not without significance in explaining why footwear from these two countries came to dominate the import trade.

The profitability picture for the industry has also been poor. During the last escape clause investigation, the International Trade Commission compiled financial data on 88 producers of footwear based on responses to a confidential questionnaire relating to their 1975 experience. The result showed that the ratio of net operating profit to sales (before taxes) in 1975 for all U.S. producers was only 5.4 percent. Later data through 1977, compiled by the ITC as part of its first annual survey report required under the President's Import Relief Proclamation, showed a modest improvement in the profit position of the nonrubber footwear industry. The ratio of operating profits to net sales (before taxes) for firms was 6.6 percent in 1977. Smaller producers, however, did not do as well as the average for the industry as a whole.

#### 4. CONSISTENTLY UPWARD IMPORT TREND

In the face of a relatively static picture for overall market growth, imports have continued upward, relentlessly capturing an ever-increasing share of the domestic market. From 1968 to 1978, imports rose from 175.3 to 373.5 million pairs and imports as a percent of total supply rose from 21.5 to 49.4 percent in this period.

A significant feature of the avalanche of imports has been a shifting of foreign source supply with substantial amounts of nonrubber footwear increasingly coming from such low-labor cost countries as Taiwan, Brazil, Hong Kong, Argentina, Korea, India, Romania, and Poland, with Korea becoming the third major supplier behind Taiwan and Italy beginning in 1976. At the same time, over the past decade, imports from Italy and Japan experienced noticeable declines.

#### *C. The Shoe Industry's Struggle for Import Relief*

##### 1. THE PERIOD PRIOR TO THE TRADE ACT OF 1974

The footwear industry became seriously concerned about the effects of import competition on domestic production and employment when, by 1967, imports of nonrubber footwear exceeded 100 million pairs for the first time and reached 18 percent of U.S. consumption (having increased from 27 million pairs or 4 percent of U.S. consumption at the beginning of the decade).

As a result of the industry's concerns over these developments, President Johnson in April 1967 requested the then Tariff Commission to conduct a comprehensive investigation into the economic situation of the nonrubber footwear industry, including the competitive relationship between imports and domestic production. The investigation conducted by the Commission under Section 332 of the Tariff Act and completed in January 1969 led to the creation of an inter-agency task force, at the direction of President Nixon, to inquire into the effect of imports on the domestic industry. Meanwhile, a new fact-finding investigation was initiated by the Tariff Commission on its own motion in October 1969, with its report completed in December 1969.

<sup>32</sup> This has been substantiated by the Treasury Department's affirmative countervailing duty determinations relative to nonrubber footwear from a number of countries.

In June 1970, the interagency task force report led President Nixon to initiate a Tariff Commission investigation under the escape clause provisions of the Trade Expansion Act of 1962, the first escape clause case initiated by a President. At that time, President Nixon also requested the Secretaries of Labor and Commerce to proceed expeditiously with a number of adjustment assistance cases. The Tariff Commission sent to President Nixon in January 1971 an evenly-divided decision on the finding of injury. This, of course, was based on the escape clause criteria of the Trade Expansion Act of 1962, under which it was necessary that an import-induced injury be linked to an earlier trade concession and that imports had to be the major cause of injury to the domestic industry.

As a result of the Commission's split decision, the President postponed action on the case although discussions were held informally with a number of major supplying countries in hopes of obtaining voluntary restraints in their exports. These efforts were unsuccessful.

Meanwhile, import penetration continued to grow with imports in 1973 exceeding 300 million pairs and accounting for 39 percent of U.S. consumption, with domestic production continuing to decline and slipping under 500 million pairs for the first time since 1951. Employment of production workers also slumped to the lowest point since the Depression at 164,300.

## 2. THE TRADE ACT OF 1974 AND ITS AFTERMATH

The passage of the Trade Act of 1974 and its liberalized escape clause provisions (i.e., it was no longer necessary for an import-induced injury to be linked to earlier trade concessions and imports now had to be only "a substantial" cause rather than the major cause of injury to the domestic industry) led the domestic nonrubber footwear industry to petition the International Trade Commission in August 1975 for a new escape clause investigation. It was encouraged to do so by the Administration.

It should be noted that when the Trade Act was under consideration in the U.S. Senate, William B. Eberle, then Special Trade Representative, assured Senator Thomas J. McIntyre of New Hampshire that the Administration intended to use the legislation to resolve the shoe industry's import problem.

In a letter to Senator McIntyre dated December 11, 1974, Ambassador Eberle said:

\* \* \* it seems to me that the escape clause provisions of the Trade Reform Act are ideally suited for use by the American nonrubber footwear industry. If such escape clause procedures were undertaken (by the industry) under the new law, priority attention would be given the matter, and if the procedures suggested the need for import relief, you can be assured the Administration would move expeditiously to provide it. I can also assure you that in determining what form of relief would best deal with the industry's problem, particular attention will be given to the possibility of devising some suitable form of arrangement with the governments of other nations whose exports to us are determined to be significant causes of disruption to our nonrubber footwear industry.

In February 1976, the International Trade Commission announced a unanimous finding of injury from imports, but there was no clear majority on the remedy. Adjustment assistance had been recommended as the relief vehicle by one Commissioner, and President Ford, in April 1976, rejecting import relief, adopted this route and called for expedited action to assist injured firms as provided in the Trade Act of 1974.

Pursuant to the Trade Act, whenever the ITC conducts an industry investigation under the escape clause provisions of the Act, the Department of Labor (as provided in Section 224) and the Department of Commerce (as provided in Section 264) are required to make separate studies for firms and workers respectively and to assess, among other things, the extent to which the adjustment of workers or firms "to the import competition may be facilitated through the use of existing programs," such as the adjustment assistance programs for firms and workers.

On March 5, 1976, Commerce submitted its findings for firms to the President and estimated that, if the President adopted adjustment assistance as the escape clause remedy, more than 200 firms would petition for certification, of which 150 might be found eligible. Only a small handful, in fact, chose to apply and the collective response by nonrubber footwear firms to the trade adjustment assistance program was disappointing.

The Department of Labor, for its part, foresaw that petitions for adjustment assistance would continue to be filed at about the same rate as in the past. The

report noted that since the enactment of the Trade Act through February 3, 1976, determination had been issued in 42 cases involving 9,116 workers of which certifications resulted in 37 cases involving 8,000 workers. Higher levels of petitions for 1977 were not then anticipated, but the report noted ominously that "in spite of the recent upturn in production in the nonrubber footwear industry, employment has not risen significantly and is still below the 1974 average level."

Notwithstanding the availability of adjustment assistance programs, which both firms and workers considered to be inadequate and no remedy against import impact, the months following President Ford's decision saw further production cutbacks and job losses.

Although the Trade Act discouraged the ITC from reinvestigating an industry for one year after its report to the President, unless there was good cause for a reopening of the proceedings, the Senate Finance Committee on September 28, 1976, requested the Commission to reinstitute an investigation only five months after the President's announcement. This occurred as imports attained a record market share of 48 percent.

After an expedited investigation, the ITC made another unanimous finding of injury, confirming its previous determination that the domestic nonrubber footwear industry was being seriously injured by imports.

The ITC concluded its report and findings on February 8, 1977, just 19 days after President Carter took office. On April 1, the President granted import relief to the industry but chose his own remedy through the mechanism of orderly marketing agreements (OMA's) with "appropriate foreign suppliers."

#### *D. The President's Import Relief Program*

##### 1. QUOTAS ADVOCATED BY INDUSTRY AS EFFECTIVE REMEDY

In its presentation to the International Trade Commission, the industry pressed vigorously for direct curbs on imports through a global quota system as the only effective form of import relief.

The industry saw many benefits flowing from a quota remedy. A statement by the American Footwear Industries Association at the 1976 hearings summarized these benefits, as follows:

During a 5-year period under an import quota system, it should be possible for the rate of return to domestic footwear manufacturers to be restored to respectable levels which would permit investment in plant and equipment to make the industry even more productive and more efficient than it is today. Greater sales will lead to a return to efficient levels of capacity utilization, with longer runs resulting in economies of scale and lower unit production costs, thus strengthening the industry's competitive position. This should also result in a strengthened financial position for companies in the industry permitting them to attract more capital at more reasonable rates, thus enabling them to invest in new plant and equipment and to pay for additional research and development—both technical and marketing. Greater technological and marketing strength will, thus, be an inevitable result improving the industry's competitive position even further. At the same time there will be a narrowing of the price gap between domestic and foreign shoes. Consumers will benefit from better quality and fit than is now provided by imports. Employment will increase. The industry will have funds for training workers in the use of more sophisticated equipment in which the industry will invest.

In specific numbers, it was estimated by expert witnesses that an effective 5-year program of import relief could increase domestic production by 100 million pairs annually. This would bring output back to a normal level experienced just a few years ago. Moreover, the industry felt that the employment effects of such increased production would be most dramatic, resulting in an additional 40,000 to 60,000 jobs, including jobs in supplier industries. Given the locale of most shoe plants and supplier establishments, the majority of these jobs would represent additional jobs in rural areas.<sup>33</sup>

##### 2. THE ITC'S RECOMMENDED REMEDY THROUGH THE TARIFF MECHANISM

The International Trade Commission had coupled its unanimous determination of import-related injury with a majority recommendation for a tariff-rate quota.

The tariff-rate quota system proposed by the full majority of Commissioners would have permitted up to 265 million pairs of shoes to enter at present rates of

<sup>33</sup> USITC Publication 799, February 1977, p. 25.

duty, generally between 6 and 15 percent. Under that remedy, all "over quota" imports would have been dutiable at a tariff rate of 40 percent for the first 3 years, falling to 30 percent and to 20 percent during the fourth and fifth years, respectively. Thereafter, the ad valorem rates would return to existing levels.

No quantitative estimates were given in the majority finding concerning the effect of the recommended remedy on employment and production. However, one other Commissioner (Leonard) recommended an alternative remedy through a direct increase in tariffs to 30 percent for the first 2 years with a phase down in such duties to 20 percent in the fifth and final year of the import relief. On this basis he anticipated:

"The domestic industry could be expected to produce about 47 million more pairs of shoes in 1977 than it would produce if no remedy were provided, or about 30 million pairs more than it produced in 1976. With this increased production 16,000 more workers would be employed in 1977 than if no relief were granted, or 10,000 more than were employed by the industry in 1976."<sup>34</sup>

### 3. THE PRESIDENT'S ALTERNATIVE REMEDY THROUGH OMA'S

While acknowledging a reluctance "to restrict international trade in any way," President Carter recognized the necessity for import relief for the American footwear industry. However, his announcement on April 1, 1977 called for orderly marketing agreements (OMA's) with appropriate supplying countries as the remedial mechanism. Such agreements, involving a rollback in imports from two principal foreign suppliers of shoes—Taiwan and Korea—were officially implemented by Presidential Proclamation 4510 of June 22, 1977. Imports from these two countries alone had spurted from 98 million pairs of shoes in 1974 to 200 million pairs in 1976, representing in that year about 54 percent of total imports.

The agreements negotiated with both countries were on a four year basis with quota levels containing some built-in growth during the life of the agreements. Quota levels specified for the first control year (ending June 30, 1978) approximated the 1975-1976 average of total combined imports from Korea and Taiwan and represented a rollback of 44.6 million pairs—about 22 percent—from the 1976 levels of imports from the two countries.

These bilateral agreements with Taiwan and Korea have resulted in a decline in the volume and value of imports from these two countries. Yet, the domestic industry, far from making a comeback, shows signs of a serious continued malaise, with levels of employment and production both down and the import penetration rate remaining at an extraordinarily high level.

At the time of the President's grant of import relief for the shoe industry in April 1977, there were 159,000 employees in the industry. In December 1978, there were only 152,000. Indeed, for the full year 1978, average employment at 155,800 employees was the lowest recorded level in the history of the nonrubber footwear industry. Reduced employment in 1978 reflected a level of production which was almost at a record low, that is, 389.9 million pairs, the lowest in 43 years. Compared to the 1976 and 1977 production levels, the 1978 output was down by 32.6 million pairs (7.7 percent) and 1.2 million pairs (0.3 percent) respectively. On the other hand, total imports, despite the OMA's with Taiwan and Korea, grew significantly, reaching 373.5 million pairs in 1978, an all-time high, 5.4 million pairs above the 1977 levels and 3.5 million pairs over the 1976 levels. As a result, the import penetration level in 1978 reached a record 49.4 percent.

These figures concern the industry and its workers, for they show that the OMA's have fallen far short of their intended objectives to give the industry a necessary respite against further import surges and an opportunity to adjust to import competition.

#### *E. Conclusion*

The two OMA's with Korea and Taiwan represent an incomplete control mechanism in that other supplying countries continue to have unrestricted access to the U.S. market.

Import data for 1978 show that imports have risen sharply from previously minor supplying sources such as Hong Kong, India and the Philippines. Hong Kong, in particular, moved up so alarmingly as to cause suspicion that suppliers in Taiwan and Korea were using Hong Kong as an uncontrolled transshipment point. The U.S. engaged in consultations with Hong Kong authorities with the result that the latter agreed to institute a visa system to insure that shipments

<sup>34</sup> *Ibid.*, p. 25.

were of local manufacture. As the attached table indicates, while imports from Korea and Taiwan and the aggregate declined by 77 million pairs in 1978 from the previous year, a decline of 35 percent, imports from uncontrolled countries increased by 82 million pairs, an increase of 58 percent.

Clearly, the OMA's have a potential for providing reasonably effective import relief for the domestic shoe industry. To date, however, performance has not measured up to potential.

#### NONRUBBER FOOTWEAR IMPORTS BY COUNTRY, 1976-78

(In million pairs)

Country	1978	1977	1976	Percent change	
				1978/77	1978/76
<b>Controlled:</b>					
Taiwan.....	117.2	166.5	155.7	-29.6	-24.7
Korea.....	30.6	58.7	44.0	-47.9	-30.5
<b>Total controlled.....</b>	<b>147.8</b>	<b>225.2</b>	<b>199.7</b>	<b>-34.4</b>	<b>-26.0</b>
<b>Uncontrolled:</b>					
Italy.....	62.9	39.7	47.2	+58.6	+33.3
Spain.....	37.5	31.3	38.7	+19.8	-3.2
Brazil.....	27.4	17.6	26.7	+55.8	+2.8
France.....	4.3	3.4	3.2	+25.8	+33.1
Uruguay.....	2.1	2.6	2.1	-19.2	+1.0
Mexico.....	5.3	3.1	5.3	+68.3	n.c.
India.....	3.6	3.5	5.8	+2.5	-37.5
Poland.....	4.6	3.2	5.0	+45.4	-7.3
Romania.....	6.0	3.7	3.7	+59.3	+63.3
Yugoslavia.....	3.0	2.9	2.9	+2.5	+3.4
Greece.....	3.1	2.7	4.2	+14.9	-25.8
Japan.....	7.3	5.5	4.7	+34.1	+57.1
Hong Kong.....	28.3	8.7	6.6	+225.2	+327.2
Philippines.....	8.4	.6	.4	+1,244.4	+2,155.1
Austria.....	2.7	1.5	1.5	+78.5	+79.8
Thailand.....	1.6	.1		+1,174.2	
All other.....	17.6	12.8	12.3	+37.5	+43.1
<b>Total uncontrolled.....</b>	<b>225.7</b>	<b>142.9</b>	<b>170.4</b>	<b>+57.9</b>	<b>+32.5</b>
<b>Grand total.....</b>	<b>373.5</b>	<b>368.1</b>	<b>370.1</b>	<b>+1.5</b>	<b>+1.0</b>

Source: U.S. Department of Commerce data.

### III. COLOR TELEVISION RECEIVERS

#### A. Summary

The swift and successful penetration of the American market for color television receivers by Japanese and other foreign producers, begun in the 1960s, led to severe structural erosion of the domestic industry. The result was that COM-PACT,<sup>35</sup> a group representing American color television industry labor unions and manufacturers, petitioned the International Trade Commission in October 1976 for escape clause import relief. The Commission's investigation culminated in a unanimous finding of injury from imports.<sup>36</sup> With regard to remedy, five of the six Commissioners recommended tariff increases and one recommended quantitative limitations. The President, however, opted for an orderly marketing agreement with the major supplier, Japan, which became effective July 1, 1977. It established ceilings for three years on imports of complete and certain types of incomplete television receivers from Japan so as to achieve a substantial rollback from the then current level.

The initial effect was beneficial in reducing the level of shipments from Japan and in facilitating some improvement in U.S. production and employment. However, it quickly became apparent that other noncontrolled low-cost suppliers, such as Taiwan and Korea, were stepping into the breach with sharply expanded exports of television receivers to the U.S. market, thus vitiating any benefit to the industry from the OMA restraints on shipments from Japan.

<sup>35</sup> Acronym for "Committee to Preserve American Color Television".

<sup>36</sup> This finding applied to color TV receivers only. The Commission was evenly divided in its determination of injury with respect to subassemblies of color television receivers. The Commission's investigation had been extended also to monochrome receivers, but only three Commissioners ruled on these. See Section B5 herein.

Another repercussion of the OMA with Japan was a marked increase in the level of imports, of incomplete color receivers and subassemblies, indicating an acceleration of the gradual shift in emphasis of U.S. production toward assembly of final sets containing a higher portion of foreign components and subassemblies.

As a result of these developments, in 1978 high import penetration levels and near record volumes of low-cost complete receiver imports continued to restrict sharply the ability of domestic producers to secure an increased rate of return to healthier levels. At the same time, the continued rapid growth of imports of incomplete receivers and subassemblies and the trend in U.S. facilities toward assembly of imported subassemblies prevented any improvement in employment. In fact, total employment in the industry declined by 5 percent in 1978 compared to 1977 despite an 18 percent growth in complete receiver production from 7 million units in 1977 to 8.3 million units in 1978.

This continued deterioration of the U.S. industry motivated the Administration to negotiate orderly marketing agreements with Korea and Taiwan, the second and third largest U.S. suppliers of complete and incomplete color receivers, for the period February 1, 1979 through June 30, 1980 (the same terminal date as the OMA with Japan). These additional agreements, which applied specific restraints on the number of complete and certain incomplete units exported to the United States during the control period, were clearly essential if the domestic industry was to reap any benefits from the original OMA with Japan.

The Korea and Taiwan agreements, however, do not necessarily resolve the import problems of the domestic industry, for there are still other uncontrolled foreign suppliers, such as Singapore, Canada and Mexico. Such imports will require continued surveillance on the part of the U.S. Government. In 1980, the Administration may need to consider possible extension of the OMA's as specified in the Trade Act.

### *B. Elements of Import Impact*

#### 1. EROSION OF FIRMS AND PLANTS

Broadly defined, the domestic television industry consists of a wide range of companies which manufacture receivers and/or glass parts, picture tubes, various electrical and other components necessary for final assembly. Import competition, therefore, has adversely affected not only the firms and workers directly producing the completed receiver but also the firms and workers in all of the various supplying industries. Taking only those firms which produce the finished television receiver, the erosion caused by import competition has been very much in evidence. In 1960, there were a total of 27 manufacturers of television receivers (both monochrome and color) in the U.S. By 1969 that number was reduced to 15 and by 1976 to 12, all of which produced color receivers. Of these, 3 each accounted for less than 0.5 percent of the market and 4 had come under foreign ownership.

The decline in the number of firms coincided with growing financial weakness among the surviving companies. This was strongly confirmed in the International Trade Commission's Section 201 investigation.<sup>37</sup> The ITC report<sup>38</sup> revealed, for example, that 8 of 12 U.S. producers of television receivers, which reported financial data to the Commission, experienced net operating losses in 1974; 8 of 11 reporting companies experienced losses in 1975; and 7 of the 11 operated in the red in 1976. The poor profit performance from 1974 on continued the decade-long erosion of the U.S. industry because, as the ITC report noted, "rather than operate at an unreasonable level of profit, a significant number of firms in the U.S. television receiver industry accepted offers and sold out."<sup>39</sup>

This pattern of acquisitions by foreign interests or of liquidations in the domestic color television industry has continued to the present. At the end of 1978, Rockwell International liquidated its Admiral television production facilities in Illinois which it had acquired 5 years before. Earlier in 1978, a Japanese company, Toshiba, announced the establishment of a new producing affiliate in the United States. With the liquidation of the Admiral facilities, there remain only 12 color TV producing companies in the United States.

#### 2. EFFECT OF IMPORTS ON EMPLOYMENT

The U.S. industry invented color television and first made color television receivers commercially available for general consumption. During the 1960's, as the quality of color TV improved and production costs and consequently retail

<sup>37</sup> USITC Publication 803, March 1977.

<sup>38</sup> *Ibid.* Table 33, p. A-58.

<sup>39</sup> *Ibid.* p. 52.

prices were reduced, color sets became widely popular in the United States. Since imports of monochrome TV receivers had already begun supplanting domestic production, U.S. monochrome receiver manufacturers were able, to some extent, to offset production and employment declines by rapidly shifting resources into color receivers where they held a technological lead.

Japanese producers, meanwhile, showed deftness in acquiring advanced U.S. technology. Assisted by lower labor costs coupled with favorable exchange rates, due to a substantially overvalued dollar, they successfully penetrated the U.S. market with high volume sales at prices well below domestic prices. As a result, imports from Japan registered sharp gains, absorbing larger and larger shares of the U.S. market. Thus, hopes that declining employment in monochrome production would be offset by expanded employment in color TV proved ill-founded.

The ITC's escape clause investigation did not break out employment data for color receivers but the downward trend was clear in the employment data compiled for all TV receivers. From a peak of 42,920 in 1971 the average number of persons employed declined to a low of 28,446 in 1975. Subsequent reports issued by the ITC<sup>40</sup> reveal that, despite the OMA with Japan, the average number of production and related workers employed in 1978 decreased to 23,855 from 24,976 in 1977 (a decline of 4.5 percent) and the total number of workers declined 5.2 percent to 27,593 from 29,104. This decline in employment reflected to a considerable extent the heavier domestic production emphasis on assembly operation, utilizing imported incomplete receivers, subassemblies, and components. As will be seen, the OMA with Japan accelerated the level of imports of these products, especially from noncontrolled countries and this, in turn, eroded the job opportunities for American workers in the TV receiver industry.

In evaluating the effects of imports on total employment in an expanding market such as color TV receivers, the loss of new job opportunities must also be taken into account. An industry witness at the ITC escape clause public hearing, for example, estimated that every million units of imports involved a loss of at least 8,000 domestic production jobs. If the jobs lost in supplying industries are added to the jobs lost in color TV receiver manufacturing, it can be reasonably estimated that at least 12,000 jobs are lost to American workers for every million units of imports.

### 3. IMPACT OF IMPORTS ON DOMESTIC SHIPMENTS

Imports of color TV receivers enjoyed their first stage of very brisk growth in the mid-1960's with the import penetration rising to over 17 percent by 1970. At the same time, shipments of domestically produced color TV receivers oscillated between 4.5 million units and 5.6 million units annually. Thus, the domestic manufacturers were able, to some extent, to capture a portion of the incremental growth in the domestic market. Reflecting the strong growth in U.S. demand for color receivers, domestic shipments rose substantially in 1972 and 1973. In part, the success of the domestic effort to meet the foreign competition during this period was assisted by a substantial devaluation of the dollar which increased the price of imports. However, in large part, the domestic industry was able to expand output and sales only through drastic price cutting and steep declines in profits. Domestic shipments of color receivers reached a peak of 7.7 million units in 1973, but from that point on the course was downward to 5.9 million units in 1976. Imports, on the other hand, maintained high levels in 1974 and 1975, despite the strong decline in U.S. demand in 1975. 1976 brought a severe intensification of the import crisis as U.S. imports more than doubled and import penetration reached 33 percent, almost twice what it had been just 6 years earlier.

The ITC staff confirmed this rapid deterioration of the U.S. industry in 1975 and 1976 due to imports, pointing to lower sales and to an alarming buildup of U.S. producers' year-end inventories. The decline in U.S. production and sales and the large inventories resulted in a significant idling of production facilities. Capacity utilization in the industry, which reached 82 percent in 1973, fell to below 70 percent at the time of the ITC escape clause investigation. It has since declined even further. In fact, the ITC reported in March 1979<sup>41</sup> that "capacity has been more than double U.S. production since 1976."

As a result of the OMA with Japan and an improving level of U.S. demand, production and domestic shipments showed improvement in 1977 and 1978. U.S. producer shipments of color TV receivers in 1978 were 8.2 million sets, 1.1

<sup>40</sup> Quarterly ITC monitoring reports on domestic industry developments are required under the OMA Presidential Proclamations.

<sup>41</sup> USITC Publication 962, March 1979.

million more or 16 percent higher than in 1977. However, these figures are somewhat misleading because of the rapid rise in imports of incomplete receivers. Even though production of complete receivers was substantially higher in 1977 and 1978 than in 1975 and 1976, the fact that considerably larger numbers of foreign components and subassemblies were being used in final assembly of sets in the United States obscured the true value of U.S. production.

U.S. import data confirm the increasing share of foreign products being used in the assembly of color receivers in the United States. The data show clearly that there has been a substantial increase in imports of incomplete color TV receivers and subassemblies since July 1977. For example, Japan, Taiwan, and Mexico together exported 84 percent more incomplete color receivers by value in the first half of 1978 than in the first half of 1977.

#### 4. CONTINUING UPWARD IMPORT TRENDS

The initial thrust of imports in the mid-1960's led to a tripling of color imported TV receivers, from 318,000 units in 1967 to 914,000 units in 1970, almost all from Japan. The domestic industry, in an effort to adapt to the influx of cheaper foreign sets, accelerated its research and development in order to improve the quality of its product. It also resorted increasingly to using foreign components and locating certain production in low labor-cost areas, such as Taiwan and Korea.

Despite such programs to cut costs and improve efficiency, domestic manufacturers were faced with an ever-shrinking market due to continued inroads by imports. U.S. imports of color receivers trended sharply upward in the 1971-76 period and more than doubled in a single year, 1976, as imports rose to 2.8 million units compared to 1.2 million units in 1975. Imports then accounted for one-third of the market and, undoubtedly, this upsurge in the import penetration rate has a strong bearing on the ITC's finding of injury. In 1976, almost 90 percent of all U.S. imports of color TV receivers were of Japanese origin. Thus, once the Administration decided on orderly marketing agreements as the mechanism of import relief, it was logical that it should seek to negotiate such an agreement with Japan.

#### 5. ESCAPE CLAUSE IMPORT RELIEF AND OMA AS THE REMEDY

On March 22, 1977 the U.S. International Trade Commission reported to the President results of its investigation under Section 201(b) of the Trade Act of 1974. On its own volition, the Commission had extended coverage of the investigation petitioned by COMPACT<sup>42</sup> to embrace monochrome TV receivers as well as color TV receivers. However, three Commissioners did not include monochrome production in their determination. All six Commissioners concurred in a finding of injury with respect to finished and unfinished color TV receivers. On the other hand, the Commissioners were evenly divided on the question of injury to that portion of the industry producing subassemblies of color TV receivers.

On the question of relief, five of the Commissioners recommended that the President impose an additional duty of 20 percent on TV receivers for the first 2 years, falling to 15 percent in the succeeding 2 years, and 10 percent in the fifth year. One Commissioner<sup>43</sup> thought that "to remedy the serious injury found to exist it is necessary to impose quantitative restrictions on imports of color TV receivers in the sum of 1,272 thousand units on a global basis," with provision for an annual growth factor of 5 percent.

The President decided not to accept the recommendations of the Commission, and instead directed the negotiation of an orderly marketing agreement with Japan which became effective July 1, 1977. This agreement established an annual limit on exports of color television receivers to the U.S. of 1.75 million units (1.56 million complete receivers and 190,000 incomplete receivers). The OMA was designed to reduce the annual flow of Japanese color receivers being imported into the U.S. by some 40 percent from the 1976 level of 2.5 million color sets.

<sup>42</sup> Petition for import relief had been filed collectively by the Industrial Union Department (AFL-CIO) American Flint Glass Workers Union of North America; Allied Industrial Workers of America; Communication Workers of America; Glass Bottle Blowers Association of the United States and Canada; Independent Radionic Workers of America; International Association of Machinists; International Brotherhood of Electrical Workers; International Union of Electrical, Radio and Machine Workers; United Furniture Workers of America; United Steelworkers of America; Corning Glass Works; GTE Sylvania Inc.; Owens-Illinois, Inc.; Sprague Electric Company; and Wells-Gardner Electronics Corporation.

<sup>43</sup> Commissioner Ablondi, p. 5, USITC Publication 803, March 1977.



The initial effect of the OMA was beneficial, as imports from Japan were rolled back well below the then current levels. However, imports from Japan in 1977 were still well above the annual rate in the years prior to 1976. Moreover, as the first year of the agreement passed, it became clear that the President's decision was proving to be a Pandora's box as U.S. importers shifted to other foreign supply sources such as Taiwan and Korea. Also, levels of imports of incomplete receivers were rising and becoming more significant in proportion to complete receiver imports. Consequently, it became evident that injurious import competition had not been significantly mitigated by the Japanese OMA and that the health of the domestic industry continued to be adversely affected by the impact of imports.

The Administration itself came to the conclusion that imports of complete and incomplete receivers from Taiwan and Korea had increased "in such quantities so as to disrupt the effectiveness of the OMA with Japan with respect to such products."<sup>44</sup> Accordingly, separate orderly marketing agreements were negotiated on December 14, 1978 and December 29, 1978 with Korea and Taiwan respectively, both effective February 1, 1979 through June 30, 1980.

The two new agreements covered the same product range as the OMA with Japan. In the case of Taiwan, specific export quotas were designated also for certain incomplete receivers (classified under TSUSA 685.2064), while in the case of Korea, exports of such products were also under restraint, but were to be counted against the overall level for complete and other incomplete receivers.

As with Japan, restraint levels were fixed so as to provide a rollback from the current level of imports of complete and incomplete color TV receivers from these countries. But past experience and recent import data indicate continued shifting of foreign source supply to other uncontrolled suppliers, and to types of incomplete receivers not under control.

As table 1 shows, imports of complete receivers from Japan dropped by almost 20 percent from 2.5 million units to 2.0 million units between 1976 and 1977, and dropped a further 30 percent to 1.4 million units in 1978, but the growth of new sources of supply (not only Taiwan and Korea but increasingly Singapore and Canada) wiped out most of the gains which the domestic industry could have anticipated from the reduction in Japanese imports.

Table 2 shows the dominant role that Japanese exporters played in the U.S. import market for color television receivers through 1976. The data also show clearly that Japan's position has declined substantially since 1976 and that Taiwan and Korea, along with other suppliers, are becoming much more significant. In 1976, Japan, Taiwan, and Korea supplied virtually all color TV receivers imported into the U.S. However, in 1978, 10 percent of color television receiver imports were from other countries. Of the 90 percent supplied by the three OMA countries, little more than half came from Japan in 1978, whereas in earlier years the proportion from Japan was much higher.

The import data shown in the attached tables relate only to complete color television receivers. However, imports of subassemblies or incomplete receivers are an equally serious threat to the domestic industry. Some of these are the type controlled under the OMA's but others are not controlled at all either with Japan, Taiwan, or Korea. In a report on audio-video imports published March 29, 1979, the U.S. Department of Commerce noted that imports of incomplete color TV receivers of the type covered under the OMA's, rose from 546,000 units in the second half of 1977<sup>45</sup> to 2,143,000 units in all of calendar 1978, whereas "other assemblies" (that is, incomplete receivers not controlled under any OMA), jumped spectacularly from 461,000 units in 1976 to 5,789,000 units in 1977 and to a staggering 8,556,000 units in 1978. On a percentage basis, this represented a growth of 1,155 percent between 1976-1977 and a further 47.8 percent rise between 1977-1978.

### C. Conclusion

The OMA with Japan represented an incomplete import relief mechanism, a fact which the Administration recognized when it negotiated new OMA's with Korea and Taiwan to limit exports of the same product range covered under the OMA with Japan.

<sup>44</sup> Presidential Proclamation 4634 of January 26, 1979 which put into force OMA's with Taiwan and Korea.

<sup>45</sup> Import classifications for these incomplete receivers were established as of July 1, 1977. Data prior to that date are not available.

Since the additional two OMA's became operative only in February 1979, there has been insufficient time to assess their impact on the domestic industry or to conclude that these new agreements will enable the industry to adjust more satisfactorily to import competition. Negotiation of additional OMA's with presently uncontrolled suppliers may prove necessary. It may also be desirable that the United States should close other loopholes by coverage in OMA's of all sub-assemblies or incomplete receivers. The possibility of an extension of the present orderly marketing agreements in terms of the Trade Act provisions is yet another area for attention by the Administration.

On the surface, the evidence indicates some improvement since the OMA with Japan as the industry has improved its production and shipment levels. However, the actual condition of the industry, as measured by employment and profits, remains weak. With respect to profitability, the most recent report issued by the International Trade Commission on conditions in the U.S. color television industry points up a disappointing profit performance for 1978 relative to the two preceding years. The report<sup>46</sup> shows the ratio of net operating profit to net sales was 1.5 percent in 1978, down from 2.8 percent and 3.7 percent in 1977 and 1976, respectively. After deducting other expenses from net operating profit, the industry actually experienced a net loss of \$1.6 million in 1978. Employment also continues to indicate deterioration, despite growth in U.S. demand in 1977 and 1978.

There are three basic reasons for this poor performance. First, a high volume of complete receiver imports continues to enter the U.S. market, cutting short possible U.S. production growth. Second, rapid growth in very low-priced imports from newer suppliers has maintained strong price depression in the U.S. market. Third, U.S. manufacturers have imported greatly increased volumes of subassemblies and components, precluding employment increases. Thus, unless the import penetration ratio for complete receivers, which in 1978 was in excess of 26 percent, can be further reduced, and the increasing offshore sourcing of components reversed, import competition will very likely continue to erode the domestic industry.

TABLE 1.—U.S. IMPORTS OF COMPLETE COLOR TELEVISION RECEIVERS FROM MAJOR SOURCES, ACTUAL QUANTITY 1973-78

	[Thousands of units]				
	Total imports from all countries	Imports from Japan, Taiwan and Korea	Japan	Taiwan	Korea
1973.....	1,339	1,386	1,059	325	2
1974.....	1,282	1,275	916	337	22
1975.....	1,215	1,209	1,044	143	22
1976.....	2,835	2,814	2,530	236	48
1977.....	2,538	2,447	2,029	322	96
1978.....	2,775	2,506	1,445	624	437

Source: U.S. International Trade Commission and U.S. Department of Commerce data.

TABLE 2.—PERCENTAGES BY QUANTITY OF TOTAL U.S. IMPORTS OF COMPLETE COLOR TELEVISION RECEIVERS ACCOUNTED FOR BY JAPAN, TAIWAN, AND KOREA, 1973-78

	Japan, Taiwan, and Korea	Japan	Taiwan	Korea
1973.....	99.0	75.7	23.2	0.1
1974.....	99.5	71.5	26.3	1.7
1975.....	99.5	85.9	11.8	1.8
1976.....	99.3	89.2	8.3	1.7
1977.....	96.4	79.9	12.7	3.8
1978.....	90.3	52.1	22.5	15.9

Source: Compiled from table 1 statistics.

<sup>46</sup> USITC Publication 962, March 1979.

TABLE 3.—U.S. IMPORTS OF COMPLETE COLOR TELEVISION RECEIVERS FROM ALL COUNTRIES AND FROM JAPAN, TAIWAN, AND KOREA AS A PERCENT OF APPARENT DOMESTIC CONSUMPTION, 1973-78

[In percent, except units]

	Apparent domestic consumption (thousands of units)	Total imports	Imports from Japan, Taiwan, and Korea	Japan	Taiwan	Korea
1973.....	8,828	15.9	15.7	12.0	3.7	.....
1974.....	8,010	16.0	15.9	11.4	4.2	0.3
1975.....	6,742	18.0	17.9	15.5	2.1	.3
1976.....	8,579	33.1	32.8	29.4	2.8	.6
1977.....	9,283	27.3	26.4	21.9	3.5	1.0
1978.....	10,459	26.5	24.0	13.8	6.0	4.2

Source: Based upon U.S. International Trade Commission and U.S. Department of Commerce trade data.

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# THE UNITED STATES AND JAPAN: COMPETITION IN WORLD MARKETS: POLICY ALTERNATIVES FOR THE UNITED STATES

By William V. Rapp

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## INTRODUCTION

Japan and the United States are the world's two largest economies, accounting for over \$3 trillion in gross national product (GNP) and over \$400 billion in world trade. Their impact on the world economy, on trade patterns, on foreign exchange markets, on currency flows, in fact on our economic future, is profound. Yet, these two countries have contrasting postwar economic developments as a direct result of different economic policies. In an interrelated world, these developments affect world trade and other countries which compete with Japan and the U.S. More importantly, the adverse consequences of contrasting postwar policies and different competitive positions are presently exacerbated by a worsening of already poor U.S. economic policy in the face of superior Japanese competition. This competition is for global market share across a wide range of industries in which import, export, and investment strategies all play an important role nationally and corporately. In the near term, this competitive situation will continue to result in rising tensions between the two countries and in an unstable world trade and currency environment until some basic U.S. policy changes are made.

United States-Japanese competition in world markets is obviously a broad-gaged subject. This paper examines the problem in terms of the impact of policies and perceptions on global competition and apparent trends in competitive dynamics, and analyzes how U.S. strategies and policies might influence those trends. The paper also discusses the theoretical basis for Japan's continuing economic success and outlines an alternative framework for U.S. economic policy.

## JAPAN AS A SUPERIOR COMPETITOR

The United States has lost its position as the world's leading industrial power by not meeting the competitive challenge of a better organized, more productive, and faster-growing economy, Japan; 1978 was the Watershed Year. At an average monthly rate of 190 Yen = one dollar, per capita GNP of \$9,500 essentially equalled the U.S. (\$9,600), while per capita GNP from manufacturing was 50 percent higher. Japan has an industrial trade surplus of \$77 billion compared to a U.S. deficit of \$4.8 billion. Her manufactured exports totalled \$96 billion, essentially the same as the U.S.'s \$100 billion. Although America has twice the population and GNP, manufactured shipments were also equivalent. In addition, her absolute gross level of domestic capital formation was comparable at \$340 billion, versus 328, was private machinery and equipment investment (\$144 billion versus \$148 billion). Investment rates about twice America's and higher real growth rates mean that Japan will clearly pass the United States as the world's leading industrial power in the early 1980's despite any exchange rate fluctuations.

Current U.S. policies have been woefully inadequate to meet its obvious competitive problem. Its bilateral trade deficit (excluding freight and insurance) which was \$5.5 billion in 1976 rose to \$11.8 billion in 1978. In the same years, Japan's overall trade surplus was \$9.9 billion, and \$24.7 billion; conversely, the U.S. overall trade deficit was \$7.4 billion and \$30.9 billion.

Examining manufactures alone, the situation looks even bleaker since almost all Japan's exports, though not all U.S. exports, are manufactures. The United States overall trade surplus in industrial goods of \$20.5 billion in 1975 deteriorated to a \$4.8 billion deficit in 1978 while Japan's overall surplus improved from \$44.3 billion to \$77 billion. The bilateral situation was similar, as Japan's manufactured goods surplus rose from \$7.7 billion to \$19.2 billion.

Nor should we take comfort from the 1979 decline in Japan's trade surplus due to rising energy, raw material, and food prices and subsequently a falling Yen. Japan's absolute annualized savings and investment levels remained comparable to the United States—\$325 billion for total capital formation and \$154 billion for plant and equipment, versus \$368 billion and \$162 billion for the U.S. Her manufacturing trade surpluses globally and bilaterally were \$72 billion and \$18.8 billion respectively versus \$77 billion and \$19.2 billion in 1978, essentially no change on a bilateral basis. The increased price of oil accounted for a \$12.3 billion swing in Japan's import bill, and food and raw materials another \$11.5 billion. Net dollar export prices were up 10.2 percent annually, less than the U.S. at 13.7 percent. The U.S. global surplus in manufacturing was only \$8.5 billion. Average monthly Yen rate for 1979 was \$222.

## U.S. COMPETITIVE DIFFICULTIES

De facto U.S. postwar industrial and economic policies in themselves probably would have led foreigners to exploit U.S. competitive weakness, but Japanese firms, assisted by favorable government policies, have been particularly successful in doing so. This can be beneficial to the United States if it focuses attention on competitive

problems, the need for policy change, and a more successful model for competitive development. However, it is also worrisome given the probability of increased tensions, continued U.S. weakness, and more pressures on the dollar if sound new policies are not rapidly developed.

Such tension and U.S. weakness also have serious strategic consequences for America's important military and political relations. If the U.S. defense budget must grow 5 percent per year in real terms to maintain or recapture strategic equilibrium with Russia, and if the economy continues to stagnate, the result will be intolerable internal allocation pressures by the end of the decade. Thus, the 5 percent goal may not be reached, resulting in a serious decline in our relative defense posture and U.S. world leadership. This in turn may force the Japanese to reevaluate their own position. Indeed there are recent public policy statements that indicate they already are. Fortunately, the policies needed to increase growth and to make the U.S. more competitive would, at the same time, alleviate many domestic economic ills such as stagflation, unemployment, and competing social objectives as well as several international problems. A more productive, more competitive, more efficient economy would lessen inflationary pressures, create more jobs and provide a larger, faster growing economic pie to support national goals, while reducing current and potential problems with Japan and other countries.

The United States must be able to compete with Japan for global markets if it is to retain the economic base needed to remain a dominant world power. This is an important national objective. The benefits more than justify it. Japan needs a strong and predictable ally. The United States needs better Japanese relations, an improved payments balance, a stronger dollar, and reduced world economic tensions. To achieve this, the United States need not remake itself in Japan's image. Profound historical, political, and cultural differences prevent this. The economic fundamentals required, though, are actually straightforward and within our grasp. Further, there is little in the Japanese success formula that is innately Japanese. The political will and educational follow-through are what is difficult, and we must recognize that following sound competitive principles does not make us Japanese. Still, the only adequate response to the competitive challenge is a fundamental political economic reorientation: a substantial resource allocation shift towards investment, trade, and technology and a change in regulatory policies and in the sharing of regulatory costs. This, in turn, must be combined with an increased appreciation by American business of the importance of global market share.

The reasons for our bilateral and global imbalances with Japan are the same. Many major U.S. industries are declining competitively. World trade in the manufactured goods primarily produced by major industrial countries is dominated by a few large multinational companies which compete for the same markets. In the United States, some 250 firms account for over 75 percent of U.S. exports. In Japan some 200 firms (not including trading companies) account for roughly 64 percent of exports. These companies compete for sales in the United States, in Japan, and in third markets. A loss of export sales by General Electric or General Motors to Hitachi or Toyota in Saudi Arabia has as much negative impact on the U.S. payments balance as a loss in the United States or Japan. The United States has lost such sales. To

decrease the trade deficit, major U.S. exporters must be more competitive domestically and internationally, and must understand the strategic use of foreign investment. But they also need government assistance and incentives.

Japan sells little that we do not or could not make. Yet we have a massive bilateral deficit in manufactured goods, with no discrimination against U.S. manufacturers in the U.S. market. We suffer from excessive imports and declining domestic competitiveness in addition to any difficulties exporting to Japan. A Boston Consulting group study for the U.S. Treasury indicates that the United States has lost market share in Japan to the European Economic Community (EEC) and to more developed Asia as well. Yet, those U.S. firms that have been successful in Japan have all had global strategies (e.g., International Business Machines, Texas Instruments, Boeing, Caterpillar, and Coca-Cola). Those U.S. industries that have had competitive problems, often resorting to "fortress America," have not had global strategies (e.g., steel, shipbuilding, heavy power generation, and consumer electronics). The former have often used a proprietary position or technology or both to force entry into Japanese markets, the latter have not.

The lessons are clear-cut. Markets for traded commodities are global and decreased competitiveness is reflected in all markets, domestic and export. The impact on the U.S. deficit is doubled. We lose export earnings, and increase imports. Also our major corporations are weakened because the competitive problem is continuous; increased sales improve a competitor's productivity. The largest Japanese firms with the largest domestic share also have the largest export share. The marginal U.S. firm competes with the most successful, most efficient Japanese producer. The small U.S. firm's lost market share in turn helps develop the large Japanese firm's global competitive position against the leading U.S. producers. Anti-trust policy that prevents declining U.S. industries from rationalizing production exacerbates this problem. The biggest Japanese inroads into U.S. domestic and export markets are in industries where economies of scale in production and/or marketing are important, and where there are small inefficient producers, or major producers serving only the U.S. market.

However, just as Japan was able to develop viable economic policies and strategies out of the necessities she faced at the end of the war, it is certainly possible for U.S. officials and businessmen to develop an appropriate and coherent set of competitive and strategic policies to offset actions that have raised user costs and lowered normal productivity increases, and to improve on historical performance as well. But to do this correctly, the United States must have a good understanding of Japan's competitive thrust and its probable future direction, as well as a knowledge of the economic theories and policies underlying Japan's economic success.

#### AN EVOLUTIONARY PERSPECTIVE OF THEORY AND POLICY

Over time, economic theory must reflect reality or subsequent policy will be increasingly ineffectual or even counter-productive in achieving national economic goals. Traditional neo-classical and Keynesian analysis is now less and less appropriate as a basis for formu-

lating policy or national economic strategies. The United States and world economies have changed dramatically since the 1930's so that underlying assumptions of traditional neo-classical and Keynesian theories no longer reflect the realities of the competitive environment. These theories were developed from real world economic situations substantially different from those existing today. Classical theory emphasizes perfect competition among small, similarly sized units with no economies of scale and a common cost structure. In turn, wages and prices are assumed flexible and fully responsive to specific demand and supply pressures. This situation may have reflected nineteenth century England, but it does not typify the present world economy. At that time, there was surplus labor available from agriculture and industrialization was dominated by light industry, particularly textiles. But in today's modern industrial economies, services and industry are dominated by large firms operating on a worldwide basis where economies of scale in production, marketing, and distribution differentiate firms from their competitors in terms of size, efficiency, and profitability. Competition is oligopolistic and global.

It was the shift in industrial structure in the early twentieth century from light to heavy industry within the major industrial countries like England, the United States, Germany, and Japan that helped alter the ingredients of successful economic policy. Under classical assumptions of price and wage flexibility, supply was thought to create its own demand. (This was Say's law of markets.) Initially this was done by creating jobs and income due to investment expenditures. Longer term, capacity usage was assured through lower prices; that is, the supply curve shifted to the right and this, in turn, created secondary effects as prices fell via substitution demand and rising real incomes.

Under this scenario business downturns were inevitable but also temporary. In a recession, prices would fall and a certain number of firms would go out of business, eliminating excess supply. Wages would also fall, but due to declining prices, real wages would rise until demand and supply were again in equilibrium. On the monetary side, reduced investment levels would lower interest rates until capacity and inventory additions were again attractive. This also helped bring demand back to full-employment equilibrium. The economy was thus seen as self-correcting and as moving from one full-employment equilibrium to another along a growth trend, with capacity and inventory expansions being the disturbing influence. The difficulties in solving or formulating specific economic analytical problems in terms of a general equilibrium approach meant that most economists, for practical policy purposes relied on partial equilibrium analysis. Analytically, certain major variables like investment were changed while others were held constant (*ceteris parabus*). Overall this theoretical and policy approach seemed to work well in the relatively simple, *laissez-faire*, small-firm, nonunionized environment of the day. Indeed *laissez-faire* policy and its theoretical base as conceptualized from observations of the economy were self-reinforcing since the economy did appear actually self-correcting with little government interference.

Classical economic theory and policy emphasized what one might call the real or physical economy at the micro level—growth and supply—rather than the monetary or demand economy at the macro level. The latter was in many analyses considered just a veil with little



effect on the real allocation of resources as prices and wages responded to the physical capacity available to supply goods and to the amount of money in circulation. From this viewpoint, prices were determined by multiplying the "Marshallian K" (the velocity of money) times the amount of money in circulation divided by the real transaction level. But growth implies change, and since economies alter their structures over time, the validity of particular economic models and their associated policies also change. Thus, classical theory and its associated laissez-faire policies gradually became less appropriate in dealing with certain economic problems.

The growth of light industry created demand for heavy industry such as steel, machinery, automobiles, and shipbuilding where economies of scale and the organizational benefits of large corporations were manifest. At the same time, skilled laborers were hired on a more permanent basis and unions came to exercise greater influence. Further, user capital costs, profitability, and capital formation began to have more impact on the real allocation of resources and business success. Therefore, as the relative importance and size of heavy industry grew, these developments came to dominate the economic environment. Administered prices, lumpy investments, and sticky wages soon substituted for the small-scale flexibility of the original classical environment.

In this context, supply did not necessarily create its own demand as prices and wages might not fall sufficiently to clear markets. Large corporations could maintain their existence by laying off workers and cutting back production levels. Yet, substantial excess capacity would continue to exist. Falling interest rates and an increased money supply would then not bring forth new investment, especially as the time value of, and transactions demand for, money set a floor under interest rates. (This was Keynes' liquidity trap.) In fact, the "Marshallian K" or the velocity of money was found not to be fixed and price flexibility was no longer sufficient to automatically increase private consumption or investment demand.

In this environment, Keynes correctly analyzed that massive government expenditures and deficit spending were necessary to generate demand or alternatively to use up excess desired savings. This was the origin of demand management and the increased reliance on government policies affecting the money economy at the macro level as opposed to letting the real economy function with little government influence. The assumption was if sufficient demand was in place, the traditional classical responsiveness of supply would be forthcoming. Essentially this policy worked, and was a proper response to changed economic circumstances. Monetary policy became part of this demand management emphasis as a way to control investment demand via interest rate levels. This was also true of foreign exchange rates since devaluation lowered export prices, increased import prices, and so raised the demand for a country's products. Therefore, rising government expenditures, competitive devaluations, and low interest rates were all tried during the 1930's.

Gradually, demand or money management theories and policies became the accepted wisdom with little real thought for supply or the real economy. After all, in a major depression there is little concern about excess demand. But, clearly, constantly shifting the demand curve right raises prices and is inflationary. Increasing government

expenditures, reducing taxes, or devaluing the dollar does nothing to increase the available supply except through the inducement of higher prices. At the same time, attempts to restrict demand growth periodically via monetary policy by raising interest rates to curb investment have been self-defeating; in the short term, these policies raise capital costs, aggravating inflation, and in the long term they reduce available capacity. Alternatively, reducing government expenditures or raising taxes has proved politically unpalatable.

In addition, demand management policies have lost sight of the fact that it takes time to expand capacity, that is, for supply to respond to increased demand. Further the oligopolistic competition and business structures partially responsible for the problems of the 1930's have continued or even become more prevalent. Prices and wages are still not very flexible downward in a recession. Thus the level of unemployment that is politically tolerable is not sufficient to bring about long-term price stability. In sum, demand management policies can underwrite demand levels sufficient to prevent major recessions, but practically they cannot assure long-term price stability at acceptable levels of unemployment.

The obvious solution to this dilemma is an approach in which supply growth and reduced prices are encouraged via competition, plant modernization, increased productivity, and expanded capacity. That is, the supply curve should be shifted to the right while demand management assures this capacity will be utilized. This implies a more balanced policy in which there is concern for supply and demand, for both the real and money economies at all levels. It is not enough to assure adequate demand if the economy is not prepared to meet it efficiently over time. Yet Americans have shied away from supply management because some have felt this meant too much government control in running the economy, along Russian lines, but this position is ridiculous. Already a plethora of government regulations have impacted the real economy. Unfortunately, though, they have tended only to raise costs and restrict supply, further aggravating the inflation and unemployment problems, because they have not been tied in with any overall economic policy. Since government interference is already a fact, at least it should be intelligent; one can certainly indicate directions and offer incentives without controlling specific business activities. The best and most successful real world model of this kind of balanced approach is, of course, Japan. Here supply and demand management are properly treated like two parts of a scissors. If the U.S. wants to cut a successful national economic pattern of price stability, low unemployment, balance of payments equilibrium, a stable dollar to meet its security and other obligations, and reasonable growth to fund people's rising aspirations, it needs both policy blades and could profitably learn from Japan's experience. The current U.S. wisdom maintains there is fundamental conflict among these goals; but in fact a two bladed approach can achieve them simultaneously.

#### JAPAN'S BALANCED APPROACH TO COMPETITIVE DYNAMICS AND ECONOMIC POLICY

At the end of World War II, Japan's economy was devastated, and her government faced the challenge of providing a living for an already large population further expanded by returning soldiers and colonists.

With little arable land and few raw materials, this could only be achieved by developing an internationally competitive industrial sector which would not only supply domestic demand but could competitively export to pay for required food, energy, and raw material imports. Further, given the economy's labor intensity, any upgrading of national income depended on becoming competitive over time in more capital and technologically intensive industries. These goals logically required the targeting of key industries and the achieving of high rates of growth and productivity. This scenario in turn would necessitate high rates of investment which, to be noninflationary, would require high savings rates. The Japanese government, therefore, undertook to change savings and investment rates through monetary, fiscal, and tax policy actions<sup>1</sup> and to direct these funds initially towards industries like shipbuilding, steel, fertilizer, and power generation and later, as the economy grew and developed, towards chemicals, petrochemicals, autos, and computers.<sup>2</sup> The government itself ran a fiscal surplus, increasing aggregate savings, while aggressive monetary policy encouraged the corporate use of debt financing, lowering after-tax capital costs to stimulate investment particularly in heavy industry. The result was a flexible financial system generating substantial savings that were readily allocated to high growth areas.

The success of these policies is well documented. (See above section: Japan as a Superior Competitor.) Japan achieved very high real growth rates and low unemployment rates with remarkable wholesale and export price stability. Yet this success raises many questions concerning the traditional assumptions of U.S. economists, who see long-term savings and consumption rates as relatively fixed due to institutional and cultural factors. In fact, these parameters can be changed over time given changes in policy incentives affecting savings and investment such as depreciation allowances, real after-tax rates of return, and government regulations. Japan did not have the luxury of looking at historical statistics in a relatively unchanged cultural environment to create a circular self-fulfilling prophecy. Japan had to increase savings and investment levels, and it did, from 20-25 percent of GNP in the early 1950's to over 40 percent in 1973!

These dramatic changes in savings and investment rates radically altered the relative factor endowments between capital and labor; so that gradually Japan gained comparative advantage in more capital and technologically intensive industries, raising incomes and living standards. Therefore, it would appear that comparative advantage is not only variable over time but is subject to policy manipulation; that is, product cycles occur due to economic growth, and government can affect the speed with which they occur through policies affecting savings and investment and thus growth.<sup>3</sup> Interestingly, in the early 1950's, the Bank of Japan (BOJ) and the Ministry of Finance (MOF) argued that Japan should not try to develop an automobile industry because Japan's comparative advantage was in light labor intensive industries such as textiles. They should, therefore, export textiles and

<sup>1</sup> See William V. Rapp, "Japan's Industrial Policy," in I. Frank, ed., *The Japanese Economy in International Perspective*, Johns Hopkins University Press 1974, pp. 37-66.

<sup>2</sup> The interaction between economic growth, industrial sequencing, and product cycles is fully covered for Japan in W. V. Rapp, "A Theory of Changing Trade Patterns under Economic Growth: Tested for Japan", *Yale Economic Essays*, Fall 1967, pp. 69-135 and W. V. Rapp, "The Many Possible Extensions of Product Cycle Analysis," *Hitotsubashi Journal of Economics*, Vol. 16, No. 1, June 1975, pp. 222-229.

<sup>3</sup> In addition to the articles noted in footnotes 1 and 2 above, see W. V. Rapp, "Japan: Its Industrial Policies and Corporate Behavior," *Columbia Journal of World Business*, Vol. XII, No. 1, Summer 1977, pp. 38-48.

import autos. This was essentially the traditional Western Economic view using comparative statistics analysis, and probably reflected training at prestigious U.S. universities. Fortunately, MITI (The Ministry of International Trade and Industry) took a more pragmatic and dynamic view of where the economy ought to go and how it should get there. MITI won the debate.<sup>4</sup>

Yet, the government did not try to control the economy, but rather led it through incentives and logical persuasion.<sup>5</sup> Perhaps the government had learned this lesson from its disastrous experience with attempts at rigorous economic control during the War and under SCAP (Supreme Commander, Allied Powers).<sup>6</sup> In any case, general incentives to growth, investment, exports, price competitiveness, productivity improvements, expanding markets, and more growth were offered to all firms in an industry or sector, primarily via tax and monetary policy. The faster growing more successful firms benefited more from these incentives which further improved their performance and often led to rapid consolidation unopposed by anti-trust policies. Further, high growth rates contributed to the fiscal surplus that was rechanneled into more productive investment. Japan predated the current "incentive economics" theories by thirty years, and is living testimony to their validity.

Japan observed or recognized a competitive environment in which economies of scale in production, marketing, and distribution for capital and technologically intensive industries were a reality. Developing internationally competitive firms, therefore, required oligopolistic competition if costs were to be lowered and markets developed. Both government officials and businessmen recognized that global market share would affect profitability, growth, and competitiveness, domestically and internationally. Classical theory's perfect competitor was not a reality in international markets. Thus it was not practical or effective to pursue financial or regulatory policies that favored perfect competition.

In essence, out of necessity, Japan recognized the implications of the changes in industrial structures that had occurred in modern economies and the dynamic possibilities this offered. In turn, Japan's successful policies and strategies further changed the world's competitive economic environment by establishing internationally competitive firms with high investment and productivity rates that priced aggressively to develop markets. But the key was that Japan's policy makers in government, business, and labor developed their theories and policies from observations of the real world, rather than by manipulating existing theories. This is how they achieved their economic objectives, initially to survive, and later to raise living standards and the quality of life. This is what American economists and policy makers should learn from Japan—to look at the real economy first in order to develop a theoretical base. Then we can formulate the policy tools both regulatory and monetary (e.g., foreign exchange, interest rates, and tax rates) to bring about desired policy

<sup>4</sup> J. Dresser, T. Hout, W. Rapp, "Competitive Development of the Japanese Automobile Industry," J. Cohen, ed., *Pacific Partnership: U.S.-Japan Trade*, D.C. Heath, Lexington, Mass. 1972, pp. 221-240.

<sup>5</sup> E. Vogel, *Japan as Number One: Lessons for America*, Harvard University Press, Cambridge, Mass. 1979, pp. 53-97.

<sup>6</sup> See recent articles in *Journal of Asian Studies*, August 1979, Vol. XXXVIII, No. 4: Richard Rice, "Economic Mobilization in Wartime Japan: Business, Bureaucracy, and Military in Conflict," pp. 689-706; Leon Hollerman, "International Economic Controls in Occupied Japan," pp. 707-720; Ray Moore, "Reflections on the Occupation of Japan," pp. 721-734.

objectives. Further, we should probably follow Japan's example of viewing monetary, fiscal, and tax policies as functions of real micro economic objectives rather than just pursuing preprogrammed monetary or fiscal responses in particular macro economic situations.

As an example, the current wisdom says that the only way to whip inflation is to cut back on Federal deficits and tighten the monetary screws to wring inflation out of the economy at unacceptably high levels of unemployment, despite the political difficulties. This view indicates our total involvement with demand management, and cogently illustrates the traditional policy problem described by the "Phillips curve," that is, the pitting of jobs against price stability. This proposal seems politically naive, given our postwar economic history of supporting employment. It also seems to reflect a Calvinist bent in conservative economists advocating this approach; that is, the Nation and the people must suffer to compensate for their past excessive living style and profligate consumption patterns. In fact, Japan's experience and policies, as well as common economic sense, indicate that we can have rapidly rising living standards, high employment rates, and price stability if we only maintain or generate high enough savings and investment rates so that productivity increases and more efficient supply capacity can meet the increased demand at stable prices. If the supply and demand curves move to the right together, price stability can be achieved at higher levels of output and employment. In sum, a policy balancing demand and supply can solve the policy dilemma of the "Phillips curve," and, like the two blades of the scissors, can cut an internally consistent and acceptable pattern of national economic goals.

Japan's balancing of supply and demand management has necessarily meant a conscious involvement and monitoring of the real micro economy, the monetary macro economy and their interaction. In practice, however, the emphasis has been first on real economic impacts such as establishing internationally competitive industries with real productive capabilities. Foreign exchange, fiscal and monetary policies have supported these objectives through underwriting demand and providing required financial resources to fund noninflationary investment demand. These policies and objectives are also coordinated with regulatory policies affecting such matters as pollution and safety. At the same time, real economic policy is viewed as a dynamic process. This is because a policy based on changing an economy's structure and comparative advantage must recognize that the economy is continually evolving. Therefore, measures as to the appropriate target industries, industrial structure, and living standards are constantly being revised and upgraded. In sum, Japanese officials, businessmen, and labor leaders understand the need to plan and prepare for the economy's natural development. Currently this means phasing out of light and even certain capital, but energy-intensive, industries into more technologically sophisticated levels of production and employment (e.g., computers, semiconductors, telecommunications, software systems and engineering).

Japanese policymakers understand that the declining cost of technological transfer combined with the faster growth of light and certain energy uses in base materials industries in the less developed countries (LDCs) means that Japan is rapidly losing absolute and comparative advantage in these industries. But rather than oppose these

economic forces, Japan is trying both to encourage and cushion their impact. Imports are being encouraged to keep living costs low, but the government is also helping firms to scrap obsolete plant, to modernize, and to enter new industries. Firms are also investing overseas to maintain their export markets through lower cost production bases, while providing marketing, design, engineering, and equipment support. In this way firms can upgrade their employment on an intra-industry basis while globally maintaining their overall corporate competitiveness. Just as successful Japanese managers saw that exports extended the beneficial cycle of investment, productivity improvement, cost declines, competitive pricing, market expansion, and more investment once high domestic demand slowed, they now view foreign investment as a logical strategic extension to maintain global markets and to promote corporate development.

Since macro-economic results are generally made up of micro-economic events, the overall effect of these developments in the last few years has been to rapidly increase Japanese direct investment abroad. It also explains why the Japanese government wants foreigners to look at Japan's basic balance of payments rather than its trade balance since Japan needs a trade surplus to fund both its deficit in services and its growing long-term capital outflow. Japan's positive technology balance of payments with the LDCs is an adjunct of this evolution. Though the economy is currently in transition, ultimately the impact of these policies and Japan's economic evolution will be to maintain the worldwide competitiveness of Japanese multinational corporations (MNCs), even though the direct source of production may be other countries. In effect, this represents the multilateralization of Japanese competition with the more sophisticated managerial, engineering, and production work remaining in Japan.

Simultaneously, with this continuous upgrading in employment opportunities and the quality of life, these policies will create a positive outlet for Japan's excess savings. They will also reduce the trade surplus and pressures on the Yen as some export growth is shifted overseas. Monetary policy, foreign exchange controls, fiscal expenditures, and tax codes will be manipulated as before to achieve this scenario. Special reserves for overseas investment, subsidies for industrial restructuring, changes in foreign bond issue approvals, are already being used to keep the business cost of capital for foreign investment low and the Yen slightly appreciating. Further, because real savings and investment rates and thus real growth and productivity rates will continue to be higher than current U.S. levels, this competitive restructuring should take place rather smoothly at lower rates of interest and inflation than in the U.S.<sup>7</sup> Simultaneously, real standards of living, employment opportunities, and Japanese global competition will rise more rapidly as well. Moving declining industries offshore naturally contributes to this beneficial cycle as fewer resources are channeled to low growth sectors. The overall growth rate, therefore, remains higher, and growth facilitates structural change.

High rates of saving and low user capital costs are, as in the past, the key to this restructuring since they make possible both high rates of domestic growth and substantial foreign investment without

<sup>7</sup> W. V. Rapp and R. Feldman, "Japan's Economic Strategy and Prospects," in W. Barnds, ed., *Japan and the United States: Challenges and Opportunities*, Council on Foreign Relations, New York University Press, 1979, pp. 86-154.

sacrificing continued competitiveness in basic strategic industries. An example of this fact is the contrast with the United States of the effect of wage settlements and government regulations on inflation. In the United States, government pollution and safety regulations have increased industry costs and decreased productivity. Because wage settlements are negotiated on the basis of anticipated, i.e. historically based, productivity improvements plus a cost of living allowance (COLA), the effective interaction of wage settlements and regulations has been an upward spiral in prices and nominal wages as productivity has fallen short of anticipated levels. Japan, on the other hand, has actually benefitted from even stricter pollution regulations because mandated expenditures have used up excess desired savings, raising overall GNP growth levels while developing a new industry and new technology for which there is rising worldwide demand.

To compensate, the United States should allow expensing or very rapid write-offs of pollution-related expenditures. Tax credits might be considered to compensate for Japan's competitive edge. Currently 3 to 4 percent of U.S. GNP goes to all regulations, but it is only investing 17 to 18 percent compared to Japan's 30 percent. Competitively, America's economy and industry cannot handle the relatively higher diversion of productive resources, especially when one recognizes that the amount of investment available to increase productivity after replacement costs, housing and inventories is only 4 to 5 percent of GNP. Such tax policies would also force legislators to make the appropriate budget/benefit trade-offs for various regulations. But strategically this must be supported by more savings.

Given Japan's planned economic direction for the 1980's, the likely sources of global competitive friction with the United States and U.S. corporations are likely to be as follows:

(1) World competition and Japanese liberalization in high technology manufacturing industries like computers, semiconductors, telecommunications, and aerospace where Japan will try to build on its existing strength in producing plant and equipment consumer electronics, and automobiles.

(2) Future competition and the need for significant Japanese liberalization in high technology and/or knowledge (skill) intensive service industries like software systems, management services and systems, banking, and insurance. The issue of national treatment will probably be important here.

(3) U.S. market competition with exports from Japanese investments in third countries like Brazil, Mexico, Korea, and Taiwan.

(4) Competition from new, highly productive Japanese investments in the U.S. in mature industries where U.S. business in many cases has inefficient capacity (e.g., autos, TVs, and ballbearings).

(5) Competition for global resources, including energy, though there is an opportunity to use Japanese capital resources to develop alternative U.S. energy resources to the economic, political, and security benefit of both countries.

Illustrating these trends is the apparent transitional strategy of Japan's steel industry. This industry, of course, formed the basis for Japan's competitive growth in the 1950's and 1960's through its competitive development and positive interaction with shipbuilding,

machinery, and, later, autos. Currently it is trying to keep its existing capacity competitive (it has 37 basic oxygen furnaces of over 2000 cubic meters capacity versus five for the U.S.) through more productive investments and modernization in Japan, such as continuous casting. But this is coupled with selling plant, equipment, and technology overseas. Japan's steel industry often takes an equity or management position as well. For example, in 1978 Nippon Steel had over \$1 billion in engineering revenues, and Sumitomo provided technical assistance to U.S. Steel for its wide diameter pipe mill in Texas.

#### TOWARD AN ALTERNATIVE FRAMEWORK FOR U.S. ECONOMIC POLICY

How does the U.S. adapt Japanese approaches to U.S. institutions to solve its current economic problems? The following seems a constructive first step, given that current challenges have created opportunities for rethinking basic assumptions about economic reality.

The U.S. must begin to shift real resource allocation to achieve a more rational regulatory burden sharing and to improve savings, investment, technology, and productivity. Though resources will come from business, consumers, and government, the shift is highly dependent on government policies and initiatives. In addition, the U.S. needs a different conceptual framework for formulating economic policy analogous to Japan's which recognizes that:

1. Growth and economic change are basically beneficial.
2. Successful economic policy in a modern complex industrial society is a long-term proposition. Long leadtimes for major capital investments, retraining, and economic restructuring require longterm planning and consistent economic and regulatory policies.
3. Economies, industries, and markets differ and constantly change and develop, creating risks and opportunities. So policies must be both dynamic and industry specific. One firm or industry's difficulties or success can be masked by macro-economic variables such as the balance of payments or the unemployment rate. Yet, its performance can have significant political or strategic consequences as in the cases of Lockheed, Penn Central, Chrysler, or Youngstown Steel. Industries and firms are not homogenous in terms of factor inputs, economics, development stages, and so on. Policies, to be successful in the aggregate, must pay attention to such differences and yet intergrate them into an overall strategic framework that relies on incentives rather than legislative compulsion.

An already noted illustration of this is the Japanese government's approach to foreign investment, modernization, and industry rationalization which has combined nicely with Japanese corporate strategies in terms of multinationalization and controlling product evolution. Further, while comparative statics may offer a reasonable approximation of reality for policy purposes in a slow or negative situation like the 1930's, it is totally unsuitable to the high growth environment with large differentials among industries and countries that exist today.

This means that government should pursue selective favoritism according to strict criteria, promoting key emerging industries or those strategic for the economy and defense. Producing firms should be as efficient and internationally viable as possible. A service economy still needs an efficient and competitive industrial base. Supporting losers is expensive and counter productive. Some favoring of particular indus-



tries is inevitable. The United States should change its focal point, however, to favor those on the cutting edge of industrial development. This facilitates growth, competitiveness, and industrial restructuring. Declining industries with declining employment and relative GNP contribution should not be propped up by tariffs or quotas. Yet industry rationalization should not be blocked by anti-trust regulation as long as international competition will keep prices down. In addition, those firms that remain should be able to get the investment resources they need to remain productive and competitive. A large declining industry eats up productive resources at low rates of return. These are resources America cannot afford to waste. The United States must overcome its fear of corporate bigness and take a global competitive view. A large and growing world economy requires this, especially where economies of scale are competitively important. Theory must be dynamic, and policy must be thought through consequentially.

4. Markets are multinational. Thus policies must reward competitive success domestically and overseas.

5. Countries have different regulations so regulatory policies, including anti-trust, must be flexible and consider the cost competitive impact of each regulation.

6. The keys to long-run economic success are a high savings rate and high investment levels leading to solid growth, productivity improvement, low inflation rates, international cost competitiveness, and a strong currency. Therefore policies must promote saving and investment. Such policies need not take income resources away from any group, however, as some "zero-sum" society analysts have argued. They only need change the price incentives facing consumers as between savings and consumption. In this way, people by their own incremental consumption decisions will over time both raise savings and total real income.

7. Government interference in today's complex society is inevitable but it should be limited and should emphasize direction rather than control. To accomplish its objectives, government needs to cooperate with business and labor.

This economic view of reality in turn can lead to a series of specific policies and policy recommendations such as: balancing the budget to increase savings; eliminating double taxation on dividends to lower business capital costs; introducing tax incentives to encourage international competition; allowing tax breaks to offset regulatory costs; and giving real after-tax rates of return on savings.<sup>8</sup> Such measures will improve our competitiveness in world markets. In addition, such a viewpoint can help us to see clearly the inadequacies of those present policies (and their theoretical bases) that have been implemented to solve our present economic ills. This current policy group would include floating exchange rates, trade-related pressure tactics, promoting export consciousness, the present energy program, and the November 1978 and October 1979 dollar support packages. None of these addresses the fundamentals. They will not change investment levels, productivity, or resource allocation or long-term global market share. At best they offer time to improve investment, growth, productivity, and export competitiveness. At worst, they aggravate present diffi-

<sup>8</sup> For more detailed policy recommendations see: William V. Rapp, "What the U.S. Has to do to Compete with Japan," *Journal of Contemporary Business*, Vol. 8, No. 2, Summer 1979, pp. 17-26.

culties, leaving few options for future maneuvers. Because we do not live in a policy vacuum there are competitive time pressures. We cannot gradually introduce or postpone a new program. Japan has had an appropriate one in place for some time with adverse competitive consequences for the United States. While we have printed money to pay for imports, the Japanese have strived for export competitiveness. Quite logically, therefore, their policies are almost the opposite of ours in a number of areas detailed below:

1. Floating exchange rates have little competitive impact if fundamentals are unchanged. Large Japanese firms can absorb much of the change, especially where imported raw materials or overseas marketing costs are a large portion of the delivered price. Revaluation stimulates cost saving and modernization while reducing inflation and interest rates. Highly leveraged Japanese firms benefit directly from low cost credit. The reverse situation is true for the U.S. where rising exchange and interest rates raise both supply costs and domestic demand. Floating rates only offer a short-term adjustment, or a one-time opportunity to improve market position. New rates must be followed by appropriate changes in the fundamentals to provide any long-term assistance. At worst, floating rates act as a policy opiate which continuously but unsuccessfully tries to substitute for basic policy change.

2. U.S. pressures on Japan to grow faster or to liberalize imports have a marginal impact on U.S. competitiveness. Japan's and Germany's postwar economic history shows that exports have actually expanded faster than imports in periods of high domestic growth, reflecting greater cost competitiveness from higher investment rates and productivity improvement. In the U.S. where economic growth has generally been demand rather than supply stimulated (e.g., government expenditures, devaluations and tax cuts, rather than increased investment or productivity), growth has meant more imports as the U.S. has encountered supply constraints. America should not, however, project its economic policy views onto others. Currently Japan is pursuing its expansion plans via aggressive monetary policy and more public works (an investment approach similar to past policy). But the United States has increased its marginal propensity to import since 1965 from about 3-8 percent as a result of the Vietnam war and the Great Society programs that led to increased regulatory costs, environmental expenditures, and energy shortages. This has exacerbated and interacted with compounding inflation rate and a declining dollar.

3. A more open Japanese economy or more export-minded U.S. companies will not rectify the situation either. America must first be cost competitive across a broader range of industries. Arguably, opening Japan could help emerging or existing competitors in third countries while further rationalizing Japanese producers, making all more effective competitors vis-a-vis the United States. Nor is it clear that the problem is U.S. firms' low export consciousness. The leading 250 American exporters account for over 75 percent of U.S. exports. This averages \$476 million per firm, and compares favorably with the leading 200 Japanese firms' average of \$214 million. Thus, several U.S. firms are competing successfully on a global basis. In many major industries though, American firms have difficulties competing in the United States much less Japan. Greater export incentives, export consciousness, and liberalization are important and would be bene-

ficial if achieved. But they are not the crux of the competitive problem since export competitiveness depends on a competitive domestic base, and continued domestic competitiveness requires growth in productivity. Loss of global market share is more understandable given Japan's higher savings and investment rates and a rise in Japanese wholesale prices from 1975 through 1978 of only 3 percent while U.S. prices were up 21 percent, or given a decline in Japanese export prices in Yen terms of 12 percent while U.S. dollar export prices were up 27 percent.

4. Attribution of the payments problem, U.S. inflation and U.S. loss of competitiveness to oil imports and OPEC is also somewhat misplaced. U.S. energy prices and oil imports relative to GNP and population remain well below those of Japan and Germany. These countries pay higher domestic oil and energy prices while running large payments surpluses and maintaining relatively low inflation rates.

Actually, the U.S. potentially has a comparative advantage in energy intensive industries. Competitively, Japan and Germany pay more per btu than America does. The error has been mandating increased costs for oil energy substitutes (e.g., the cost of coal and nuclear generation plants rose 400 percent per kwh between 1969 and 1977, of which 300 percent was directly due to regulation). The U.S. needs a rational energy policy and should reverse or offset regulatory constraints that have made alternative energy sources like coal and nuclear more expensive than oil and gas.

5. Finally, the current dollar support package does nothing to change basic resource allocations, while higher interest rates potentially discourage investment and without a major recession raise costs and prices. In sum, while current policy approaches could have some validity and benefit, as a comprehensive program to deal with the essentials of the competitive problem they are inadequate. Failure to change them means a continuation or worsening of the present situation. Dynamically, declining competitiveness depreciates the dollar and raises interest costs, an adverse cycle promoting further depreciation, a lower standard of living, more inflation, and a weakened world position, economically, politically, and militarily. The following is indicative of our present performance and the required direction of change:

(1) U.S. gross fixed capital formation's share of GNP is the lowest of any major industrial country (17 percent), little more than one-half of Japan's.

(2) Personal savings rate is also the lowest—about one-fourth Japan's (6 percent of disposable income versus 24 percent).

(3) U.S. research and development's share of GNP is declining while Japan's is rising.

(4) Despite Japan's recent "recession" due to an excess of desired savings relative to investment, Japan's real growth rate has equalled or exceeded U.S. rates since 1973.

(5) From 1975 through 1978, U.S. wholesale prices rose 21 percent versus Japan's 3 percent, and export prices were up 27 percent versus Japan's decline of 12 percent.

(6) Japan's trade surplus from 1975 through 1978 rose \$19.7 billion; the United States' was down \$40.9 billion. The competitive consequences of a superior policy framework are real, direct, and obvious.

## SUMMARY AND CONCLUSIONS

The solution to U.S. competitive weakness in world markets vis-a-vis Japan requires a reallocation of national resources and a concern with global market share. While Japan has put its funds into investment and technology, America has consumed not only a larger portion of its real GNP but some of its existing capital stock. U.S. firms have fallen badly behind in the rate of productive investment and technological improvement, and are now falling behind in absolute levels as well. Government in Japan has cooperated with industry, has promoted rationalization and international competitiveness, and has directly and indirectly cushioned the cost competitive impacts of mandated expenditures and regulations. The United States has not. If U.S. policies do not change, Japan's competitive differential will remain and compound. Lower savings and investment rates mean declining productivity, more inflation, less research, a weaker dollar, higher capital costs, increasing world economic tensions, and rising internal dissatisfactions. Continued government regulations for their own sake without appropriate political trade-offs, cost/benefit analyses or user cost offsets exacerbate this. Reduced to its simplest terms, the economy's rational and coordinated management is an economic and political necessity for survival in a competitive world.

Yet, clearly, the Keynesian and neo-classical theories that currently dominate economic thought no longer provide a good approximation of economic and competitive realities, domestically or internationally. This fact, however, does not argue for a retreat to either a classical laissez-faire approach or to a fixed monetarist position. Rather, what is needed is a balance between supply and demand management, in which regulatory, tax, fiscal, and monetary policies are concerned with their dynamic impact on both sides of the equation. The idea should be to stimulate a resource allocation that will move the supply curve and the demand curve to the right in parallel fashion. We cannot focus just on demand or supply alone.

Rapid real economic growth worldwide has created a new context. We live in a mixed economy where some government interference is inevitable and beneficial. We can ask, though, that this be intelligent and appropriate, that economic policies be effective and that theories reflect changes in the real economy. This is what we can learn from Japan.

Such a major change in political economic ideology requires government, business, and labor to work together on a national reeducation effort. Any analysis of competitive policy interaction leads to this conclusion because Japan cannot be expected to alter its logical systemic formula for economic success. As noted, the alternative is not attractive: increased world economic tensions, declining U.S. credibility, and increased internal squabbles over a smaller economic pie. America's fate therefore remains where it always has been, in its own hands. Only if we can meet this challenge to ourselves, will the world as a whole benefit and will the 1980's be other than a worsening continuation of the 1970's.

# U.S. TRADE CONSIDERATIONS

By H. William Tanaka\*

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I am pleased to be able to present my views on U.S. export performance and some of the domestic factors which influence that performance.

Our export record is, of course, impressive in an absolute sense. By a small margin, the United States is the world's largest exporter. Yet, we have also been described as the world's most reluctant exporter. Relatively speaking—as a percentage of our GNP, for example—our export performance lags behind that of other developed countries. And in recent years our exports have not risen nearly fast enough to balance our surging import costs. As a result, we have accumulated massive trade deficits. These, in turn, have been major contributors to undermining the value of the dollar.

Much of the blame for the recent trade deficits must be charged to a growing volume of petroleum imports at ever rising prices. Last year alone imported oil cost us \$39.1 billion. But solving the energy problem and putting a cap on petroleum imports is only part of what is needed to put the dollar on a sound basis. The other essential ingredient is a national export policy, supported by fundamental changes in attitudes that have kept exports low on our list on national priorities.

The huge U.S. trade deficits have at least served to broaden official and private sector interest in expanding our export trade. This interest comes at a fortuitous time. With the conclusion of the Tokyo Round of the Multilateral Trade Negotiations, new opportunities to export have been opened up to Americans. If we are to take advantage of them, we shall have to overcome a number of factors which have constrained our exports in the past, and which to a large extent continue to do so.

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The subject is not one that can be simplified to one or two basic issues. The roots of the problem can in some cases be traced to fundamental and pervasive aspects of our society—to value orientations and to perceptual, social, legal and organization characteristics. That our country was built on the notion of an ever-expanding frontier and grew to be the world's largest single market are facts which are relevant not only economically but psychologically.

Moreover, forces which by themselves might not significantly inhibit exports have coalesced to form a sizable internal barrier to exports. These forces fall into four major categories that I will elaborate on: Economic and business constraints, technology constraints, national policy constraints and sociological constraints.

### ECONOMIC AND BUSINESS CONSTRAINTS

Turning first to economic and business matters, it is noteworthy that, except for certain industrial goods and high technology products, an increasing number of American manufactured goods are not competitive in foreign markets. Until the mid-1950's, American goods in general were exported with great success. The subsequent erosion of American firms' ability to compete abroad was not entirely due to traditional business factors such as costs of labor and capital or productivity problems. To the ordinary costs of production were added the costs of complying with ever-increasing governmental regulation, a burden not likely soon to abate. The quality of American products relative to the competition declined. The overvaluation of the dollar made the price of American consumer goods less attractive. Multi-national corporations (MNC's) based in the United States built production facilities abroad rather than increasing domestic production to meet the foreign market demand. I will touch on each of these factors in turn.

#### *Productivity*

Without doubt, growth in the productivity of U.S. labor has slowed. Neoclassical economic theory attributes this to four causes:

First, the ratio of capital to labor hours normally increases in a productive economy. This rate of increase has been slowing, due both to rapid growth in the labor force and only modest growth of savings and capital formation.

Second, the labor force is becoming demographically unfavorable. More young workers are entering, more old workers are retiring, and there is high turnover even among young workers. The average level of experience in the work force has therefore suffered a real decline.

Third, the movement of labor from agriculture into industry has fallen off. In the past this shift of workers out of low-skilled seasonal work has helped boost national productivity rates.

Fourth, the rate of development of new technology, has declined, affecting the efficiency with which capital combines with labor to produce output. One cause is the decline, in real terms, in spending on research and development.

Other economic theories suggest different causes for the productivity decline—our large, economically-wasteful military sector, alienation of U.S. workers, inevitable "limits to growth", deviation

from free-enterprise precepts. But whatever the cause, one might expect a decline in productivity to be accompanied by an increase in unit labor costs—that is, labor costs per unit of output. Unit labor costs are significant not only for their relatively direct impact on final product prices. Over the long term, if real unit labor costs are higher in the United States than abroad, U.S. capital will tend to flow to other countries and thereby impair the quality of U.S. capital stock, accelerate the decline in productivity growth, and reduce export competitiveness. In fact, however, during the 1970's unit labor costs have risen more slowly in the United States than in any of the other principal industrialized nations, which of course started from a lower base. Therefore, although U.S. unit labor costs have risen absolutely, they have not been a negative factor in our export performance.

#### *Price Competitiveness*

The deterioration of the U.S. trade position since the mid-1960's has reflected, to a considerable degree, an erosion of price competitiveness. The origin of the decline is attributable to the relatively high rates of inflation in the U.S. and, in the early years, an increasingly overvalued dollar in a fixed exchange rate environment. The dollar devaluations in 1971 and 1973 eased the latter problem somewhat. U.S. export price competitiveness was improved substantially, and in 1973 and 1974 U.S. exports made sharp gains. These were largely reversed in 1974 and 1975 as currency appreciation and higher inflation raised the prices of U.S. exports relative to those of its major trading partners. The U.S. balance of trade subsequently deteriorated, at least in part due to price considerations.

The depreciation of the dollar beginning in 1977, although worrisome in some aspects, helped to counteract the slide in price competitiveness and tended to ameliorate the trade deficit. The relatively favorable state of the dollar today makes this an opportune moment to undertake new efforts to expand our exports.

Next to exchange rate relationships, relative inflation rates are perhaps the most important determinants of price competitiveness. A significant element in domestic inflation is the incremental costs to business of complying with various forms of government regulation. These costs, estimated at between \$50 and \$150 billion annually, are of course reflected in increased prices to both domestic consumers and foreign buyers.

Price competitiveness, while important, is not the only determinant in the overall competitiveness of American goods. Nonprice factors such as market familiarity, salesmanship, reliable delivery, product quality and suitability to local tastes, after-sales service and credit terms have a crucial effect on the U.S. exporter's ability to exploit a relative price advantage. Deficiencies in these areas probably account for much of the recent U.S. failure to surpass Japan in the growth rate of its exports to the European Community and Middle East export markets, despite price and exchange rate movements that substantially benefited the United States relative to Japan. U.S. exporters will have to improve their performance in these nonprice areas if they are to maintain and increase their share of export markets.

*Quality*

A first order of business in this regard must be quality and quality control. In recent years, the United States has been losing export markets to competition from abroad, particularly from Japan. In many cases this has been due to the inferior quality of the U.S. product. Today Japan sets the standard for quality and reliability in many products and markets. However, in some of the markets hardest hit by Japanese imports, U.S. corporations have instituted quality management programs that are starting to show results.

The Japanese emphasis on quality has been an integral part of Japan's national strategy to build an export economy, not just a company-by-company decision. The strategy began with a massive training program at all levels, amounting to indoctrination in quality control. Ironically, many of the concepts in quality control came from the United States, where Japan turned for help.

Other countries have decided to emulate the Japanese. For example, Taiwan, Argentina, and Brazil either have or are developing plans whereby plants are graded according to quality and assessed a tax if quality drops.

Catching up in the quality area is essential if we are to improve our export performance. Some U.S. corporate managers seem to think this is an impossible task. They have expressed the belief that U.S. workers are inherently different from the Japanese, who are described as dedicated, industrious and loyal as a result of their culture and traditions. This belief has been debunked by the experience of Sony and other Japanese firms establishing manufacturing facilities in the United States. In 1972 Sony built a TV plant near San Diego, Calif. That plant now holds Sony's world-wide record for quality of 200 days of production without a major defect. In addition, studies of defects and their causes have shown that over 80 percent are correctible only by management—design changes, for example—and not by workers.

The difference between the American and Japanese management approach to quality has been aptly expressed by ITT vice president for quality, Philip Crosby, who instituted at ITT a highly successful program with "zero defects" as a goal. He said: "Every Japanese manager is long-range, defect-prevention oriented. American management is short-range, defect-detection oriented." Crosby has also noted that ITT makes the same products in many parts of the world. "Without exception", he says, "we find that the best workmanship, the best worker attitudes are here in the United States."

*Multinational Corporations*

Mr. Crosby's comments highlight the critical role in exports of multinational corporations such as ITT. Their presence cuts both ways. Though they account for about 85 percent of all U.S. exports, their enormous investment in overseas production limits the export markets they are willing to enter, and has preempted others. The basic aim of MNC's is anational, that is, to maximize world profits. They export from the United States only if that will better serve this goal, not from patriotic or idealistic motives. In short, they need practical incentives, not exhortations.



At the same time, MNC's do have well-established export networks and are in the best position to exploit the new price competitiveness. Moreover, their overseas plants buy many U.S. goods. The greatest part of MNC exports consists of intracompany transfers of products.

The MNC's, because of their large overseas production capacity, in many cases source foreign markets from abroad and use domestic production for the home market. General Motors exports only 4 percent of domestic production, meeting foreign demand from overseas plants. This is in contrast to Japanese automobile manufacturers, who until recently had virtually no production facilities outside Japan to service their worldwide sales.

Foreign governments have come to rely upon the plants of U.S. MNC's within their borders to provide, among other things, a healthy level of exports. Consequently these governments press for continued local production, increasingly requiring that this be accompanied by an influx of technology so that local production may ultimately replace imports entirely. These pressures have distorted the ability of the MNC's to make "pure" marketing decisions, sometimes causing them to refrain from sourcing from the U.S. even where it would be cheaper to do so.

#### TECHNOLOGY CONSTRAINTS

Technological constraints can also hamper exports. The technological preeminence of the United States in the areas of space and defense is renowned and virtually unchallenged. In the commercial and industrial applications of technology, however, we are losing our leadership in certain product areas important to our economy. Significant technological gains by other industrialized countries have given rise to fears that the future viability of the American economy may be in jeopardy.

During the cold war, most U.S. research and development was directed to space, which in recent years has suffered a drastic cutback in funding, and to defense. Meanwhile, most other countries directed their R. & D. spending toward commercial products and adaptation of imported technology.

Until around 1970, the overall U.S. trade balance reflected a persistent surplus, led by aggressive export performance of high technology industries that were largely by-products of this country's DOD (Department of Defense)- and NASA-funded R. & D. push. Between 1963 and 1969, the aggregate trade surplus of technology-intensive industries rose from \$7.7 billion to \$11.1 billion. But problems were mounting in exports of other manufactured goods. A trade deficit in these goods of \$1 billion in 1963 increased sharply to \$7.5 billion in 1969. Early in this decade the U.S. trade balance began to suffer substantial deficits, despite continued excellent performance by high-technology exports.

These changes reflect in part the inevitable consequences of development abroad. But regardless of their cause, the changes highlight the need for our government to play a positive role in fostering noninflationary economic growth through renewed funding and promotion of R. & D. efforts more directly focused on incremental commercial and industrial technology. If justification for government intervention be

needed, it can be found in the fact that compliance with growing safety and environmental regulations, imposed by the government, has adversely affected productivity and increased costs, at the same time that federal R. & D. funding was being cut back.

Two characteristics distinguish the R. & D. effort and environment in the United States from that of most of the industrial countries. While the United States concentrates on space and defense, Japan, for example, focuses its national R. & D. spending on commercial applications of known technology. Second, in the United States there is no national policy fostering joint government-industry R. & D. In our country, as in the United Kingdom, the relationship between government, academia and industry is fundamentally adversarial, often characterized by hostility and competitive distrust. In contrast, Japanese industry and government have been more successful in working together in consensual collaboration and joint endeavors. These factors may be at least partly responsible for the competitive advantage of many Japanese goods.

#### *Automotive Industry Case*

Thus, empirical evidence suggests a link between U.S. R. & D. practices, our productivity and our trade performance. The automotive industry provides a good example of this.

The American automotive industry, though the largest in the world, has not been in the forefront of technological innovation for at least the last 25 years. Typically, American auto executives have followed a marketing policy of creating "planned obsolescence" through annual model changes. Rather than innovation, U.S. auto makers have been concerned mainly with selling style, comfort, and status. What improvements have taken place have largely been from the use of off-the-shelf, existing technology. The major impetus to fundamental change in U.S. automotive design and construction has been federal regulation. The need to down-size cars for better fuel efficiency and handling has been recognized for years, but Detroit has only recently begun to manufacture its own small cars.

Resistance to entering the small car market is attributable to one obvious fact—large cars are far more profitable to build than small cars. Fixed investments in plant and machinery, advertising expenses and labor costs do not vary substantially for a sub-compact and a standard-size car. Raw material costs do not vary more than about \$500. Yet the standard-size car sells for as much as several thousand dollars more than the sub-compact. The result for years was huge profits, well above the U.S. average for manufacturing companies. American industry has been reluctant, however, to reinvest an adequate proportion of these profits to improve its product or manufacturing technology.

Contrary to popular myth, the U.S. automotive industry's failure to compete with imports has little to do with the high hourly wages paid American workers. According to one analyst, foreign manufacturers sell cars more cheaply because of their high level of productivity, and because they accept smaller profits than American corporations. General Motors' profit on each vehicle it produces is about three times that of its foreign competitors.

In fact, the evidence shows that were it not for the Federal mandate on average mileage of the domestically-produced fleet, U.S. producers might well have imported all or almost all of their requirements of compact and sub-compact cars. It is thus clear that until now the domestic producers have had no serious plans to export their domestically made small cars. A lack of desire to export therefore seems to be a larger factor in the adverse net U.S. trade balance in cars than foreign import barriers.

#### NATIONAL POLICY AND LEGAL CONSTRAINTS

Our exports are further inhibited by policy and legal constraints. The United States has no national export policy. With our vast resources and huge home market, until recently we had no pressing need to export, either as individual companies or as a nation. Most other industrial countries, on the other hand, have had to export to live. The Japanese, in particular, have inadequate food supplies and virtually no energy or raw materials, and so must import virtually everything an industrialized nation depends on. Early on they realized that to pay for this would require a national effort by both industry and government to fill their own needs for manufactured goods and at the same time to develop exports.

The United States is, it seems, at last coming to a similar realization, spurred by our need to import much of our oil, and by our choice to import many of our consumer goods.

Although lacking an export policy, the United States has had an international economic policy since World War II. Unfortunately, some of its aspects have served as disincentives to a thriving U.S. export trade. Under the fixed-exchange rate system instituted at Bretton Woods, under our leadership, the U.S. dollar became overvalued. U.S. firms invested in new plants overseas, rather than modernizing or expanding existing facilities at home, since foreign assets cost fewer dollars than comparable assets here.

When the U.S. finally ended dollar-to-gold convertibility, and other nations allowed their currency to float against the dollar, the value of the dollar began to seek more realistic levels. This should have stimulated exports, but the response was not as dramatic as might have been expected. One reason is that the major types of exports of the United States—capital goods, industrial supplies and agricultural products—are price inelastic. Sales levels are governed largely by non-price factors such as the state of the business cycle, quality of workmanship, availability of service, reliability of delivery, etc. Moreover, some of the major U.S. export markets are not responsive to the apparent price advantages which accompany a decline of the dollar against major foreign currencies such as the mark, the franc or the yen. Almost half of all U.S. exports go to Canada and the developing nations, whose currency values closely follow the dollar.

Formulation of a constructive and coherent international economic policy is hindered by a fragmentation of policymaking authority. The United States, alone among the major trading countries, has no single government agency responsible for advancing its foreign trade. Other countries rely on trade ministries to help their exporters probe markets abroad, develop new export products, coordinate export bidding, arrange subsidized financing, insurance, and shipping and bargain

with foreign governments to insure market access. The plan for the reorganization of trade responsibilities proposed by the administration falls considerably short of the export support structure available to our principal competitors.

Once again, the Japanese experience and government organization provide an interesting contrast. The undervalued yen for years served both as a disincentive to Japanese investment in manufacturing facilities abroad and as an incentive to development of foreign markets by their exports. Moreover, the Japanese Ministry for International Trade and Investment has provided coordinated support to Japanese corporations in marketing their products abroad.

### *Legal Constraints*

Ironically, at a time when other governments provide positive incentives to exports, we find numerous instances in which our own government imposes restrictions on or disincentives to U.S. exports. Each of these self-imposed market foreclosures should be reexamined to determine whether the policy sought to be promoted still outweighs our compelling need for an aggressive export policy.

The Export-Import Bank is our principal government instrumentality for the promotion of exports. Although the present management of the Bank has adopted policies to provide aggressive financial support to our exporters, these policies must operate within the confining limits imposed by Congress. The Bank's statutory charter has become encumbered with restrictions relating to financing trade with Communist countries, Rhodesia and South Africa, and to such diverse considerations as human rights, international terrorism, nuclear proliferation and environmental degradation. The export credit agencies of our chief competitors do not suffer under such limitations.

The Jackson-Vanik Amendment to the Trade Act of 1974 is a singular example of how extraneous considerations are made to intrude in Eximbank's export financing, as well as in other trade matters. It is hard to make a rational connection between a foreign nation's emigration policy, on the one hand, and, on the other, Eximbank financial support for our exports to it, or most-favored-nation for that country's goods destined for the United States. Yet, under Jackson-Vanik, we penalize our own exports if a foreign country's emigration policies are not to our liking. There are other restrictions, as well.

Although there are valid policy reasons and wide public support for the recently-enacted anti-boycott and anti-bribery laws, I know of no foreign exporters who are subject to similar restraints on their ability to exploit export possibilities.

Much the same is true regarding exports of nuclear plants. While we in the United States may feel growing apprehensions about reliance on nuclear power, many other countries regard this as luxury they cannot afford. The restrictions we place on such exports are not always well adapted to a competitive world.

Even our cargo preference laws, designed in part to promote the export of shipping services, can cost us exports of goods and, with them, related services. For example, the Russians are currently required to ship at least one-quarter of their commercial grain purchases on U.S. flag vessels. This makes U.S. grain the most expensive

in the world for the Russians, because U.S. flag rates range two to three times higher than comparable non-U.S. flag rates.

There is considerable debate today over whether our antitrust laws inhibit U.S. exports, and particularly whether antitrust rules prevent American businessmen from teaming up to bid on major foreign projects in competition with powerful, government-backed European and other foreign consortia.

I have already mentioned the direct impact on our exports of government regulation in various areas. The costs of compliance with environmental, safety, energy, food and drug, antitrust, and other forms of regulation add not only to the price of particular export products. They permeate our entire economy and fuel economy-wide inflation. The competitiveness of our exports is impaired, imports are sucked in, and our trade balance suffers.

Excessive regulation also inhibits investment in new technology and product innovation. It lowers productivity and diverts capital to non-productive ends.

Finally, I would note the indirect effect on U.S. export performance of our laws to protect U.S. industry from certain types of foreign competition. The recent amendments to our antidumping and countervailing duty laws perpetuate the concept that any domestic industry which can show injury from imports is worthy of protection. In practice, this involves application of a static criterion which serves to keep alive low-technology, labor-intensive industries and allows many high-cost, inefficient producers to survive. The process of disinvestment and reallocation of resources to the higher end of the technology scale is retarded. Our economy is weakened, and saddled with an inflationary bias. Once more, our exports suffer.

The contrast with Japan is again striking. The Japanese Government plans the nation's industrial policy years ahead in an effort to promote leading-edge technologies. Growth industries are selected for promotion. Moreover, when the United States seeks to restrict Japanese imports by orderly marketing agreements or other devices, in low or medium technology fields such as steel, or, today, even TV sets, the Japanese Government goes along relatively gracefully. Why? Because in its long-range planning it realizes that production in industries at the lower end of the technological spectrum will in any case have to be ceded to developing countries if Japan is to sustain a dynamic economy.

In short, our laws, being indiscriminating in the industries they protect, end up protecting those which are a drag on our economy. Meanwhile, the Japanese are consciously discriminating in favor of industries which will promote domestic economic growth and vitality.

### SOCIOLOGICAL CONSTRAINTS

The policy and legal constraints I have been talking about largely represent conscious national choices, or a balancing of choices. If we have the will, the choices or the balance can be changed. I would like to turn now to some sociological constraints on exports which are not only more difficult to analyze but will prove more resistant to change.

I am referring principally to certain orientations and patterns of behavior which are endemic to the free enterprise system in America. I will only mention in passing the debate over whether there have

been changes in the American work ethics that have affected productivity. Certainly many workers are dissatisfied with their jobs, and some of this no doubt results from changing values regarding work. Sometimes this dissatisfaction is expressed through reduced productivity, degraded quality of work, and even pilferage and sabotage. Interesting programs to increase worker motivation are being tried by a number of companies, some of which show considerable promise.

To the extent that negative attitudes exist, I am persuaded that much of the blame can be traced to the nature and quality of the relationship between labor and management. In the United States, too often this relationship is a corrosively hostile adversarial one. This is in sharp contrast to the fundamentally consensual and syzygistic perception of labor-management relations characteristic of Japan. I will cite just a few examples of the differences between the two systems:

In Japan, wages are negotiated by unions within a single company, rather than by industry-wide unions. Yet the union's power is not significantly less, because it has access to information on the results of negotiations in other firms.

The typical Japanese worker stays with one company during his entire working career. His job is secure, even during production cutbacks. This gives him a greater interest in the long-range vitality of his company, which is often expressed in a greater degree of worker participation in management decision-making.

Japanese labor willingly embraces new technology rather than resisting its introduction, and management retrains its existing work force as necessary. The resistance of American unions to new technology, based largely on the threat to job seniority and employment security, causes American management to delay implementation of technological improvements.

The factors just cited give Japanese companies a relatively high average level of worker experience and maximizes benefits of the learning curve.

Finally, while in America a strike often leads to a complete shutdown of the business, during the infrequent Japanese strike the union will usually keep some workers on the job so that the company can meet at least part of its production schedule.

These differences, which to a large extent spring from deeply-ingrained cultural distinctions, tend to affect adversely the relative productivity, product quality and export competitiveness of America industry.

#### *American Business Attitudes Toward Exports*

As I noted earlier, the specific attitude toward exporting of American business as a group has also been shaped by cultural factors—more specifically, by our geography and abundant natural resources. American industry enjoys the world's largest and most diversified home market. At least until very recently, there has been simply no need to export in order to have growing sales. Export markets have been widely perceived as marginal business, laden with risks, worth cultivating only when business turns down at home. Company personnel responsible for exports have been given low status within the organization.

Most of today's business leaders grew up and received their education in an era in which these attitudes were pervasive. Even today, the leading business schools are discovering they are neglecting the international side of business education. The advantages and methodology of exporting simply are not being taught to businessmen. And the American public in general is not absorbing the day-to-day effect a trade deficit can have on their lives—the fact that, according to Charles Schultz, for every 10 percent decline in the value of the dollar, the Consumer Price Index rises up to 1½ percent.

The ingrained "short-term, bottom-line" thinking of corporate America limits the willingness of management to make the substantial investments an all-out export effort often entails. The managers are accountable every quarter to the shareholders, who demand constantly rising numbers. Exacerbating the problem is the rise in stock ownership by institutions whose investment criteria demand short-term profits, successive bottom-line increases and high earnings ratios. Long-term planning by American corporate management, an essential ingredient of solid export performance, is made more difficult.

The question we must answer is whether, given these attitudinal problems, the pressures pushing individual companies to export will be strong enough, as they have been with our competition, to overcome the perceived obstacles to exporting. It is true that the up-front expense of entering any foreign market is considerable. Not only money but large blocks of management time are required. Setting up a distribution system is costly, particularly if Japan is the target market. Japan does not have the ultra-efficient distribution systems to which American businesses have become accustomed. A large number of middlemen handle a small volume of goods for a limited territory. This system increases the costs and planning necessary for market entry. Moreover, a potential U.S. seller may have to convince existing distributors to displace major Japanese firms, one of which might be the parent company of the distributor.

Another problem of tremendous importance is that American products are very seldom designed expressly for the foreign market. Often only minor product changes would be required, but U.S. companies seem reluctant to make them. This contrasts with the Japanese practice of designing both for the foreign and home markets. For example, much of the world outside the U.S. uses 220 volt, 50 cycle current for power. Japanese goods often have a switch on the product which allows it to work on either 120 volts or 220 volts. Such small changes make the difference between success and failure in foreign markets.

When American companies do attempt to enter foreign markets, they often neglect to promote their products properly and to provide the ongoing staff and management support essential to success. Japanese Diet Member Kabun Muto has summarized the differences between the Japanese approach to promoting exports and that of U.S. companies:

*First*, there is a difference in the number of trading offices and employees of each in the other's country. In 1977, American enterprises had 162 trading offices in Japan, with a total of 1,901 employees. In contrast, Japanese concerns had some 764 such offices in the U.S. employing 20,884 workers. . . . *Second*, Japanese exporters have done thorough research on the language, way of life, and other facets of the U.S. as part of their efforts to promote their exports. Again in con-

trast, study by American exporters of the language and way of life in Japan falls way short of the necessary level, and there are even some exporters who are ignorant of the FOB, CIF, and other trading prerequisites to setting export price. *Third*, Japanese exporters prepare pamphlets and other materials in English for use in the U.S., in this and other ways making continuous efforts to achieve exports. Here, too, there is a difference, as almost all American exporters use promotional materials in their own language and break off their export efforts after only a few attempts.

The impatience, or "drive", of the American businessman has much to commend it. But it is not the trait needed to overcome exporting difficulties. Instead, patient and painstaking perseverance is required to penetrate some of the more difficult but potentially lucrative overseas markets.

It is my belief that none of the problems I have discussed are insurmountable. Radical changes in the American way of doing business are not necessary to success in the export field. But we will need some changes in our way of thinking. Most of all we will need risk-taking, patience and planning.

As a French trade expert recently said: "U.S. manufacturers have good products. The price is right; the markets are there. But they don't care to sell in Europe or don't know how to go about it." We must all start to care, and we must learn how to go about it.



# THE NORTH-SOUTH DIALOG AND ITS BEARING ON U.S. COMMODITY POLICY

By Bernard Blankenheimer \*

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## PREFACE

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For the past decade or so, the United States has been edging toward the concept of agreements between exporting and importing nations to reduce price swings in world traded commodities. The United States seems to be veering toward adoption of such concepts, not because it is any less a believer in the economic rationality of the market mechanism but because the developing countries are propelling us in this direction. Commodity agreements are a major plank in the Third World's conception of a restructured world economy.

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But do such agreements really best serve their economic interests? Do they ours?

The executive branch continues to discuss possible commodity agreements in various international forums with the possibility that Congress may be confronted with negotiated agreements on one or more agricultural or mineral commodities within the next couple of years. A closer look at the political and economic implications of possible new commodity agreements would seem to be a proper congressional responsibility. In particular, more study seems warranted on the economic rationale for our participating in international commodity agreements (ICA's). One aspect of such research is the preparation of more adequate cost-benefit analyses of the presumed benefits of more stable prices in a given commodity compared with the costs of establishing and maintaining a required buffer stock.

If indeed the economic rationale for our participation in particular commodity agreements cannot be persuasively demonstrated, then the question may be raised about the wisdom of an economic response based on political grounds.

## I. INTRODUCTION

Commodity policy is the overriding subject of importance to the developing countries of the Third World—for whom it represents the principal prop by which the international economic system can be restructured—so as to achieve a redistribution of income and wealth from the developed to the less developed countries.

Both developed and developing countries share a common interest in stability of prices and stability of earnings, but there is considerable divergence in defining concepts and in the perception of the role of international commodity agreements as a stabilizing mechanism.

There is, therefore, the question of how to fashion the U.S. response in the various international forums where commodity issues are being discussed. There is inherent conflict among our national and international economic and political objectives.

We want to maintain the North-South dialog in the pursuit of a more open world, but in the process of compromise to avoid confrontation, we may be adopting new approaches to international commodity issues on the basis of political rather than purely economic considerations. Political pressures are never publicly conceded as factors in commodity policy. This forces tortuous and unconvincing economic reasoning in the Executive Branch agencies.

Where once established Executive Branch policy was to view commodity agreements with pronounced skepticism and as an exceptional almost "last resort" action, Administration policies are now much more malleable on the subject. We have joined in the Fifth International Tin Agreement, a first for any mineral; and the principal architect of that decision, Assistant Secretary of State for Economic and Business Affairs, Julius L. Katz<sup>1</sup> has called on Congress to agree to a U.S. contribution to a buffer stock operated by the International Tin Agreement. (Legislation to this effect was not enacted at the last session of Congress, but is certain to be reintroduced. If enacted, it will be also a first for the United States, as a consumer, to help

<sup>1</sup> See, for example, his testimony before the Subcommittee on International Economic Policy and Trade, of the House Committee on International Relations, February 21, 1978.

finance buffer stocks.) We will still screen international agreement proposals on a case by case basis but Administration officials take pains to stress the U.S. open-mindedness in considering possible commodity candidates. The State Department's Director of the Policy Planning Staff, Anthony Lake,<sup>2</sup> stated flatly, "On commodities, we reversed the policy of previous years and have accepted the principle of a common fund to facilitate buffer stocks." There is the unusual scenario of a senior official of the Treasury Department, C. Fred Bergsten, Assistant Secretary for International Affairs, publicly acknowledging the virtues of commodity agreements—and the inadequacies of the market mechanism for pricing stability—in a recent address to representatives of the American mining industry which is itself deeply rooted by past development and conviction to the market mechanism.<sup>3</sup>

Why this truly dramatic and sweeping turnabout in Administration policy? The answer perhaps is simply explained by the comment of the State Department's Director of the Policy Planning Staff: "And for once, we are taking the United Nations very seriously on economic and social issues."<sup>4</sup>

The purpose of this paper is to examine pertinent aspects of the Administration's response insofar as it relates to United Nations issues involving trade in primary commodities, with a view toward addressing whether this response may not need further reformulation or revision to serve our national economic interest in the years ahead.

## II. THIRD WORLD GRIEVANCES IN THE NORTH-SOUTH DEBATE

The processes of change of global dimensions which followed World War II highlight in bold relief both the necessity for, and the difficulty of, achieving international cooperation for economic and social development.

The necessity for international cooperation reflects an increasingly interdependent world, yet the difficulty of achieving cooperation lies in the fact that actions on the national scene taken as necessary to that nation's interest also have reverberations in other countries. Attention has therefore focused on whether—or how—the international system can be improved.

A report to the Trilateral Commission,<sup>5</sup> co-authored in 1977 by Richard N. Cooper (presently Under Secretary of State for Economic Affairs) notes that while "Interaction between societies at various levels is essential for economic efficiency \* \* \* it produces mutual interference across national frontiers which jeopardizes some of its advantages. Thus, it requires steering mechanisms."

Such steering mechanisms to expand "linkages of interdependency," i.e., in keeping peace, managing the world economy and human rights are the essential ingredients of a renovated international system. For others, however, growing interdependency does not merely involve renovation of the existing international system but entails a drastic restructuring of it to provide greater sharing of economic roles

<sup>2</sup> Anthony Lake, Director of the Policy Planning Staff, at the annual meeting of the African Studies Association and Latin American Studies Association, Houston, Texas, November 5, 1977.

<sup>3</sup> Before the 1978 Financial Conference of the American Mining Congress, Phoenix, Arizona, April 7, 1978.

<sup>4</sup> Anthony Lake, *ibid.*

<sup>5</sup> "Towards a Renovated International System," 1977, prepared by Professors Cooper, Kaiser, and Kosaka. The Trilateral Commission was formed in 1973 by private citizens in Western Europe, Japan, and North America "to foster closer cooperation among these three regions on common problems."

of groupings of nations classed as "developed" and "less developed" nations.

In particular, the state of relationships between the market-oriented industrial nations of the First World (or North) and less developed countries of the Third World (or South) has been a subject of much public concern and controversy.<sup>6</sup> To some, it is viewed in confrontational terms as "a crisis of interdependence" and as "the world's new cold war."<sup>7</sup> To others, it is a dialogue in the mutual interest of each group—a continuing negotiation which needs to be pursued. This had been the steadfast view of the United States and it is essential to future international stability that we continue to debate the issues in all appropriate forums. Yet, the question arises whether in debating specific issues, the United States is not better served by avoiding compromises taken in terms of language of resolutions which may only produce later expectations impossible to sustain.

It can be debated whether the 18-month long dialog pursued in the Paris Conference on International Economic Policy (CIEC) should have been allowed to go on for that length of time and whether from that point of view the CIEC was itself counterproductive. What seems clear is that expectations of the South were aroused—during the lengthy dialog in the various committees—which simply could not be met by the North, when the chips were down, in the voting of final resolutions dealing with aid, trade, technology transfers and commodities.

#### *A. Poverty: The Underlying Grievance of the Third World*<sup>8</sup>

Radical Third World spokesmen, such as those attending the Lima Conference of Non-Aligned Countries in August 1975, view establishment of a "New International Economic Order" as an essential corollary to their political emancipation from colonialism and their new nationhood. It is a "struggle for a second liberation" against the forces of imperialism in which the imperialists obstinately defend "their privileged position which they do not abandon willingly."<sup>9</sup>

This political rhetoric aside, the Third World's underlying problem of poverty is its basic grievance. Even so respected a moderate voice as the World Bank's Mahbub ul Haq writes of the "inequities" of the old economic order which has drawn a "poverty curtain . . . across the face of our world, dividing it materially and philosophically into two different worlds \* \* \* one embarrassingly rich and the other desperately poor."<sup>10</sup>

Rightly or wrongly, the view prevails in most of the developing countries that their economies are shaped by the priorities of the

<sup>6</sup> To the extent that the centrally planned (i.e., Communist countries comprising the so-called Second World) include advanced industrial countries, this group is increasingly identified with the North by the South, but this is still largely rhetoric and the economic expectations of the developing nations in every international forum still seem exclusively directed to the developed market economies of the North.

<sup>7</sup> Roger D. Hansen in "The U.S. and World Development," 1976, published for the Overseas Development Council by Praeger Publishers, New York.

<sup>8</sup> As used here, the term is synonymous with "developing countries" or "the South." Other group distinctions can be made on the basis of stage of development or on incomes. For example, the World Bank groups developing countries within three income classes: low, lower-middle income and upper-middle income countries. In 1975, per capita incomes for these classes were: under \$200, \$200-\$499 and \$500 to \$1,099, respectively.

<sup>9</sup> The rhetoric of the Lima Programme for Mutual Assistance and Solidarity.

<sup>10</sup> "The Third World and the International Economic Order," a pamphlet published by the Overseas Development Council. The author is a senior official of the World Bank and a distinguished Pakistani economist who has written extensively on the subject of development planning.

developed countries and that they are not masters of their own destinies.

Thus, assuming an increasingly confrontational stance in every international forum, Third World countries have displayed a high degree of cohesiveness in framing their proposals which would fundamentally alter the economic system so as to achieve a redistribution of income and wealth from the developed to the less developed countries. Such cohesiveness and motivation spring in large measure from the Third World's changed perception of its political and economic powers as a result of the Organization of Petroleum Exporting Countries' (OPEC) use of monopoly power to quadruple the price of oil in a single year (1973). Yet, unfortunately, the 1974-75 period, which saw the Third World mount its diplomatic offensive to achieve a new international order also coincided with a period of global recession for the industrialized countries.

Whether the quadrupling in the price of oil was a primary cause can be argued, but it is a fact, nonetheless, that the prices of many raw materials plunged as the recession deepened, even while prices of manufactures, reflecting increased energy costs, went up. Thus, poorer, non-oil-producing, developing countries experienced an increasingly adverse balance of trade which in effect wiped out the benefits of capital inflows they were receiving through foreign public assistance channels. As a result, there was a tendency toward polarization of positions in the North-South debate as these positions became manifested both in the May 1976 United Nations Conference on Trade and Development (UNCTAD) meeting in Nairobi, Kenya, and in the Conference on International Economic Cooperation (CIEC) which concluded in Paris, June 3, 1977. Since then, a special Oversight Committee in the United Nations has been charged with continuing attention to the North-South dialog.

The range of unresolved North-South issues in trade, aid, and the monetary area has continued to simmer in the U.N. and various international forums, though discussions seem to be taking place in a less-charged atmosphere. All the issues, however, will resurface to a focal debating point with the convening of the Fifth United Nations Conference on Trade and Development scheduled for May 1979 in Manila, the Philippines. While it is to be hoped that that Conference will move from an air of confrontation to one of negotiation, the fact is that to date the developing countries continue to demonstrate their disappointment over the slow progress in achieving resource transfers from the North to the South.

### *B. The First World's Response and the Role of the United States*

#### 1. PUBLIC AID LEVEL FALLS SHORT OF THIRD WORLD EXPECTATIONS

With respect to aid, the industrial nations of the Organization of Economic Cooperation and Development (OECD) provide some \$12 billion a year (of which the United States contributes about \$4 billion a year) to the developing nations. Some of this aid is channeled through international agencies which in turn make annual commitments of about \$7 billion to developing nations. But this level of public aid is still far short of the commitment equivalent to 0.7 percent of GNP called for as the First World's annual contribution

to "official development assistance" for the Third World in the International Development Strategy for the Second UN Development Decade (the 1970's).<sup>11</sup>

The United States, as the single largest aid donor among the industrial countries, has taken a position that the requirements of the developing countries for outside capital resources for development are so large (they are estimated at some \$40 billion by 1980) that public aid cannot hope to meet this requirement and that, therefore, the developing countries must necessarily meet the major part of their capital and technology requirements through private channels.

## 2. INTERNATIONAL FINANCIAL INSTITUTIONS EMPHASIZED AS RESOURCE TRANSFER MECHANISM

These U.S. proposals generally have been directed to step up the flow of resources through other than governmental aid channels. They include financial measures such as support for a substantial increase in the general capital of the International Bank for Reconstruction and Development (IBRD) and expansion of the resources of other multilateral institutions including the International Development Association (IDA) and the International Finance Corporation (IFC). The United States also led in implementing a major liberalization of the Compensatory Financing Facility of the International Monetary Fund (IMF), thereby expanding loan funds available to developing countries with temporary balance of payments problems.

In the U.S. view, the international financial institutions, such as the IBRD, IDA, IFC, IMF, together with regional banks (such as the African Development Bank headquartered in Abidjan, Ivory Coast or the Asian Development Bank headquartered in Manila) are economical and efficient channels for direct transfer of resources from developed to developing countries. As Under Secretary of State Cooper has stated:

\* \* \* such direct transfers allow development efforts to be focused precisely on the critical targets. Such transfers can also be conditioned upon effective measures by recipient countries to address the same critical needs. They also minimize distortions of market forces which can retard economic progress throughout the world. Thus, in our view, they are a preferred means of assisting the developing countries.<sup>12</sup>

## 3. ISSUE OF TRADE VS. AID TAKES ON GREATER IMPORTANCE IN NORTH-SOUTH DIALOG

In general, U.S. policy has placed emphasis on the opportunities open to the lesser developed countries to obtain transfer of resources (i.e., capital technology and managerial skills needed for development) through private channels, whereas the developing countries have placed their primary emphasis upon expansion of public assistance and upon deferential treatment in the trade area.

In turn, the issues of trade in the North-South dialog have two main elements. One concerns the formulation and implementation of trade policies to provide greater access for developing countries' products

<sup>11</sup> UN General Assembly Resolution 2626 (XXV), adopted in 1970, which set a 6-percent growth target for the Third World during the decade.

<sup>12</sup> Before the Subcommittee on International Development Institutions and Finance, House Banking Committee, March 22, 1978.

(generally processed or manufactured products) in the markets of developed countries. The second relates to those trade policies and programs by means of which raw material exports of the developing countries can yield stable and "remunerative" export prices.

The focus of this paper is on the issues involved in the developing countries' trade in raw materials. Yet, of relevance is the fact that developing countries are moving increasingly away from the primary reliance on the production of raw materials for exportation. Data of the World Bank, for example, show that the developing countries in 1960 accounted for 62 percent of world exports of primary commodities (excluding petroleum) and only 9.3 percent of world exports of manufactures. In 1976, the developing countries accounted for 23 percent of world primary commodity exports (excluding petroleum) and over 17 percent of world exports of manufactures. It is interesting that World Bank President Robert S. McNamara, in his address to the World Bank's Board of Governors September 25, 1978, emphasized the importance to developing countries of expanding their exports of manufactured goods to accelerate economic growth. He called for "a reversal in the rising tide of protectionism in the developed countries against imports from the developing world."

In their drive for greater access to industrial markets for their exports of manufactured goods, Third World countries have come to demand what amounts to a differentiated code of international law for governing the trade in manufactures or processed goods between developed and developing countries. Envisaged is an institutionalized permanent system of North-South trade discrimination in favor of the South, a concept which is totally inconsistent with the most-favored nation principle underlying the General Agreement on Tariffs and Trade (GATT) and U.S. traditional trade policy.

Notwithstanding Title V of the Trade Act of 1974 which established the Generalized System of Preferences, the United States has accepted the concept of limited preferences for industrial products entering the United States from developing countries. However, the assumption is that not all developing countries require the same special treatment. Former Secretary of State Kissinger concisely stated the U.S. approach before the U.N. General Assembly September 1, 1975:

In the earlier stages of their development, they (the developing countries) should receive special treatment through a variety of means—such as preferences, favorable concessions and exceptions which reflect their economic status. But as they progress to a higher level of development, they must gradually accept the same obligations of reciprocity and stable arrangements that other countries undertake. At some point, they must be prepared to compete on more equal terms, even as they derive growing benefits.

In the ongoing North-South dialog, there is scope, therefore, for a broad rethinking of trade policies so that interests of each group can be weighed in an equitable manner.

With respect to U.S. policies in this area, American officials perhaps should be more candid in international discussions in expressing a clear sentiment that the United States looks upon the extension of preferences to developing countries' manufactures as temporary and as exceptional measures and that the long-term interest of the Third World lies in concessions arrived at through the multilateral trade negotiations (MTN) process.

Different situations prevail in the industrialized as well as in the developing countries that perhaps may require different ground rules with respect to trade policy. Many countries in the Far East and Latin America have advanced industrially to the point where they should be required to play by the same GATT rules as any of the developed countries. Such countries need no longer be accorded the same preferential access to the markets of the developed countries as the least developed among the developing countries.

A correct tone was set for U.S. North-South policy in the testimony given to the Congress recently by Under Secretary of State for Economic Affairs, Richard N. Cooper when he stated

The dialog must be a two-way street. All countries must accept obligations to the world system. We shall approach problems of the developing world with a desire to assist in any responsible way possible. But we shall also expect that within their capabilities they maximize their own resources for development, adhere to standards of basic human rights, and respect our interests.<sup>13</sup>

### *C. Importance Within Trade Issues of Commodity Policies*

The foregoing discussion suggests that raw materials are no longer the all-embracing concern of all developing countries. Yet, commodity policies have been the centerpiece of the South's program of action for a new international economic order. The reasons, to this writer at least, are as much political as economic. As will be demonstrated by the data presented herein, it is mainly the least developed countries—those of the so-called Fourth World—which are the "one-crop" economies and which therefore derive the bulk of their export earnings from primary raw materials.

It is true that for those countries heavily exporting primary, rather than manufactured goods, the excessive price volatility of primary commodities in the market place has been a major and unsettling concern to the development planners, causing distortion in the pattern of development. Developing countries depend heavily on export revenues to finance both their regular and capital expenditure budgets. When commodity prices are buoyant, the expectations of higher exchange earnings inevitably lead governments to undertake more ambitious development projects which may then need to be drastically curtailed when commodity prices decline, thus reducing incomes and employment.

Declining commodity prices cause contraction of output, further aggravating problems of unemployment and income losses. For a developing country still dependent on primary production for exportation, such action to curtail output in mines and farms is often fraught with practical difficulties and possibly, as well, politically destabilizing effects.

For all these reasons, the developing countries are justifiably concerned about achieving greater commodity price stability, but the thrust of the South's effort at remedial action has been to effect institutional changes in world commodity markets which involve governmental intervention in pricing to prop up commodity prices at ever higher levels. The intention seems clearly aimed at increasing

<sup>13</sup> *Op. cit.*



total export revenue rather than simply moderating short-term fluctuations. Even assuming the legitimacy of Third World aspirations in this latter regard, the approach advocated in the so-called integrated program for commodities is clearly fraught with great uncertainties for the South and dangers for the North.

### III. COMMODITY RESOURCES AS KEY FACTOR IN NORTH-SOUTH DEBATE

World commodity resources were developed and can be considered to have been controlled by the industrial countries until the second half of this century. Production and marketing of commodity resources in developing countries were largely through private enterprise channels and financed largely by means of private capital. However, both private enterprise and private investment were not of indigenous origin. In many of the developing countries—particularly those in a colonial status—economic development meant uneven pockets of development in mineral-rich localities or agricultural areas where production in the mines and on plantations was geared to export markets and the growing needs of the industrial consuming nations. There was only limited indigenous infrastructural control or participation in the production-for-exchange economy. Much of the productive facilities in some developing countries were in the hands of a relatively few large expatriate companies, headquartered and controlled abroad.

The emergence of new states from colonial status in important commodity producing regions in Asia and Africa created new patterns of resource development. Motivated by their desire to obtain greater control of the productive processes and a larger share of the economic benefits from them, governments in resource-producing countries have intervened to assume an active role as participants in policy-making, ownership, and production.

There has been a shift to increased participation by the state and state-controlled entities and in many cases national governments have taken outright control of commodity resources through nationalization of existing enterprises. Particularly in the mining sector, foreign governments have encouraged joint ventures with foreign private capital or the acquisition under sales contracts of mining technology and managerial skills without linking these to ownership. In minerals marketing, increased reliance also has been placed on long-term purchasing agreements between consumers in the industrial countries and producers in the developing countries. There has thus evolved a changing relationship in the production and marketing of resources between the developed and less developed countries in which there are new elements, both of common interest and of disagreement. In the latter context, these are still very much reflected in the North-South issues currently being debated on such subjects as technology transfers, multinational company activities, and on state ownership and regulatory policy. Basic, in the resources dialog, is the interest the industrial countries have in maintaining access to developing country resources, while the developing countries insist these must produce expanded export earnings.

According to World Bank data,<sup>14</sup> in 1975, there were 127 countries classed as developing countries representing about three-fourths of the world's population but accounting for less than one-fifth of the world's gross national product. What is more, the disparity in GNP and income as between the developed and less developed country groups is due to widen, based upon World Bank projections through 1985.

Recognizing that this poverty gap exists and should be reduced, it is relevant that the gap differs widely with respect to developing countries. As is indicated in table 1, 28 countries comprising 25 percent of the world's population had an average per capita income of \$140 in 1975. There were 40 countries in the lower middle income group comprising 33 percent of the world's population with a per capita income averaging \$350, while 59 countries with 15 percent of the world's population and an average per capita income of \$1,020 comprised the upper middle income group.

Judging from the wide spread in each group's per capita income, there is considerable variance among the respective countries in development and diversification of production. A reasonable assumption is that primary production for exportation tends to be more concentrated, and thus is more important, to developing countries at the lower income spectrum than those in the upper middle income range.

In any event, taking the developing countries as a group, it is relevant to observe that they do not account for the largest proportion of either agricultural or nonfuel mineral raw materials entering into world export trade.

As the U.N. data given in table 2 show, in 1976 exports of food, beverages and tobacco from all developing countries comprised 30.6 percent of total world exports of such items while the developed countries' exports of these items were more than double that figure at 61.6 percent, the balance being accounted for by a third group, i.e., the centrally planned economies.

Similarly, exports of other crude materials, excluding petroleum, by the developed countries accounted for almost 60 percent of world exports, while such exports by the developing countries were just over 29 percent. The data in table 2 also show that the developed countries share of world imports is far greater than the developing countries' share of world imports with respect to food, beverages and tobacco (67.4 percent against 20.4 percent) and other crude materials (excluding petroleum—74.7 percent against 13.8 percent).

Clearly, therefore, the developed countries are more important than the developing countries as importer/consumers of primary products and as exporter/producers of primary products (excluding the mineral fuels).

It is therefore erroneous to associate primary production with only developing countries or to view primary production and marketing as peculiarly matters affecting the economies of developing countries.

Indeed, within the developed countries, the more advanced industrial countries also rank as the most important exporters of primary raw materials. For example, the United States has been for many years the world's largest producer and exporter of agricultural products and

<sup>14</sup> World Bank Atlas, (Twelfth Edition), 1977.

consistently it has accounted for a much larger portion of world agricultural trade than it does of world agricultural production. The United States generally accounts for more than half the world's exports in coarse grains and soybeans, but less than one-third of the world's output of coarse grains and only 40 percent of world soybeans. The United States accounts for two-fifths of world cotton and wheat exports, but only a sixth of world production; and 20-30 percent of world rice exports; but only 2 percent of world output.<sup>15</sup>

With regard to the export trade of developing countries, a striking feature has been the declining proportion of primary commodities in terms of their total annual export trade. The data in table 3 show that, as a share of their total exports, primary commodity exports (excluding petroleum) from all developing countries declined from 61.6 percent in 1960 to 46.6 percent in 1970 to 22.8 percent in 1976. (As pointed out previously, this decline was offset by increased shares attributed to manufactures exported by developing countries and also to petroleum exports.)

Likewise significant, as the data in table 4 show, is that the share of primary commodities in the total import trade of all developing countries as a group has also declined. In 1960, imports of primary products, excluding petroleum, absorbed 24.5 percent of total developing country imports; in 1976, the percentage dropped to 16.6 percent.

The aggregate values of developing countries' primary commodity imports and exports have shown sharp expansion. Since these now represent smaller shares in terms of their total import and export trade, developing countries are increasingly utilizing their own raw materials for local diversified production into processed goods and manufactures. Thus, for the developing countries primary products can no longer be considered the prime contributor to their foreign exchange earnings and to the financing of their internal development.

The developing countries, as will be discussed in some detail later, have concentrated their attention on 18 specific commodities in the agricultural and mineral fields which the developing countries regard as priority candidates for international commodity agreements aiming at more stable and remunerative prices to the producers.

Yet, as will be seen from the data given in table 5, these primary commodities do not have the same interests for all developing countries. Indeed, individual commodities may be of interest only to a relatively few countries even though the interest may be crucial, e.g., jute in Bangladesh and copper in Chile.

Taking the 18 commodities in the United Nations Conference on Trade and Development (UNCTAD) integrated program, table 5 was compiled from IMF published export data for 65 of the leading developing countries, grouped by income as categorized by the World Bank. It shows that in only 31 of 65 listed countries (i.e., 48 percent of the total) do the 18 commodities account for more than 50 percent of the respective developing country's export earnings. Moreover, the data given in table 5 suggest that commodities become less important as foreign exchange earners as the income of the developing country increases. For example, 60 percent of the lowest income countries were dependent upon such commodity exports for over 50 percent of their total export earnings, whereas only 32 percent of the countries

<sup>15</sup> "Changing World Agricultural Trade," U.S. Department of Agriculture, September 27, 1978.

listed in the highest income group depended upon such commodities for over half of their export proceeds.

When only the 10 "core" commodities (those given priority attention in the UNCTAD integrated program) are considered, the results are even more dramatic. Core commodities accounted for over half the exports in 7 out of 15 countries in the first group (47 percent) and in 7 out of 28 countries in the highest income group. In all, core commodities exceeded 50 percent of the value of exports in 23 countries of the 65 developing countries listed. Thus, only 35 percent of the leading developing countries depended in 1977 on the 10 core commodities of the UNCTAD integrated program for over half their respective exports. Moreover, three of the core commodities—cotton, sugar and copper—are important to the trade of developed countries as well as to the trade of developing countries. This is indicated in World Bank data showing that combined output in all developing countries for 1974–1976 average 51 percent of total world production in sugar, 47 percent in cotton, and 53 percent in copper.<sup>16</sup>

#### IV. THE U.S. STAKE IN THIRD WORLD COMMODITIES

##### *A. U.S. Dependency on Imported Raw Materials: Myth or Fact*

The United States has a significant and growing trade stake in the Third World, but mineral fuels aside, the developing countries are more important to us as export markets than as suppliers of raw materials.

This is reflected in the fact that in 1977 (see tables 6 and 7), 42 percent or \$48.5 billion of all non-mineral-fuel U.S. exports went to the developing countries while (exclusive of petroleum products) 31 percent \$31.6 billion of U.S. global non-mineral-fuel imports originated in the developing countries.<sup>17</sup> Indeed, as Table 7 shows, in 1977 the developing countries took 48 percent or \$38 billion of all U.S. exports of manufactures, so that, from this standpoint, the collective developing countries represent an important sales market for our industries. The developing world is also significant for sales of U.S. agricultural primary products since, collectively, the developing countries accounted for 33 percent or \$5.2 billion of such U.S. exports in 1977.

With respect to U.S. imports, in 1977 the developing countries accounted for no less than 45 percent or \$66 billion of total imports. However, the role of the developing countries in U.S. import trade is much less important when mineral fuels are excluded from consideration. On this basis, in 1977 developing country imports accounted for 31 percent of U.S. total imports (exclusive of mineral fuels); that is, \$31.6 billion out of a total of \$102.5 billion.

As indicated in table 7, in 1977 69 percent or \$9.7 billion of U.S. imports of primary agricultural products came from developing countries. However, the value of imports from all sources of agricultural primary products represented only 10 percent of U.S. total imports in 1977 (see table 7).

<sup>16</sup> World Bank, *Commodity Trade and Price Trends*, (1978 Edition).

<sup>17</sup> U.S. trade in this category has so high a value and is so concentrated in a relatively few developing countries, that it is reasonable to exclude mineral fuel trade totals from both U.S. imports and exports in order to place in proper perspective the Third World's importance to us as a source of primary nonfuel commodities.

Similarly, the developing countries in 1977 accounted for 29 percent or \$2.3 billion of U.S. imports of nonagricultural primary products. But again, this needs to be considered against the fact that non-agricultural primary products from all sources represented only 5 percent of the value of total U.S. imports in that year.

The significance of the above data is that, in broad primary commodity terms (exclusive of the mineral fuels), the U.S. economy has a high degree of self-sufficiency and, moreover, is not generally dependent on the developing countries as suppliers—at least not for the bulk of the nonagricultural primary products (again, of course, excluding petroleum).

It would be an oversimplification and clearly erroneous, however, to suggest the United States does not need increased access to world raw material supplies. Indeed, as has been observed by numerous authorities, world population increases and pressures to improve standards of living place increasing demands on the world's mineral resources.

The growth of the United States and other developed economies has stimulated higher annual absolute outputs of minerals, but for many minerals the rate of increase in world consumption has been greater than that for output. This raises legitimate concern about the adequacy of global nonrenewable resources for long-term industrial needs and a growing reliance by the United States on imports to meet projected domestic industrial consumption.<sup>18</sup>

There are varying estimates of world resources for the different internationally traded minerals, some being said to be adequate to meet projected demands for a century or more and others for periods of less than 30 years.<sup>19</sup>

Mineral reserves are those considered to be economically exploitable. However, estimates of reserves for any metal or mineral need to consider such factors as the probability of geologic identification of resources in as yet undiscovered deposits and of technologic development of economic extraction processes for presently unworkable deposits. It is also generally accepted that estimates for mineral supply can be significantly altered by new technologies for metals recovered for reuse. This, for example, could significantly affect projected supply and demand for iron, copper, lead, zinc and aluminum among other metals. The U.S. already depends significantly on recycled materials to augment mining output of these metals as well as other metals and minerals.<sup>20</sup> Moreover, extraction of ocean-floor minerals could drastically revise estimates of recoverable resources in nickel, cobalt, and manganese among other seabed minerals.

Insofar as resources in the developing countries are concerned, a U.N. report estimates that while they account for one-half of the world's land area, their known mineral reserves amount only to

<sup>18</sup> See Report of U.S. National Commission on Materials Policy, U.S. Government Printing Office, 1973; "Status of Mineral Industries, 1977," and "Mineral Commodity Summaries," 1978, published by U.S. Department of the Interior, Bureau of Mines.

<sup>19</sup> The U.N. Economic and Social Council, Committee on Natural Resources (E/C.7/51 dated February 13, 1975) stated in this respect: "Of the minerals that are traded internationally the known world reserve position of potash, columbium, phosphate, magnesium, chromium, feldspar, vanadium and iron ore are sufficient to meet projected requirements for a century. The known world reserves for cobalt, manganese, nickel, molybdenum, asbestos, titanium, antimony, bauxite and sulphur may last beyond the year 2000, while known world reserves of copper, tungsten, bismuth, lead, zinc, tin, fluor spar, silver and mercury are sufficient to meet projected demand for periods less than 30 years."

<sup>20</sup> The U.S. Bureau of Mines estimated that in 1976, four billion short tons of raw mineral materials were consumed by the U.S. economy. To this figure was added reclaimed metals and other mineral materials amounting to more than 29 million short tons, valued at over \$4 billion. (See "Status of the Mineral Industries," 1977, p. 3, U.S. Department of the Interior, 1977).

roughly one-third of the world's total (the remaining known reserves being shared between the centrally planned economies [27 percent] and the developed market economies [35 percent]). Moreover, according to the same U.N. report, the developing countries do not dominate the world reserve picture in the aggregate except in the case of tin, bauxite, fluor spar, columbium, and cobalt.<sup>21</sup>

With respect to the United States, the Bureau of Mines of the Department of the Interior estimated that total domestic mineral raw materials production in 1977 had an estimated value of \$17 billion but that to supplement consumption requirements in processing industries, including smelting and refining industries, the United States required imports of mineral raw materials with a value of \$3 billion.

As table 8 shows, net imports provided more than 50 percent of U.S. consumption for at least 18 mineral commodities and in some cases the U.S. dependence on imports was much higher ranging from 70 percent for nickel to 100 percent for strontium, mica, and columbium.

As is clearly evident from table 8, the developing countries are important suppliers for several of the most strategic metals and minerals, such as cobalt, manganese and chromium. However, the importance of the Third World as a source of supply to the United States—even for these specific strategic minerals—can be overstated. The supply of cobalt and manganese can change drastically, as ocean-floor exploitation becomes more economically feasible and widespread. Moreover, with a few notable exceptions such as tin, the developing countries are by no means the exclusive source of supply. Also, new processes will increasingly utilize lower grade ores, as is already true for example of metallurgical-grade chrome ores.

Thus, access to Third World resources cannot be regarded as crucial to the U.S. economy. If this is so, it diminishes the importance of assurances of U.S. continued access to Third World resources as a compelling rationale for U.S. commodity policies which would be otherwise economically unpalatable. It needs to be stressed here again that with respect to the 18 commodities specifically targeted in the UNCTAD integrated program for negotiation of international commodity agreements, the U.S. economy cannot be regarded as being dependent on these from Third World sources (unless we regard tropical products as essential).

Even ardent proponents of the UNCTAD integrated program have acknowledged a low U.S. threshold of vital interest in Third World resources. Guy F. Erb, for example, stated in a report published by the Overseas Development Council: "The United States and Canada, both with considerable internal possibilities for mineral exploration and development can take a more relaxed view of meeting their future needs than can the United Kingdom, other European countries, or Japan." Harold B. Malmgren is cited as the authority for estimates that Japan in volume terms has an overall dependence on imported materials equivalent to 90 percent of its domestic consumption; the figure for the European countries is about 75 percent, while that for the United States is only 15 percent.<sup>22</sup>

<sup>21</sup> *Op. cit.*

<sup>22</sup> Guy F. Erb, "Negotiations on Two Fronts: Manufactures and Commodities," (Washington, D.C. Overseas Development Council, March 25, 1978).

Since the Third World's role as a supplier of raw materials is so vital to Japan and Western Europe, it helps to explain why these developed countries seem to be increasingly receptive to Third World proposals with respect to commodities. By the same token, it seems the element of supply access does not need to be given as much weight by the United States in formulating its commodity policies vis-a-vis the Third World, as do most other developed countries.

### *B. U.S. Investment Interests in Third World Resource Production*

The United States has a considerable private investment stake in the Third World, but the sectoral distribution of our investments reflects—as in U.S. foreign trade with the developing world—a shift to decreased emphasis in primary raw materials and an increased emphasis in manufacturing and services activities.

In 1977, for example, 22.7 percent of the book value of total U.S. direct private investments was in the developing countries (\$33.7 billion out of \$148.8 billion). However, only \$2.3 billion, or 6.7 percent of the amount invested in all of the developing countries, was accounted for by the mining sector. Even with petroleum included, the total for U.S. private direct investments in developing country mineral activities was only \$5.3 billion or 15.6 percent of total U.S. direct investments in the developing countries.

On the other hand, manufacturing in 1977 accounted for \$12.2 billion or 36.3 percent of U.S. total direct investments in all developing countries, while other activities combined (such as transportation, trade and insurance) accounted for \$16.2 billion or 48 percent of the U.S. total in developing countries. Significantly, the great bulk of all U.S. direct investment, \$27.7 billion or no less than 82 percent of the total in all developing countries, was represented in our investments in Latin America.

By contrast, the data on U.S. investments in the developing world a decade earlier (1977) show that although the total sum invested was much lower (\$14.9 billion) out of a world total of \$56.6 billion, the largest shares were accounted for by mining (\$1.8 billion or 12.1 percent) and petroleum, with \$5.3 billion or 35.6 percent.

Manufacturing activities accounted for only \$3.9 billion or 26 percent of the total invested in developing countries. The developing countries that year accounted for 12 percent of total global U.S. investments in the manufacturing sector. In 1977, that percentage was considerably higher at 18.7 percent (see table 9).<sup>23</sup>

What these figures show is that, as a response to the political instability and actual or feared expropriation and nationalization in developing countries, U.S. private equity investments have shifted increasingly away from the higher risk extractive mining sector in favor of investments in manufacturing or services.

Undoubtedly, a similar trend is indicated for the other developed countries' private capital investments in the Third World. These trends of course reflect the growing role for national governments in resource exploitation in developing countries. They also place in sharper relief the necessity for the developed countries to step up provisions of alternative funding sources to the developing countries

<sup>23</sup> For original source of data see U.S. Department of Commerce, *Survey of Current Business*, August 1978.

as one means of promoting investments in commodity production and thus avoid future demand/supply imbalances.

Augmentation of world raw material supplies to keep pace with higher consumption obviously requires adequate flows of new investments in the production of agricultural and mineral raw materials.

In this context, there can be little disagreement with the fact that investment responses are influenced by commodity price fluctuations. An excessive and sustained price decline in a particular commodity thus acts to impede new investment into additional production which may then lead to supply shortages in future years when demand is higher and which in turn adds additional upward pressure on prices. This is particularly relevant to projects in the mineral area, since the nature of this sector is such as to involve larger scale, higher risk projects which take relatively long periods to bring into production.

To the extent that commodity prices could be stabilized, it would produce a more orderly flow of investment funds into resource production. Yet, reliance on this argument alone to justify United States participation in new international commodity agreements does not seem to be warranted. Investment flows are not generated only by price/cost factors. Investment decisions by individuals as well as by public entities are influenced by numerous factors—some tangible, as, for example, the relative price/cost elements, and some intangible, including evaluation of the political climate for investment in the host countries.

As has already been indicated, the United States is not nearly as dependent on imported raw materials as are other developed nations. Nevertheless, the United States cannot ignore a responsibility to help to ensure that global supplies are adequate for future global needs.

In the past, the market mechanism and reliance on private capital investments have been the means of assuring an efficient allocation of resources and of our access to such resources.

Private foreign investments—carrying their own technology and their own managerial know-how—and the private multi-national rations continue to perform a vital function in this regard. The United States recognizes this in programs such as those providing insurance against political risks by the Overseas Private Investment Corporation (OPIC). Continued Executive and Legislative Branch support to such programs is warranted.

However, to the extent that private capital is participating less actively in resource production in the developing countries, and also is less eagerly sought after by national governments, it means that finance in the developing countries for raw material production must somehow be generated from new and alternative sources. In these circumstances, the U.S. policy to expand sources of investment capital for resource production in the developing countries through international financial institutions (such as the World Bank, the International Finance Corporation, the International Development Association, and the regional development banks) is also warranted.

## V. THE EXPECTATIONS OF THE THIRD WORLD

Issues involving the "Declaration and Program of Action on the Establishment of a New International Economic Order," which was adopted at the Sixth Special Session of the U.N. General Assembly



in May 1974, have been directly or indirectly the focus of attention in virtually every international forum.<sup>24</sup>

Central to these issues is the Third World's emphasis on international commodity pricing and stocking arrangements to bring more "stability" to commodity markets. The practical effect of these arrangements, however, would be to put upward pressure on commodity prices. Thus, while the stated aim of Third World commodity proposals is stabilization of export revenue, the real aim appears to be one of increasing export revenues.

The initial thrust of Third World pressure in fact was for a massive multicommodity agreement coupled with an indexation arrangement whereby commodity producing countries would be able to index the prices of their commodities against the cost of goods they had to import from the industrial countries.<sup>25</sup> This indexation notion was soon dropped from serious consideration after it became evident that the assumptions underlying such a scheme were on thin theoretical grounds and that, moreover, none of the developed nations could accept it. The United States, for example, openly expressed its belief that a global system of indexation could not be made workable. Moreover, it questioned the underlying premise of the scheme as a vehicle to redistribute income from the richer to the poorer countries.<sup>26</sup>

#### *A. The Integrated Program for Commodities*

Developing country proposals in the commodity field finally crystallized in the Integrated Program For Commodities which was initially prepared by the Secretariat of UNCTAD in 1975 and which was given strong endorsement by the developing countries (known as the Group of 77, but which actually numbered 112 countries) at its separate strategy meeting in Manila in February 1976. Its implementation was given general endorsement at the Fourth U.N. Conference on Trade and Development in Nairobi in May 1976. The pertinent resolution which was adopted without dissent at UNCTAD IV, May 30, 1976 (TD/res/93 IV), lists the following two major objectives of the integrated program:

1. To achieve stable conditions in commodity trade, including avoidance of excessive price fluctuations, at levels which would:
  - (a) be remunerative and just to producers and equitable to consumers;
  - (b) take account of world inflation and changes in the world economic and monetary situations;
  - (c) promote equilibrium between supply and demand within expanding world commodity trade.

<sup>24</sup> The major conferences have been the Seventh Special Session of the U.N. General Assembly on Development and International Cooperation (December 1975), the Paris Conference on International Economic Cooperation (CIEC) which ended in mid-1977 and UNCTAD IV which convened in Nairobi (May 1976). For their part the developing nations have met separately and frequently to develop their strategy and action plans, e.g., in a series of Non-Aligned Conferences (Mexico City and Lima, 1975; Manila and Colombo, 1976; and Belgrade, 1978) and special meetings of the Group of 77.

<sup>25</sup> Linked with indexation was the notion of global economic planning. Some spokesmen, in fact, called for establishment of a new international organization—a World Development Authority—to assume basic responsibilities for resources and development (see Mahhub ul Haq, p. 24).

<sup>26</sup> Interestingly enough, the United States defended its opposition to indexation on the basis that international trade in raw materials is heavy among the industrial countries. Thus, any benefits from indexed commodities would be received by the "richer developed countries which are major net exporters of raw materials," at the expense of "the poorest countries which tend to be net importers of raw materials." (e.g., statement by Julius L. Katz, Deputy Assistant Secretary of State for Economic and Business Affairs, before the Subcommittee on International Trade Investment and Monetary Policy of the Senate Committee on Banking, Finance and Urban Affairs, July 9, 1975.)

2. To improve and sustain the real income of individual developing countries through increased export earnings, and to protect them from fluctuations in export earnings, especially from commodities.

To carry out these objectives, Resolution 93 calls for a variety of measures ranging from improved information exchanges and market development efforts to formal international commodity arrangements which would include, but not be limited to:

- (a) Setting up of international commodity stocking arrangements;
- (b) Harmonization of stocking policies and the setting up of coordinated national stocks;
- (c) Establishment of pricing arrangements, in particular negotiated price ranges, which would be periodically reviewed and appropriately revised, taking into account, *inter alia*, movements in prices of imported manufactured goods, exchange rates, production costs and world inflation, and levels of production and consumption;
- (d) Internationally agreed supply management measures, including export quotas and production policies and, where appropriate, multilateral long-term supply and purchase commitments.<sup>27</sup>

Resolution 93 sets out in elaborate detail the timetable and procedures for implementation of the integrated program. Producer/consumer consultations are specified for all 18 individual commodities with a special focus on the core commodities which have been singled out as suitable for international stockpiling schemes, and for which the "common fund" is specifically designed as the financing vehicle.

Resolution 93 also specifies that, upon conclusion of a negotiating conference on a common fund and the various preparatory meetings on individual commodities, the Secretary-General of UNCTAD is to convene negotiating conferences for individual international commodity agreements, with all negotiations to be completed no later than December 1978.

The common fund would finance buffer stocks for the 10 core commodities regarded as storable commodities. For the other eight commodities, producer/consumer consultations are called for, leading to international stabilization agreements but which would be based on other than stocking arrangements.

Almost from the start, it was apparent that the tasks set out in Resolution 93 were overly ambitious for so short a time. The negotiations on a common fund have been bogged down with the developed and developing countries in disagreement on fundamental issues. A number of the preparatory meetings on individual commodities have been held but none has thus far resulted in convening of a negotiating conference.

At the time of UNCTAD IV, international agreements were already extant for 4 of the 10 core commodities; namely, cocoa, coffee, sugar and tin. The United States is a member of the coffee and tin agreements and has agreed to join the sugar agreement but formal congressional approval to our membership is still pending. The only additional commodity in the integrated program likely soon to be covered by an international agreement is rubber. Admittedly, however, the matter

<sup>27</sup> Although this language leaves open the possibility of some type of indexation system, the developing countries, in Resolution 93, avoided any reference to it—presumably in order to gain its adoption at UNCTAD IV without dissent. One writer observed in this respect: "No explicit use of that term occurs; by then it had become a politically unacceptable symbol to some of the leading developed nations." (Jere R. Behrman in *International Commodity Agreements*, Overseas Development Council Monograph No. 9, p. 3)

of establishing an international rubber agreement has already been under discussion within the framework of the standing International Rubber Study Group forum. In the metals category, developing countries have moved toward an international copper agreement but, notwithstanding numerous intergovernmental meetings, that goal is still far off. Meetings on copper were held in Geneva in July and November 1978 aimed at setting up a standing intergovernmental copper working group as a first step toward arranging an international copper agreement. On each occasion, however, major differences as to whether the group should operate autonomously or under the aegis of UNCTAD led to adjournment without any action.

### *B. The Common Fund Controversy*

For the developing countries a common fund is considered essential to their entire commodity program since it is conceived as providing a central source to finance both existing commodity agreements as well as all future agreements. It would thus operate to finance all internationally held buffer stocks and national stocks, as well as other commodity-related activities such as diversification, market promotion, and research and development.

The developing countries have envisaged a \$6 billion common fund to be made available through mandatory direct assessments on governments as well as on commercial borrowings. A "two-window" common fund, one window to permit buffer stock financing and the other to finance a wide range of development type "other measures," was tabled by the Third World (i.e., Group of 77) at the first Negotiating Conference on a Common Fund in March 1977. The United States initially questioned the need for a common fund in view of the resources available from the international financial institutions such as the IDA, IMF, and IBRD. The U.S. nevertheless, at the June 1977 Paris CIEC Conference, along with other developed countries, consented to "the establishment of a common fund with purposes, objectives, and other constituent elements to be negotiated in UNCTAD."

At the Bonn Summit Conference in July 1978, the U.S. and other industrialized countries reaffirmed their agreement to pursue negotiations to a common fund. This was done in obvious recognition of the political implications and that, rightly or wrongly, the developing countries have great expectations for the economic benefits flowing from such an institution. However, the type of arrangement planned by the developed countries at Bonn was not nearly as broad in scope as that proposed by the developing countries.

As developed initially in the OECD, and tabled by the developed countries (the Group B Caucus) in the second negotiating round on a common fund in November 1977, a common fund would be a facility whereby the financial resources of participating international commodity agreements would be consolidated into a central pool. The individual international commodity agreements (ICA's), however, would operate independently of the common fund, and they would retain basic responsibility for raising the necessary finance for their own buffer stocking operations.

The developed country proposal also made no provision for a "second window" function for the common fund on the basis that nonbuffer stock operations of the type envisaged in the developing country proposal would duplicate activities financed by the international development institutions or be in conjunction with bilateral aid projects.

In the U.S. view, the common fund could usefully *supplement* the work of the existing financial institutions in the commodity trade area. The common fund could be useful to pool resources of individual commodity agreements to facilitate their operation. It would not, however, operate as an advance (or exclusive) source of funding for new international commodity agreements. Thus, the United States, in concert with the other developed countries, has taken a strong stand against a common fund *supplanting* other existing institutions and facilities available to finance commodity trade.

The conception of a common fund's function and operation is diametrically opposite to that held by the developing countries. They see a common fund as the principal financing source which entails direct involvement by the common fund in the operation and policy decisions of commodity agreements.

The Group of 77 proposal for a \$6 billion Common Fund (\$2 million paid in, \$4 billion callable) is based on mandatory direct government contributions, to be supplemented as needed by additional borrowings on commercial markets directly by the fund.

These features mean the United States would finance agreements to which it might decide later it could not join. The common fund's broad responsibilities might also enable it to finance market intervention for commodities for which no international agreements exist thus making the United States a partner in such operations.

The unsettled aspects of the common fund in organization, management, and decisionmaking responsibilities surfaced at the second U.N. negotiating conference on a common fund which convened in Geneva, in November 1978, but which was abruptly terminated on December 1 of that year by the developing countries. They insisted, as a precondition of further discussions, on: (1) a commitment by the industrial countries to mandatory government capital subscriptions to the common fund; and (2) recognition of a financial role for the common fund for other nonbuffer stocking measures even though some of these may be regarded as a development type. Such concepts ran directly contrary to the central core of the developed country proposal for a common fund or a pooling arrangement based on separate and independently run ICA's.

The resultant impasse led the developing countries to call for suspension of the conference because of "the unwillingness of some developed countries to agree to even the fundamental aspects of a common fund consistent with the objectives of the integrated program for commodities."

Failure of the conference was blamed on a lack of political will by "some developed countries to meet their commitments . . . They [the developed countries] certainly could not imply a passive and residual arrangement, severely limited in its scope, intended to facili-

tate the financing of buffer stocks only, and completely dependent for its resources on deposits by ICA's." 28

Developed countries saw it differently. The United States, for example, believes the conference failed because the developing countries felt a "need for cohesion, whatever the cost . . . and to accommodate a number of countries who seek transfers of resources rather than price stabilization through the Common Fund." 29

The Third Session of formal negotiations on a common fund was held in Geneva November 14-30, 1978. At this meeting—with no successful outcome—a scaled down proposal for a common fund was discussed. It had been submitted by the UNCTAD Secretariat as a compromise intended to break the deadlock between the Group B countries and the Group of 77.

The new scheme would provide for a common fund with an initial subscribed capital of \$500 million, financed on the basis of mandatory contributions (assessed on governments mainly on a GNP scale). UNCTAD believes such capital structures with supplemental voluntary contributions plus borrowings would still enable the common fund to adequately carry out all its stated functions.

With respect to functions, the UNCTAD proposal envisages common fund financing not only of buffer stocks, but of other commodity-related activities. These are the activities of the common fund's so-called second window to which the United States and other developed countries continue to take strong exception, especially if the principle of government assessments for the fund's subscribed capital is accepted.

However, the United States seems to have moved closer to acceptance of mandatory government contributions to a common fund, though here too, the amount envisaged would be much below the level called for in the UNCTAD proposal.

In summary, U.S. policy would now support the establishment of a common fund with defined, limited objectives. This is still not acceptable to the Group of 77, which thus far has not been able to reconcile internal differences so as to show more flexibility in its position. Clearly, the United States has been much more forthcoming on the issue of the common fund but it remains to be seen whether the United States, as stated by Deputy Assistant Secretary of the Treasury Helen B. Junz "will resist politically motivated demands that in the end do not serve anyone and thus will compromise not only our own economic interests but those of many developing countries." 30

## VI. IS INTERVENTION IN WORLD COMMODITY MARKETS WARRANTED?

### A. *Features of International Commodity Agreements Called for by the Third World*

Arrangements to manage commodity markets take many forms and have applied to a variety of commodities. Their objectives, aimed

<sup>28</sup> Statement made by Yugoslavia on behalf of the "Group of 77" (i.e., developing countries) on December 1, 1977.

<sup>29</sup> Statement by Helen B. Junz, Deputy Assistant Secretary of the Treasury for Commodities and Natural Resources before the Senate Subcommittee on Foreign Economic Policy, February 27, 1978.

<sup>30</sup> See footnote 29.

variously at influencing world prices, production or consumption may be sought through a variety of mechanisms, some more openly interventionist than others.

At particular times, and for certain commodities, conditions have been conducive for producer-influenced upward price movements in some commodities, e.g., phosphates, mercury, sulfur and diamonds; but no producer group has emulated, or indeed is likely to emulate, the example of OPEC, simply because the unique conditions for cartel success appear lacking for nonoil commodities.<sup>31</sup>

It is perhaps in realization of this fact that the Third World has turned to the mechanism of managing commodity markets through formal international agreements involving both consuming and producing countries. The Third World has acknowledged that the function of an agreement is to maximize the welfare for both consuming as well as producing countries. Nevertheless, the Third World clearly perceives the common fund and the individual commodity agreements financed thereunder as being linked to one objective: to increase real resource transfers to the developing countries from the industrial countries.

The agreements called for by the Third World fit the standard characteristics of all international commodity agreements in that they would be multilateral in membership, with both consumer and producer country members, and with administration of the agreement by a central body comprised of both consumer and producer members. The stated objectives—price stabilization, promoting economic development and assuring adequate supplies—would be met by reliance primarily on international stocking schemes.

As pointed out previously, the integrated program for commodities provides for a variety of economic measures to achieve agreement objectives; these include export quotas, production restrictions and also as appropriate, multilateral long-term, supply-purchase commitments. Even so, the basic emphasis in the commodity agreement program of the developing countries is on international buffer stock arrangements financed through the common fund.

However, though a buffer stock arrangement would appear to be more compatible with a free market operation than restrictive controls on output or trade, past experience indicates that production and export controls inevitably come into play as floor-price supporting measures when the resources of the buffer stock are exhausted.

This leads directly to the Third World's insistence that the common fund have sufficient capital assets to build up internationally held stocks of sufficient size to defend both floor and ceiling prices within an agreed price band (presumably pegged around the long-term market trend).

Will buffer stocks work to stabilize commodity prices? The answer seems to be theoretically yes, but in practice the one experience in an operating buffer stock scheme in tin seems to indicate the reverse.

<sup>31</sup> Among the important elements are inelastic demand for the commodity, the absence of substitutes, and a concentration of producers who are highly motivated for joint action.

## B. The Role of Buffer Stocks in Commodity Price Stabilization

The concept of a buffer stock is not new.<sup>32</sup> It rests essentially on the proposition that commodity stockpiling can be employed as a device to reduce excessive market price volatility by the accumulation of stocks to moderate large surpluses in periods of oversupply and by the disposal of stocks to augment available supplies during periods of shortages.

Ideally, stocks could be accumulated by purchasing in the market during periods of slack demand when prices are falling and the disposal would occur through sales in the market during periods of excess demand when prices are rising. Thus, a buffer stock, properly operated, would act both to moderate fluctuations in supply and demand of a commodity and, consequently, in its price. A more even flow of supplies would be assured to the consumer and, at the same time, there would be more stability of investment funds flowing into production.

To facilitate this, however, requires ongoing management. The concept of an internationally held buffer stock involves establishment of an international board or council with policy-formulation and decision-making authority with regard to stock operations. The board or council, in turn, may delegate to its own technical staff day-to-day management operations of the stock.

A pure buffer stock arrangement would rely only on stocking operations (i.e., buying and selling transactions) to stabilize the price of a commodity between maximum and minimum levels. In theory the range is a price band representative of the long term market average swings in prices of a particular commodity.

Since the task of the buffer stock manager is to buy up the commodity when the price falls (i.e. to defend the floor price), it requires that he have adequate funding for such support purposes. This in turn requires accurate forecasting of support requirements. Without adequate funds to accumulate stocks for floor price support purchases, the commodity stabilization board or council may resort to other alternative measures, notably direct controls on exports or production. Of course, to the extent these measures are employed, the buffer stock no longer is "pure", as there is now injected into the commodity arrangements an element of direct interference with basic supply/demand factors.

Stocking arrangements require a commodity that can be safely stored for long periods without risk of deterioration; consideration must also be given to the investment involved to fund a stockpile. Not all commodities are storable and moreover, the cost of constituting an adequate stockpile for any individual commodity cannot be calculated with any great degree of accuracy. For example, UNCTAD estimated the common fund's capital requirements to finance buffer stocking operations for the 10 core commodities at \$6 billion. This

<sup>32</sup> Buffer stocks as a device to manage international trade in primary commodities were proposed by J. M. Keynes in 1942 (see Guy F. Erb, *ibid.*, p. 33 and J. M. Keynes, "The International Control of Raw Materials," in *Journal of International Economics*, Vol. 4 (August 1974), pp. 299-315. International commodity agreements, date back to the 1930's and in the early post World War II period the possibility of considerably extending them figured prominently in the Havana talks to establish an International Trade Organization (ITO). Chapter VI of the ITO Charter set out the guidelines for the establishment and operation of inter-governmental commodity agreements. (See Appendix B, International Commodity Agreements: A Report of the U.S. International Trade Commission to the Subcommittee on International Trade of the Committee on Finance, United States Senate, November 1975.)

sum is considered much too conservative by almost all independent estimates.

One authority on commodity agreements states flatly: "The access to financial resources of \$6 billion suggested by UNCTAD is not likely to be sufficient for the core commodities."<sup>33</sup> He placed the figure at a minimum of \$10.4 billion. Other estimates are even higher. Indeed, a buffer stock for only one commodity, copper, would involve an investment outlay of about \$3 billion, according to one consultant to the U.S. Department of State.<sup>34</sup>

Because buffer stocks entail such large and unpredictable costs, which may not be easily financed through the usual channels (such as fees on member countries, borrowings, and taxing unit exports), experience has demonstrated that international commodity agreements based on stocking arrangements tend to rely increasingly on supply control measures to support the operation of the stock in defending the floor of the price range. There is no similar mechanism to apply at the upper end when the ceiling price is endangered by exhaustion of the stockpile, so that the danger persists. Experience again confirms that the Board will be influenced to effect periodic changes in the price band to bring about upward revisions in the price bands. These increases may not necessarily reflect actual market trends, and thus they may tend to raise the long-term market price.

Most authorities would concede that in theory a pure buffer stock arrangement can function to smooth out short-term fluctuations, but opinions differ sharply over whether a buffer stock can accomplish its stated objective of price stabilization.

The core of the problem is that the buffer stock manager, to counteract market forces by buying when prices are low and selling when prices are high, must be able to forecast the market trend accurately. However, no one can say with certainty just what the market trend is in the first place and thus decisions to buy and sell must be regarded as involving some degree of subjectivity. Certainly it is questionable whether intergovernmental institutions can predict the market any more efficiently than the private sector and indeed the reverse may also be true.

On this score, one writer has observed:

At best, they (the buffer stock managers) have to work with forecasts which have high uncertainty, at worst, rules determined by bargaining between producer and consumer governments. If successful they would be doing something which would earn them a fortune as speculators in commodity markets. That professional international civil servants, subject to political pressures and many rules and regulations should be able to achieve what the private professional speculators often fail to do, is somewhat incredible. This is the main technical problem. An error of judgment in setting the floor and ceiling prices for the ICA will either result in the acquisition of excess stocks which eventually have to be dumped back into the market at a loss or if the target prices are set too low, the ICA never acquires any stocks and has no effect.<sup>35</sup>

It is therefore somewhat illogical in light of the divergence of views regarding the theory and practice of international buffer stocks that

<sup>33</sup> Jere H. Behrman, *ibid.*, p. 37.

<sup>34</sup> Gordon W. Smith in his "An Economic Evaluation of International Buffer Stocks for Copper" submitted under contract to the Department of State, August 1975. He estimated that an international buffer stock for copper operating to contain prices (plus or minus) 15 percent around a specified price band would require a stock of 2.7 million short tons worth approximately \$3 billion at 1975 market prices.

<sup>35</sup> Alasdair MacBean, Professor of Economics, University of Lancaster, in a paper (mimeo.) on North/South trade issues discussed by the British-North American Committee meeting at Gleneagles, Scotland, June 23-25, 1978.



the Third World should place such extreme weight on a common fund and, in effect, to regard buffer stock operations as the panacea for commodity price instability.

On strictly economic grounds, it appears likewise illogical for the developed countries, and the United States in particular, not only to downplay the problems, but to seemingly accept the virtues of buffer stocks and international commodity agreements. Such positions may be intended to be more accommodative of the Third World but they tend only to reinforce the Third World's expectations with regard to price effects of such arrangements.

The simple fact is that the historical record of past international commodity agreements does not provide hard evidence either of a successfully functioning buffer stock arrangement, or indeed of agreements where supply/demand factors have not been subjected to more direct manipulation. Stocking arrangements have been a feature of several international commodity agreements, but only in two agreements relating to cocoa and tin have there been provisions for an internationally held buffer stock to operate between fixed minimum and maximum price ranges. Since the inception of the first International Cocoa Agreement in October 1973,<sup>36</sup> the market price has been consistently above the agreement's specified ceiling price so that the buffer stock has never been activated.<sup>37</sup> Only in the International Tin Agreement has there been an international buffer stock operation with the aim of containing prices within an agreed price band and, as will be discussed, opinions differ markedly as to whether it has been successful in meeting the interests of producers and consumers.

### *C. The Historical Record*

Although there have been international agreements on other commodities such as tea and olive oil, agreements of chief interest to the United States have been those on cocoa, coffee, sugar, tin and wheat.

Economic provisions of each of these agreements vary; for some emphasis has been placed on market-sharing devices with stocks remaining under national ownership and control; for others, as in tin and cocoa, there was specific provision for an internationally held and operating buffer stock. Controls over exports and production were features incorporated in the economic provisions of all five agreements, although the degree of emphasis given to them has not been uniform.

Looking at the historical record of the operation of these five agreements, none can be judged an unqualified success. Indeed, at one time or another, most commodity agreements can be counted failures because the agreements themselves proved unstable, being subject to frequent violations on the part of their members (e.g., deliberate overshipments)—with disputes arising frequently among the producers over market allocations and between sellers and buyers on the enforcement of export or entry requirements.

<sup>36</sup> There have been two, one covering the period from October 1973 to October 1976 and, the current agreement which expires October 1979.

<sup>37</sup> Funds for a buffer stock are provided through an export levy of one cent per pound.

## 1. INTERNATIONAL AGREEMENTS ON WHEAT

In the case of wheat, it is generally acknowledged that the market sharing agreements which date back to the 1930's functioned well only in those periods when the United States (with or without Canada) carried the major burden for stabilizing world prices by withholding stocks and reducing production.

While there have been a few notable abstentions from past International Wheat Agreements (e.g., the U.K. from the IWA of 1953 and 1956 and Argentina from the IWA of 1949 and 1953), virtually all the world's wheat trade has been conducted by countries subscribing to the agreements, the first of which was established in 1933. The various agreements functioned with marked degrees of unevenness—that they functioned at all is largely due to the willingness of the U.S. and Canada, as the world's dominant wheat suppliers, to conduct trade so as to prevent imbalances in world demand and supply. For example, shipments by Argentina in excess of its agreement quotas in 1933 and 1934 broke up the first IWA in 1934, with the next one not to be operative until 1949.

Beginning with the 1949 International Wheat Agreement, there was basic reliance on supply contracts under which exporting and importing countries agreed to buy and sell within a given price range. Some agreements also incorporated the concept of guaranteed quantities. Notwithstanding these economic provisions, the agreements themselves appear not to have had any significant impact on the market largely because of the lack of production and enforcement controls.

In 1967, the IWA was replaced by an International Grains Agreement (the U.S.S.R. and Brazil did not join) which was linked to the Kennedy Round negotiations, but it too broke down. A later (1971) International Wheat Agreement has been operative largely as a consultative forum. Noting the ineffectiveness of past International Wheat Agreements, Julius L. Katz, then Deputy Assistant Secretary for International Resources and Food Policies in the Department of State, stated at an international commodity conference on October 4, 1972:

Their price ranges often proved to be inconsistent with the underlying supply and demand situation. They could not easily accommodate to the sudden changes in the supply demand picture, and they did not attempt to cope with the full range of governmental policies affecting the supply side of the equation.

Unless multilateral arrangements deal with the production and stock policies of producing countries and unless the farm policies of the major producing countries are compatible, multilateral agreements of the traditional type are not likely to achieve their objective of stabilizing the international wheat market on a long-term basis.<sup>35</sup>

The United States is hopeful that negotiation for a new International Wheat Agreement will produce a more effective arrangement than the largely impotent 1971 Agreement. It is envisaged that the successor agreement will be based on the concept of nationally held but internationally coordinated wheat reserve stocks to be used to hold prices within a wide price band.

<sup>35</sup> As reprinted in "Foreign Agriculture," U.S. Department of Agriculture, December 4, 1972 issue. That speech set out a cautious "case-by-case" approach to commodity agreements which has delineated basic U.S. policy from which we seem now to have somewhat departed.

However, several negotiating meetings held during 1978 failed to produce a final accord. The talks have been stalled because of differences between the United States and other developed countries on a number of big issues, including the size of global wheat stocks and the prices at which reserve stocks would be accumulated or released to the market. These issues may be resolved in further meetings. Nevertheless, whether a new International Wheat Agreement can perform any better than previous agreements to bring about quota market price stability will, in turn, depend upon the agreement's effectiveness on liberalizing world grain trade.

Again addressing the wheat agreement problem, this time in February 1978, the present Assistant Secretary of State, Julius L. Katz, stated candidly: "Because some countries insulate their domestic markets from world trade, we have borne a disproportionate share of the burden of adjusting world supplies to shifts in demand."<sup>39</sup> It seems clear that to date it has been the American and Canadian stocks and production policies which have governed international trade in wheat and not the provisions of negotiated international agreements.

## 2. INTERNATIONAL AGREEMENTS ON COFFEE

Until the early 1970's, the world coffee market was characterized by persistent overproduction which had a depressive effect on price levels so that most observers regarded coffee as a commodity in permanent surplus.

Producer-run agreements had attempted to control international trade flows prior to 1962 but in that year, as a result of initiatives by the United States and Brazil, the first International Coffee Agreement was established between producers and consumers. This was followed by a second agreement in 1968 and a third agreement in 1976. The United States has been a participant in all three agreements and, in fact, U.S. membership has been critical to their operation. We represent by far the major coffee importing nation and the agreements rely on the importing countries to enforce export quotas by prohibiting entry of coffee shipments not covered by a quota.

The economic provisions in the agreements use export quotas as a means of allocating global market shares to each exporting country with quotas being negotiated by the members before each coffee marketing year (taking account of supply and demand estimates and prevailing price levels). In the Second International Coffee Agreement, adjustment of quotas based on "indicator" price movements was also provided for, but the quota adjustment system was abandoned in 1972. A "Diversification Fund" financed by an assessment based on exports by members was also included in the Second Agreement and was designed to help producers diversify into other agricultural activities.

Some observers believe that the coffee agreements have been of value in permitting more orderly marketing of the large surplus stocks that accumulated through overproduction. The U.S. International Trade Commission, in its study on international commodity

<sup>39</sup> Statement by Julius L. Katz, Assistant Secretary of State for Economic and Business Affairs before the Subcommittee on International Economic Policy and Trade of the Committee on International Relations, U.S. House of Representatives, February 21, 1978.

agreements, suggested that during the 1963-1972 period, the agreements achieved success in moderating the wide price fluctuations characteristic of coffee. However, the same report also concluded that such stabilization was reflected in higher prices to the U.S. coffee consumer.<sup>40</sup>

The Brazilian frost in July 1975 brought about a precipitous decline in global supply from which there has not yet been a full recovery. The consequences of that frost—depletion of stocks and sharply higher market prices—has meant that the current International Coffee Agreement is largely a standby arrangement, with export quotas remaining in suspense until prices fall to the trigger level (i.e., between 63.5¢ and 77¢ per pound). Interestingly enough, the United States has considered the employment of export quotas for coffee as a *stimulus* to investment and to new production in coffee and thus to the accumulation of a higher level of world stocks entering the market. In the two previous coffee agreements, export quotas were seen as a means of restraining producers from overproduction and overshipments.

That the coffee agreements have helped smooth supply/demand imbalances is more a testimonial to the cooperation of the consuming countries than to the member producing countries—since, as indicated, enforcement of past export quotas has been largely the responsibility of importing countries. In this respect, the United States as the major coffee consumer has been the principal prop in the enforcement system for coffee.

### 3. INTERNATIONAL AGREEMENTS ON SUGAR

Collaborative efforts to moderate price and regulate international trade in sugar between producers and consumers date back to 1937. But this agreement lasted only three years with another agreement not operative until 1954. Successor agreements were negotiated through 1973, when again a hiatus occurred because exporters and importers could not agree on supply/price terms of a renewed agreement.

Although sugar is one of the most widely produced commodities, most of the output is directly consumed in the country of production. It has been estimated that about 30 percent of global output enters international trade. Moreover, in 1974 more than half of the internationally traded sugar was covered under special arrangements such as those covering U.S. imports under the Sugar Act, or United Kingdom imports under special Commonwealth sugar arrangements. The International Sugar Agreements in the past thus covered only that part of sugar production traded in the residual "free" market.

Although the United States was a signatory to the 1953 and 1958 Agreements, it did not adhere to the 1968 Agreement because U.S. membership was considered unnecessary either to influence the operation of the Agreement or to protect U.S. interests (virtually all U.S. sugar imports were covered by country quotas under the U.S. Sugar Act). With the expiration of the Sugar Act and the Commonwealth Sugar Agreement, the free market for sugar has grown rapidly. It is now estimated that the residual free market accounts for about 75 percent of world sugar trade.

<sup>40</sup> International Commodity Agreements, A Report of the U.S. International Trade Commission to the Subcommittee on International Trade of the Committee on Finance, U.S. Senate, November 1975, p. 92-93.

The economic provisions of the 1968 Sugar Agreement were based upon export quotas with price triggers designed to adjust the supply and demand on the "free market." Unlike other commodity agreements, the 1968 Agreement also contained a supply commitment whereby the exporting countries would supply importing members with a specified amount of sugar, at a fixed price, when "free market" quotations rose above that price. No provision was made for a corresponding purchase commitment price to defend the floor.

The 1968 Agreement expired in December 1973 and although efforts were made in 1973 to negotiate a new agreement, disputes between exporters and importers on a revised supply commitment price blocked the effort.

Sugar supply/demand imbalances have been reflected in pronounced price changes. In the years immediately preceding 1974, world consumption exceeded output and thereafter increased output plus sugar substitutes (such as high-fructose corn syrup) greatly increased world stocks, so that there is now an oversupply with world prices currently below production cost levels in the United States.

The supply situation for sugar currently is the reverse of coffee, which has prompted efforts for a new agreement which would encourage stockholding by sugar producers to buoy up world prices. Negotiations on a new International Sugar Agreement began in early 1977 and were successfully concluded by October. The U.S. agreed to join the new Agreement, which went into effect January 1, 1978. (Efforts by the Administration to secure ratifications of the Agreement by the Senate and enactment of implementing legislation by the Congress bogged down in the last session largely on the technical issues of the Agreement's relationship to domestic price support for sugar. The Administration, however, has indicated it will press vigorously for such action by the 96th Congress.)

The economic provisions of the 1977 International Sugar Agreement call for a system of nationally held but internationally coordinated stocks combined with export controls as a supply management mechanism. To defray the costs of stockholding by sugar exporting members, a system of nominal fees collected on world trade in sugar is called for which it is hoped will enable establishment of a total world stock of up to 2.5 million tons. The new Agreement establishes a price range for sugar of 11¢ to 21¢ per pound, with stocks being accumulated when prices are low over the next three years, and then being disposed of when world prices rise above the trigger level of 19¢ per pound. Thus, stocks would be accumulated and removed from the market at low prices, being released to the market only as a defense at the maximum price range.

The Agreement has obvious domestic overtones for the United States in view of the fact that the United States not only is a net importer (absorbing about one-fourth of the internationally traded sugar) but is also a large sugar producer. Agreement advocates suggest that the successful operation of the new agreement will enable the U.S. import prices to rise sufficiently so that the President can lift special import charges imposed on sugar as part of the domestic price support program. In this sense, states a senior State Department spokesman, "The sugar agreement can provide the same stabilization benefits to producers as a domestic support program, without signif-

icant budgetary expenditures." This official also considers the sugar agreement as perhaps "the clearest example of an international agreement which provides significant domestic economic benefits to the United States."<sup>41</sup>

Whether the new Agreement will succeed any more than the former agreements in achieving their objectives remains to be seen. Ongoing administration and enforcement will involve many technical issues relating to stockholding and financing, division of market shares among exporting members, and treatment of preferential arrangements.

#### 4. INTERNATIONAL AGREEMENTS ON COCOA

The International Cocoa Agreement was adopted at a U.N. Cocoa Conference October 20, 1972, and entered into force June 30, 1973. The agreement was for three years and provided for export quotas for countries producing more than 10,000 tons of cocoa annually, and for a buffer stock with a maximum capacity of 250,000 tons. A minimum and maximum price range was specified in the agreement, with buying and selling operations of the buffer stock tied to the relationship between this price range and the market indicator price of cocoa. Funds to operate the buffer stock were raised through an export level of 1¢ per pound.

The second agreement was negotiated in October 1975 and entered into force on October 1, 1976. Economic features of the present agreement are essentially extensions of those in the previous agreement, with provision of some upward revision in nominal price ranges.

Neither the first nor the current agreement has ever been tested, largely because market prices have consistently exceeded the maximum prices set by the respective agreements as a consequence of global supply deficiencies. Unlike most agricultural commodities, cocoa is a product in which relatively few countries dominate production. Moreover, there has been a continuing decline in world production due to crop conditions, disease of cocoa trees in West Africa and limited new plantings. Countries have never needed to accumulate cocoa stocks for support operations, but were this necessary it would present technical problems. Because of poor storage in the tropical producing countries, the cocoa agreement provides for storage in the consuming countries.

Despite the political advantages which might be derived from U.S. participation in an international agreement on cocoa, the United States declined to join both past agreements. The decision was based on a rightly held conviction that the agreements were unnecessarily cumbersome and rigid with respect to the provisions dealing with export quotas, price ranges and other features such as the voting system. The U.S. has felt the Cocoa Agreement is deficient also in not addressing the matter of stimulating global production to overcome supply deficiencies. Indeed, until world production has increased enough to allow stocks to replenish and prices to fall within the agreement price ranges, the buffer stock provisions of the International Cocoa Agreement will remain inoperative. Nonetheless, the International

<sup>41</sup> E. Allan Wendt, Director of the Office of International Commodities, U.S. Department of State in a speech to the Society of Mining Engineers of the American Institute of Mining, Metallurgical and Petroleum Engineers, Denver, Colorado, February 27, 1978.

Cocoa Organization headquartered in London, which monitors operation of the International Cocoa Agreement, continues to build its buffer stock fund by collecting the 1¢ per pound export levy.

Presumably when prices decline to the levels prescribed in the agreement, the purchasing and storing of buffer stocks would commence. However, this now appears an unlikely prospect. In summary, the International Cocoa Agreement provides for a buffer stock operating to stabilize prices. In actual practice, the emphasis in the current agreement seems to be on export quotas aimed at levels of production which will yield prices above the long term market level.

The United States is participating actively in negotiations on a new International Cocoa Agreement and meetings were slated for mid-December 1978 in London and Geneva to draft the articles on the economic provisions of a new agreement. The U.S. delegation will seek appropriate modifications in these provisions, but it is still questionable whether the final agreed language will meet all the U.S. prior objections and enable us to agree to join the new agreement. Certainly there will be pressure on the United States to do so.

## VII. THE FIFTH INTERNATIONAL TIN AGREEMENT: SYMBOL OF NEW INTERNATIONAL COMMODITY AGREEMENTS?

### *A. Rationale for U.S. Participation*

The International Tin Agreement (ITA) is unique in that it is the only extant agreement involving a primary metal and it is the only agreement involving an internationally owned and managed buffer stock which has functioned in the market over a long period. Opinions differ on how well it has functioned to carry out its stated objectives but unlike most commodity agreements, the International Tin Agreement has proved to be a durable arrangement for the regulation of international trade in tin, having been continuously in effect since 1956 when the first agreement was instituted. Since then it has been successively renegotiated four times, each for a five year period.

Virtually all consuming and producing nations (with the notable exception of the People's Republic of China) now participate as members, although the United States had been a conspicuous consumer holdout until the Fifth International Tin Agreement which went into effect July 1, 1976.

The economic rationale for the U.S. decision to join the Fifth Agreement, after participating in the negotiating conference in May 1976, had several elements:

Recognition that tin is an essential raw material for which the United States is almost completely dependent on imports.<sup>42</sup>

While there are substitutes, tin is of major importance to certain domestic industries.<sup>43</sup>

The United States had a large strategic stockpile of tin metal (amounting to over 200,000 metric tons, of which some 168,000 tons

<sup>42</sup> In 1977, our net import reliance as a percent of apparent consumption was 86 percent. Recycled tin in past years has accounted for up to 20 percent of total consumption but the proportion is declining. Two domestic companies also produce an undisclosed quantity of tin concentrates (from a placer deposit in New Mexico and as a by-product of a molybdenum mine in Colorado). In some years, authorized disposals from the Government stockpile also have been significant in relation to total apparent consumption (e.g., 30,747 metric tons out of 79,216 metric tons in 1974).

<sup>43</sup> In 1977, of total U.S. consumption of 65,700 tons, cans and containers took 31 percent, electrical uses 17 percent, construction 14 percent, and transportation uses 13 percent.

were considered surplus at the end of 1977) which gave the United States a comfortable cushion against future shortages; yet its use in such situations was not without problems needing congressional approval and, as a practical matter, coordination with the ITA.

Internationally traded tin had displayed considerable price instability (with underproduction and rising prices more typically experienced) in spite of operations to moderate such price gyrations by the International Tin Buffer Stock.

Only intervention by U.S. stockpile sales of tin prevented more pronounced upward price thrusts.

If the United States were to lend its direct support to buffer stock operations, the Agreement could be made to function much more effectively. By joining the Agreement, the United States would participate in the International Tin Council decisions and help to implement multilateral actions to insure production so as to balance consumption requirements—thus moderating price fluctuations with benefits to both consumers and producers.

The U.S. decision to join the Agreement was taken after prolonged interagency consideration and even though Administration officials took pains to stress the economic rationale for the action, there were undoubtedly strong foreign policy overtones, keeping in mind the important political stake in our relationships with the seven producing members of the Agreement, i.e., Malaysia, Bolivia, Thailand, Indonesia, Nigeria, Zaire and Australia. Significantly, the U.S. decision was announced by then Secretary of State Kissinger in a major policy speech to the Seventh Special Session of the U.N. General Assembly, September 1, 1975.

According to a study by the U.S. International Trade Commission, the primary factor for the U.S. rejection to become a signatory to the first four agreements was the opposition of tin consumers, notably the tin plating industry which considered the International Tin Council's operation as being "virtually exclusively in the interests of tin producing countries." A secondary contributing factor, according to the ITC's analysis, was the influence which could be exercised by the International Tin Council over the strategic stockpile.<sup>44</sup>

These factors unaltered but overridden in the Administration's consideration of the Fifth Agreement, nonetheless made the Administration wary of congressional review.

The Fifth Tin Agreement called for consumer contributions to the buffer stock that would involve new U.S. commodity policy precedents and would complicate Senate ratification. So the Administration decided then against such action and it stressed in the ratification proceedings that the United States was not required by the Agreement to make any contribution and would not do so.

The Administration may not have intended to establish the precedent of a U.S. contribution to a buffer stock but both economic and political considerations soon compelled a change in thinking. For one thing, the Third World nations were openly voicing their disappointment that the United States would not help finance an established buffer stock, and thus the political mileage gained by our act of joining the Agreement was being eroded. For another, economic logic dictated that a larger buffer stock would contribute substantially to the im-

<sup>44</sup> *International Commodity Agreements, op. cit.*



proved working of the Agreement, which the United States as a full member now had a responsibility to help bring about.

Again, both political and economic considerations were weighed, this time by a new administration anxious to adopt a more responsive posture to the Third World. The decision in favor of making a contribution again was justified on valid economic grounds, but foreign policy considerations of the option were indicated by the fact that Secretary of State Vance used the occasion of a speech to the Paris Conference on International Economic Cooperation on May 30, 1977, to make known the Administration's decision.

Legislation to authorize such a contribution was not enacted in the last session of Congress<sup>45</sup> and it is certain to be reintroduced in the 96th Session and, again, will be strongly supported by the Administration.

The significance of the U.S. decision is that it sets a precedent for U.S. contributions as a consumer to buffer stocks (previously financed solely by producers in international commodity agreements that provided for stocks). The U.S. decision (as reflected in the legislative proposals of the last session) also establishes a precedent that such contributions can be made in the form of commodity withdrawals from the U.S. strategic stockpile, rather than cash, which involve a principle of using the stockpile for economic purposes.

The U.S. participation in the Fifth International Tin Agreement (ITA) and within its administrative arm, the International Tin Council (ITC), engages the United States in an international cooperative effort to stabilize the tin market which some see as a model for the U.S. with respect to other commodities, particularly in the metals field. Others see it fraught with many political and economic liabilities for the United States. To Gordon W. Smith,<sup>46</sup> the Fifth International Tin Agreement "has the potential to become the first truly effective international commodity agreement based on buffer stocks and having price stabilization rather than higher producer prices as its primary goal." Others have viewed the International Tin Agreement "as a benevolent producers' cartel . . . which in no sense should serve as a beacon light or a model to be emulated by potential agreements in other commodities."<sup>47</sup>

### *B. Is the Fifth International Tin Agreement Workable?*

The Fifth Tin Agreement aims at the stabilization of tin prices and for this purpose, its governing body, the International Tin Council, attempts to hold prices within a specified maximum/minimum price range by the operation of a buffer stock which is set at a nominal level of 40,000 metric tons, half of which is to be contributed on a mandatory basis by the producing countries, with the remaining half to be contrib-

<sup>45</sup> Legislation proposed in the last Congress would have authorized the Administrator of the General Services Administration to transfer up to 5,000 metric tons of tin metals to the International Tin Council. This would correspond with our share of the 20,000 metric tons specified in the agreements as to be voluntarily forthcoming from consumer nations either in cash or metal. The equivalent of about 4,000 metric tons has been thus far pledged or contributed by six other consumer nations.

<sup>46</sup> Gordon W. Smith, Department of Economics, Rice University, Houston, in his testimony, February 15, 1978 before the Committee on International Relations, Subcommittee on International Economic Policy and Trade, House of Representatives, on H. R. 9486 regarding a U.S. Contribution to the International Tin Buffer Stock.

<sup>47</sup> Robert A. Kilmarx, Director, Defense and Business Research Center, The Center for Strategic and International Studies, Georgetown University, Washington, D. C., in his testimony, February 15, 1978.

uted on a voluntary basis by the consuming countries. The ITC has the authority to institute export controls to curtail available supplies when necessary to support the floor price.<sup>48</sup>

In practice, the effectiveness of the International Tin Agreement as an instrument for stabilizing the tin market has been more successful in supporting sagging tin prices than in supporting prices in the upper level. Periodically, floor and ceiling prices are reset by the ITC to adjust for market changes. Ideally, these ranges can be set lower, but in practice readjustment of floor and ceiling prices has almost always been upward. Indeed, during the life of past agreements, there was frequent resort to export controls in periods of slack demand which proved very effective in protecting the floor (the only time that the ITC floor price was breached was in 1958).

Such actions by the Tin Council, however, while taken to guard against overproduction also added to the likelihood of future shortages. (About three-fourths of world production is from alluvial mines primarily in Southeast Asia, and typically, production has been unable to rebound quickly after removal of export controls.) Even though present world consumption of tin has grown slowly, estimated at only 1 to 1½ percent per annum, the supply of new primary tin has not kept pace with consumption. Contributing factors have been the restrictive production, taxation and investment policies of many of the producing nations. The result of all these disincentives to production is that tin prices have followed an almost consistent upward trend since the mid-1950's. Indeed, during periods of rapid price rises, such as the 1964-1965 and 1973-1974 periods when the ceiling price could not be held because of exhaustion of the buffer stocks supply of metals, only the intervention of disposals from the U.S. strategic stockpile kept prices from going even higher.

In the past, the International Tin Council had a ready solution to threats to the ceiling. It increased the floor and ceiling range to be more in line with market prices. The Council seems again to be following this pattern, even though the United States has outspokenly opposed such action since its participation in Council decisions.

The United States has argued, and with good reason, that floor prices should track with longrun production costs and that raising floor prices to track with market prices merely perpetuates supply instabilities that are tied to the use of export quotas and other production restrictive practices. Raising floor prices to help the least efficient producer merely strengthens inefficient producer operations and brings onto the world market tin that is artificially expensive.

U.S. officials readily acknowledge the deficiencies of the ITC in that it has not been able to moderate upward price fluctuations and that it has had a tendency toward excessive use of export controls which have had a retarding effect on production growth.

Is the solution simply to provide the Tin Council with a larger buffer stock? Again, most observers would agree that additional resources available for stocking operations would be helpful in moder-

<sup>48</sup> The Fifth International Tin Agreement also states that the Tin Council may borrow for purposes of the buffer stock on the security of the tin it holds and on this basis it is anticipated that a buffer stock of 40,000 tons could yield a total stock of perhaps 70,000 tons. Thus, say the supporters of a U.S. contribution, were the 20,000 tons obtained from consumers, it would enable the buffer stock to expand its total capacity to a level sufficient to cope with any threats to ceiling prices. Opponents argue that the size of the buffer stock is not the problem and that higher prices can be avoided by increasing supplies.

ating price fluctuations. There are differences in views over whether a buffer stock of any size would alter the basic producer attitude toward periodic upgrading of floor prices which are seen as necessary to maintain production. In this respect, as one government official has noted, "The ITC's decision on the appropriate price range to trigger market intervention activity are a basic determinant as to whether the Agreement stabilizes prices or fundamentally alters market trends."<sup>49</sup>

Some observers have no doubt which philosophy is guiding Council decisions. Even though the Council is a producer/consumer forum, Robert A. Kilmarx<sup>50</sup> believes the "tin market is . . . partially monopolized with prices near the level which maximizes producer profits."

### *C. The U.S. Experience in the International Tin Council: An Assessment*

In the two years since the United States participated in the International Tin Agreement and in the workings of the International Tin Council, this country has seen a lifting of floor and ceiling prices three times. In December 1976, the floor price was increased 7.5 percent and the ceiling price by 10.4 percent and in July 1975 there was another increase of 11.6 percent and 13.2 percent respectively. On July 17, 1978, the Tin Council for a third time effected an 11.1 percent increase in the floor price and a 13.3 percent increase in the ceiling price.<sup>51</sup>

The debates on these price range increases within the International Tin Council reflect the divergent viewpoints of producers and consumers and also point up the political and economic frustrations of U.S. participation. A Commerce Department official paints a realistic picture:

Producers have argued that the floor price should be set high enough to cover costs of the highest-cost-producer, including royalties and taxes, and provide a profit for investors; this argument is essentially that the floor price should serve as a guarantee of profitability to prospective investors. The producers further suggest that the ceiling price should bracket current market prices. The U.S. and some other consumers have argued that tin mine production has become largely unresponsive to prices due in major part to producer taxation and investment policies. We have pointed out the inappropriateness of increasing the price range under these circumstances, and that governments of producing countries should adjust their policies to permit supply to become more responsive to price.<sup>52</sup>

The U.S. experience in participating in the deliberations of the International Tin Council over the past two years does not negate the view that the Agreement can be a helpful influence in the tin market. This, however, will depend on how responsively the Tin Council acts with respect to pricing and measures to correct current supply deficiencies.

The Tin Council consists of representatives of 7 producing countries and 22 consuming countries. Each exercises a voting share weighted by its importance as a producing or consuming country, and a dis-

<sup>49</sup> Antonio J. Macone, Associate Director, Office of International Trade Policy, Department of Commerce, in testimony, February 15, 1978 to Committee on International Relations, House of Representatives.

<sup>50</sup> Robert A. Kilmarx, *op. cit.*

<sup>51</sup> The new floor prices pegged at 1350 ringgits per picul in Penang and a ceiling price of 1700 ringgits (equivalent to \$5.40 per pound). This ceiling price has been pierced by recent market price which has exceeded 1950 ringgits per picul.

<sup>52</sup> Antonio J. Macone, *op. cit.*

tributed majority of the votes in both consumer and producer country groups is required to carry decisions taken by Council by vote. On this basis, the United States (with 26 percent of the votes) plus Japan, Germany and the United Kingdom can collectively block any action by the Council. However, the Tin Council prefers actions by consensus and, until the U.S. entry price changes, were never made by formal ITC vote.

The mood of the Tin Council has notably changed since the U.S. entry. According to one press report "the hardline attitude" by the United States has forced several votes, with council meetings being "characterized by tension and a considerable amount of bitterness on the part of producers ever since the United States joined the Council . . ." <sup>53</sup>

A recent article is even more pointed; the United States, West Germany, Japan and Britain "have come to be known as the 'gang of four' among some producer delegates." They "suffer a certain degree of schizophrenia because they are great believers in the free-market system and yet, through political circumstances, they find themselves part of an agreement which involves market intervention." <sup>54</sup>

U.S. officials acknowledge their problems and frustrations. One U.S. participant in past ITC meetings acknowledged that "Some producers look on the buffer stock operations as a market support mechanism," but he considered U.S. participation as having exercised a "moderating influence" on the Council. <sup>55</sup>

This is the basic dilemma for the United States. Having joined the tin agreement on the basis of the expressed economic merits, we are insisting on a principle of mutual consumer/producer responsibility to make it a workable agreement to achieve "short-term stabilization as well as long-term assurance of reasonably priced supply." Such mutual responsibility, however, seems largely unrealized. Yet, if we continue to insist on it, there may be political costs. Playing a leadership role for constructive action in the Tin Council risks eroding much of the political goodwill engendered by the U.S. original decision to join the Agreement. Yet, the question of whether the U.S. interest was best served by joining the Agreement is now moot. We participate, and we should try to maximize the welfare of consumers and producers. It is still premature to draw conclusions on this score, but certainly our experience in the Tin Agreement indicates the desirability of a country's policy approach and thorough advance examination of cost/benefits of other commodity agreements it may be asked to join.

## VIII. CONCLUSION: DIRECTIONS FOR U.S. COMMODITY POLICY IN THE 1980's

The Carter Administration has sought to defuse the confrontational stance between the First and Third Worlds on commodity issues by adopting a conciliatory policy toward the UNCTAD integrated program on commodities. As has been discussed, this program depends on the establishment of a host of international commodity agreements with the common fund—capitalized by assessments on

<sup>53</sup> Reporter Tom Walsh quoting a source in an article on the ITC in *American Metal Market* of July 17, 1978.

<sup>54</sup> Alan Spence in a *Wall Street Journal* article on the ITA published February 13, 1978.

<sup>55</sup> Walter Lenahan, Deputy Chief, Industrial and Strategic Materials Division, U.S. Department of State, as quoted in *American Metal Market*, August 23, 1978.

governments—acting as an advance and exclusive source for funding such agreements.

Buffer stocking operations are envisaged by both the First and Third Worlds as a mechanism for moderating price fluctuations under the individual commodity agreements but whereas it is only one mechanism among many for possible use in the UNCTAD catalog (i.e., as set forth in Resolution 93), it is central to the developed countries—and to the United States—views of how the commodity agreements would function. Indeed, U.S. policy has now tacitly accepted that a buffer stock operation is the preferred basis for any international commodity agreement, that the United States has a responsibility, whether as a consuming or producing member nation, to help finance such buffer stocks, and that if buffer stocks are to be utilized to influence market price, the United States should exert leadership to ensure that sufficient stock for effective operation is accumulated.

That this policy line represents a significant shift from that of the previous Administration is readily apparent from a comparison of statements by responsible policymaking officials in the current and previous Administrations.

In 1976, the Assistant Secretary of the Treasury for International Affairs, Gerald L. Parsky, minced no words in opposing commodity agreements and economic stocking arrangements. He stated:

Our system relies primarily on the functioning of markets to identify demand and the necessary production to satisfy that demand at prices that clear the market . . . We believe that government's interference in the operation of markets should be limited to those activities which are essential in promoting efficient allocation of resources to meet the economic needs of its citizens. At the same time, we are willing to consider proposals to solve individual commodity problems on a case-by-case basis. We have steadfastly adhered to that policy, in spite of strong efforts by developing nations to launch negotiation of a series of new commodity agreements to maintain or increase commodity prices—without economic analysis of the dynamics of each individual commodity—through buffer stocks and a common fund for financing.<sup>66</sup>

Two years later, his successor at the Treasury Department, C. Fred Bergsten, had this to say on the subject:

It is often argued that the market provides the optimal degree of price stability for commodity trade. Unfortunately, this is not always the case. The direct benefits of reducing commodity price fluctuations accrue to all buyers and sellers, whether or not they individually contribute to the cost of the stabilization arrangement; hence the incentive to individual market participants to contribute to the cost of stabilization is negligible, and the market alone will not call forth the appropriate institutions. In addition, the indirect benefits of price stabilization—notably the reduction of overall inflation rates—extend well beyond the universe of participants in the commodity markets themselves. Thus, price stability can be considered a public good and an appropriate target for governmental action.<sup>67</sup>

Indicated here is pronouncement of a much more activist Administration policy; it is not simply a “hands-off” policy of reacting to proposals for commodity agreements, but one of designing agreements in negotiating conferences which would provide net economic benefits to the United States, thus enabling the United States to join them.

Assistant Secretary Bergsten subsequently explained this new commodity policy initiative in a speech to corporate executives noting that the Carter Administration had “adopted a positive and open

<sup>66</sup> Statement before the Subcommittee on Materials Availability, Joint Committee on Defense Production, June 9, 1976.

<sup>67</sup> Remarks before the 1978 Financial Conference of the American Mining Congress, Phoenix, Arizona, April 7, 1978.

attitude toward the negotiation of individual commodity agreements to stabilize price.”<sup>58</sup> As a result, Third World spokesmen were encouraged by what they saw as a “perceptible shift” in the U.S. thinking toward international commodity agreements.<sup>59</sup>

What type of international commodity agreement could provide net economic benefits to the United States? Again, Assistant Secretary Bergsten has the Administration’s answer:

We believe price stabilization agreements should operate wherever possible through buffer stocks. Bought when prices are low, sold when they are high, within an agreed price range, buffer stocks can be more effective than any other approach in stabilizing prices without distorting markets for production patterns.<sup>60</sup>

On this point, Assistant Secretary Bergsten’s view contrasts sharply with that of his predecessor, Gerald L. Parsky, who stated:

Although in theory, stockpiles can play a valuable role in reducing excessive volatility in certain markets, we have found in practice that stockpiling to stabilize international commodity trade has had little impact on U.S. markets. For example, the operation of the International Tin Buffer Stock has had no appreciable effect on U.S. prices of tin . . . Buffer stocks are attractive because of their theoretical simplicity—buy low and sell high. In practice, however, buffer stocks are usually supplemented by direct supply management, usually export or production controls, in order to limit the stockpile funding requirements . . . A severe operational problem is the correct ‘reading’ of the market to permit timely purchases and disposals. Unless a manager can forecast the market trends accurately, he will not be able to counteract market forces and may even accentuate them. In practice, then, the operation of international buffer stocks is very difficult.<sup>61</sup>

A comparison of statements by the top State Department commodity policymaking official, Assistant Secretary Julius L. Katz, is also revealing in this regard.

In 1972, Julius L. Katz, then Deputy Assistant Secretary, voiced open skepticism “of the general utility and workability of commodity arrangements that seek to deal primarily with prices.” Noting that the countries in quest of commodity agreements are generally those adhering to “a philosophy which seeks to regulate and to organize markets,” he emphasized “the U.S. attitude seeks to avoid interference in markets except where there is a demonstrated need.” He noted that while the United States would consider commodity arrangements proposals on a case-by-case basis, “We will view with skepticism arrangements which seek to deal only with the superficial manifestation of a problem, such as prices, and which seek to do so through trade restrictive devices.”<sup>62</sup>

Assistant Secretary Katz on February 21, 1978 reflected the Carter Administration’s more positive view when he stated:

International price stabilization arrangements should be considered for specific commodities where such arrangements are feasible and appropriate. Where markets do not permit smooth adjustments to shifts in supply and demand, there may be a case for international agreements to improve the way a particular market operates . . . Ideally, we would prefer stabilized commodity prices through the operation of internationally constituted and financed buffer stocks . . .<sup>63</sup>

While the Administration’s economic rationale for commodity agreements is that they can enhance the market mechanism, provided the

<sup>58</sup> Remarks before the Tenth Washington Conference for Corporate Executives of the Council of the Americas, Washington, D.C., June 28, 1977.

<sup>59</sup> As for example, Peter Lal of Malaysia, Chairman of the International Tin Council, as quoted in the *American Metal Market*, May 17, 1977.

<sup>60</sup> Remarks, April 7, 1978, to the American Mining Congress, *op. cit.*

<sup>61</sup> Statement before Subcommittee on Materials Availability, *op. cit.*

<sup>62</sup> Remarks, October 4, 1972, *op. cit.*

<sup>63</sup> Statement, February 21, 1978, *op. cit.*

agreements are properly negotiated and constructed, it is also apparent that the Administration is increasingly aware that the developing countries do not necessarily share the U.S. view that commodity agreements must avoid tampering with the market mechanism.

It should be noted that Assistant Secretaries Katz and Bergsten, among other Administration officials, have called attention to the fact that buffer stock operations are not feasible for all primary raw materials. They have also emphasized that market sharing arrangements such as export quotas may be acceptable alternatives only if the objective of such arrangements is to correct temporary supply demand imbalances, not to perpetuate them.

Judging from the historical record of agreements in such commodities as coffee, cocoa and tin, the developing countries as producers seem inclined to view market sharing arrangements as a means of preventing price declines in order to maintain production. But what this approach entails is keeping up prices at the level approximating the cost of production of the least efficient producer.

There is, therefore, a fundamental divergence in approach as between the developed countries, as consumers, and developing countries, as producers, to the operation of international commodity agreements. Political considerations in recent years have propelled the United States to downplay the economic liabilities of commodity agreements and to emphasize the possible economic benefits of such agreements if they are properly designed and operated. Here is an inconsistency in U.S. policy. The United States does not publicly admit that its commodity policy initiatives concerning the UNCTAD integrated program are politically motivated. Yet, the U.S. proceeds on the basis of trying to maximize economic results out of essentially weak economic arrangements. Thus, the U.S. delegations to negotiating conferences for commodities on the UNCTAD list, such as copper and rubber, inevitably are forced to take positions which the United States may consider to be constructive but which developing countries may view in quite another vein. This process entails risk of diluting political benefits, if any, which the United States gains from its original commodity policy initiatives.

The analysis of North-South commodity issues presented in this paper leads to several important conclusions:

(1) The thrust of Third World aspirations in commodities involves governmental intervention in pricing with the aim of increasing total export revenues rather than simply moderating short-term fluctuations;

(2) However, such actions in commodities would result in income transfers to countries least in need and actually harm those most in need;

(3) The United States is by no means self-sufficient in raw materials, and imports are necessary to meet our growing consumption requirements. Yet our requirements for raw materials—aside from the mineral fuels—are not critically dependent on supply from Third World countries. We have an interest in widening access to supplies of Third World raw materials, but it should not be the compelling rationale for U.S. adherence to commodity agreements which, in fact, give us no assurance of such wider access to supply; and

(4) Experience with most commodity agreements indicates their inherent instability due to the irreconcilable and often clashing pricing objectives between the consumers and producers. Evidence is that

where commodity agreements have worked for periods to reduce short-term price fluctuations, success has been largely due to the willingness of one or two dominant trading nations to make the respective agreement work by assuming a disproportionate share of the costs in making necessary demand-supply shifts.

With respect to the above conclusions, the advanced industrial countries are themselves important exporters of many of the raw materials in the UNCTAD integrated program. Moreover, primary commodities are by no means equally important as export earners to the economies of all developing countries. Only a minority of Third World nations depends on the UNCTAD core commodities for over half of the export earnings. Thus, higher prices for commodities would result in an inequitable distribution of benefits among developing countries. Moreover, higher prices would directly benefit the developed countries such as the United States, Canada, and certain European countries that are also major exporters of agricultural and mineral raw materials. This would certainly not promote a redistribution of income from the richer to the poorer nations. There is no evidence that the more positive commodity policies of the Carter Administration have lessened the stridency of Third World positions with respect to the UNCTAD integrated program. Indeed, it may well be contributing to new tensions by arousing unrealistic expectations for U.S. involvement in commodity market intervention arrangements.

It is reasonable to question whether the United States would not serve its interest best by being more open about the limited possibilities that exist for agreements on commodities other than those in which the United States has already participated.

It is simply unrealistic to expect that the United States will join an agreement on a commodity such as copper which would require huge buffer stocks and the active cooperation of a large domestic mining sector. Indeed, the developing countries should not be optimistic regarding price stabilization agreements for most of the commodities in their integrated program. Commodities such as jute and hard fibers, for example, have their problems rooted in competition from substitutes and the solution here must be directed to expansion of consumption and to new end uses for the product. The historical record indicates that agreements have not been successful in stabilizing prices and that buffer stocks do not provide a panacea. Indeed, it needs to be emphasized that buffer stocks can themselves be a destabilizing influence on market price.

Nonetheless, even if their economic provisions may be considered failures, commodity agreements confer benefits upon consumers and producers by providing a permanent forum for exchanging technical commodity information and by compiling statistics and preparing world demand and supply forecasts. Such international consultations help to bring about a greater transparency of the market, which itself is an important factor in lessening price volatility. The establishment of such institutionalized commodity consultation forums is generally acceptable to the Third World only as a prelude to formal agreements. Nonetheless, the United States should encourage establishment of such forums—but without precommitments on future agreements. The United States should seek their establishment outside the aegis of UNCTAD.

The Administration's policy with respect to Third World commodity issues seems to be based on a reasoning that, even if we feel commodity



agreements will not solve the problems of developing nations, but the Third World wants them badly enough and such agreements do not entail too great a cost for us, the United States should be responsive to their desires and at the same time try to make them workable. But our experience in the UNCTAD discussions on a copper agreement and on a common fund indicates that the ultimate political and economic costs for us are likely to be substantial. In the end, the Third World is likely to feel let down if we do not measure up to their expectations in respect to resource transfers arranged through international commodity agreements.<sup>64</sup>

In this regard, it seems that the United States may derive more long term political benefits vis-à-vis its relationships with the Third World by being responsive in other directions.

TABLE 1.—DEVELOPING COUNTRY DISTRIBUTION OF POPULATION AND GNP, 1975

[Total GNP figures and average GNP per capita figures in 1975 U.S. dollars; population in millions, population distribution in percentages]

Country group by income per classification:	Number of countries	Population	Percent of world population	GNP (billions)	Average GNP per capita
Low income—Less than \$200.....	28	959	24.6	\$131	\$140
Lower middle income <sup>1</sup> —\$200 to \$499.....	40	1,295	33.2	457	350
Middle income <sup>2</sup> —\$500 to \$1,999.....	59	576	14.8	590	1,020
Total developing world.....	127	2,830	72.6	1,178	

<sup>1</sup> Countries with per capita income of less than \$200: Afghanistan, Bangladesh, Benin, Bhutan, Burma, Burundi, Chad, Ethiopia, Gambia (The), Guinea, Guinea-Bissau, Haiti, India, Lao People's Democratic Republic, Lesotho, Malawi, Maldives, Mali, Mozambique, Nepal, Niger, Pakistan, Rwanda, Somalia, Sri Lanka, Tanzania, Upper Volta, Zaire.

<sup>2</sup> Countries with per capita income of \$200–\$499: Angola, Bolivia, Botswana, Cameroon, Cape Verde, Central Africa Empire, China (People's Republic of), Comoros, Egypt (Arab Republic of), El Salvador, Equatorial Guinea, Grenada, Honduras, Indonesia, Jordan, Kenya, Korea (Democratic People's Republic of), Liberia, Madagascar, Mauritania, Morocco, New Hebrides, Nigeria, Papua New Guinea, Philippines, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, St. Vincent, Sudan, Swaziland, Thailand, Togo, Tonga, Uganda, Western Samoa, Yemen Arab Republic, Yemen (People's Democratic Republic of), Zambia.

<sup>3</sup> Countries with per capita income of \$500–\$1,999: Albania, Algeria, Antigua, Argentina, Barbados, Belize, Brazil, Chile, China (Republic of), Colombia, Congo (People's Republic of), Costa Rica, Cuba, Cyprus, Djibouti, Dominica, Dominican Republic, Ecuador, Fiji, French Guiana, Ghana, Gilbert Islands, Guadeloupe, Guatemala, Guyana, Hong Kong, Iran, Iraq, Isle of Man, Ivory Coast, Jamaica, Korea (Republic of), Macao, Malaysia, Malta, Mauritius, Mexico, Mongolia, Namibia, Netherlands, Antilles, Nicaragua, Panama, Paraguay, Peru, Portugal, Reunion, Rhodesia, Romania, Seychelles, South Africa, St. Kitts-Nevis, St. Lucia, Surinam, Syrian Arab Republic, Trust Territory of the Pacific Islands, Tunisia, Turkey, Uruguay, Yugoslavia.

Source: World Bank, "Atlas of Population, Per Capita Product, and Growth Rates," 1977.

TABLE 2.—SHARE OF WORLD EXPORTS AND IMPORTS OF COMMODITIES, BY GROUPS OF COUNTRIES, 1975 AND 1976

[Total figures in billions of dollars; world shares in percentages]

	World (billions)		Developed countries (percent)		Developing countries (percent)		Centrally planned economies (percent)	
	1975	1976	1975	1976	1975	1976	1975	1976
<b>EXPORTS</b>								
Primary products.....	\$339.5	\$387.5	39.7	37.9	51.2	53.3	9.1	8.8
Food, beverages, and tobacco.....	104.2	112.1	63.6	61.6	28.3	30.6	8.1	7.7
Crude materials excluding fuels oils and fats.....	66.7	75.8	59.0	59.7	29.3	29.1	11.7	10.6
Mineral fuels.....	168.6	199.6	17.4	16.1	73.9	75.3	8.7	8.2
Manufactured products.....	518.2	601.3	83.8	82.3	6.8	8.1	9.4	9.6
Miscellaneous.....	14.8		58.8		7.0		34.2	
Total.....	872.5	988.8	62.2	64.9	24.1	25.8	9.7	9.3

<sup>64</sup> According to one press report on the latest Common Fund talks in Geneva on November 24–28, 1978, the Group of 77 considered a scaled-down financing offer of the developed nations as "an insult."

TABLE 2.—SHARE OF WORLD EXPORTS AND IMPORTS OF COMMODITIES, BY GROUPS OF COUNTRIES, 1975 AND 1976—Continued

[Total figures in billions of dollars; world shares in percentages]

	World (billions)		Developed countries (percent)		Developing countries (percent)		Centrally planned economies (percent)	
	1975	1976	1975	1976	1975	1976	1975	1976
<b>IMPORTS</b>								
Primary products.....	338.7	387.5	72.9	72.8	18.6	17.6	8.5	7.4
Food, beverages, and tobacco.....	103.7	112.1	65.5	67.4	22.9	20.4	11.6	11.3
Crude materials excluding fuels oils and fats.....	65.9	75.8	74.5	74.7	14.4	13.8	11.1	9.6
Mineral fuels.....	169.1	199.6	76.1	77.4	18.5	18.1	5.4	4.5
Manufactured products.....	519.0	601.3	70.0	64.3	20.1	24.2	9.9	11.5
Miscellaneous.....	14.8							
Total.....	872.5	988.8	70.7	68.2	20.1	21.9	9.2	9.9

Source: United Nations, "Monthly Bulletin of Statistics," August 1978.

TABLE 3.—VALUE OF PRIMARY COMMODITIES AND MANUFACTURES AS A PERCENTAGE OF TOTAL EXPORTS 1960, 1970, AND 1976

	Exports (billions of U.S. dollars)			Percentage of total exports		
	1960	1970	1976	1960	1970	1976
<b>Developing countries:</b>						
<b>Primary commodities:</b>						
America.....	6.0	10.3	23.1	63.2	64.0	46.6
Africa.....	4.7	7.3	12.8	88.7	59.4	30.6
Asia.....	5.8	7.3	20.5	48.7	28.9	12.9
Others.....	.2	.4	1.1	100.0	66.7	78.6
Total.....	16.5	25.3	57.5	61.6	46.6	22.8
<b>Petroleum:</b>						
America.....	3.2	3.7	19.5	33.7	23.0	39.3
Africa.....	.3	4.1	27.3	5.7	33.3	65.2
Asia.....	4.2	10.1	103.4	35.3	39.9	65.0
Others.....						
Total.....	7.7	17.9	150.2	28.7	33.0	59.6
<b>Manufactures:</b>						
America.....	.3	2.0	6.7	3.1	12.4	13.5
Africa.....	.3	.9	1.7	5.7	7.3	4.1
Asia.....	1.9	7.0	34.7	16.0	27.7	21.8
Others.....		.1	.3		16.7	21.4
Total.....	2.5	10.0	43.4	9.3	18.4	17.2
<b>Miscellaneous:</b>						
America.....		.1	.3		.6	.6
Africa.....			.1			.2
Asia.....		.9	.5		3.5	.3
Others.....		.1			16.7	
Total.....	.1	1.1	.9	.4	2.0	.4
<b>Total exports:</b>						
America.....	9.5	16.1	49.6	100.0	100.0	100.0
Africa.....	5.3	12.3	41.9	100.0	100.0	100.0
Asia.....	11.9	25.3	159.2	100.0	100.0	100.0
Others.....	.2	.6	1.4	100.0	100.0	100.0
Total.....	26.8	54.3	252.1	100.0	100.0	100.0
<b>Developed countries:</b>						
Primary commodities.....	26.0	51.8	129.9	30.4	23.1	20.3
Petroleum.....	3.3	7.6	32.1	3.9	3.4	5.0
Manufactures.....	54.9	160.9	470.1	64.3	71.8	73.3
Miscellaneous.....	1.2	3.9	9.1	1.4	1.7	1.4
Total exports.....	85.4	224.2	641.2	100.0	100.0	100.0

Source: World Bank, "Commodity Trade and Price Trends" (1978 edition).

TABLE 3a.—Value of primary commodities and manufactures as a percentage of total exports, 1960, 1970, and 1978

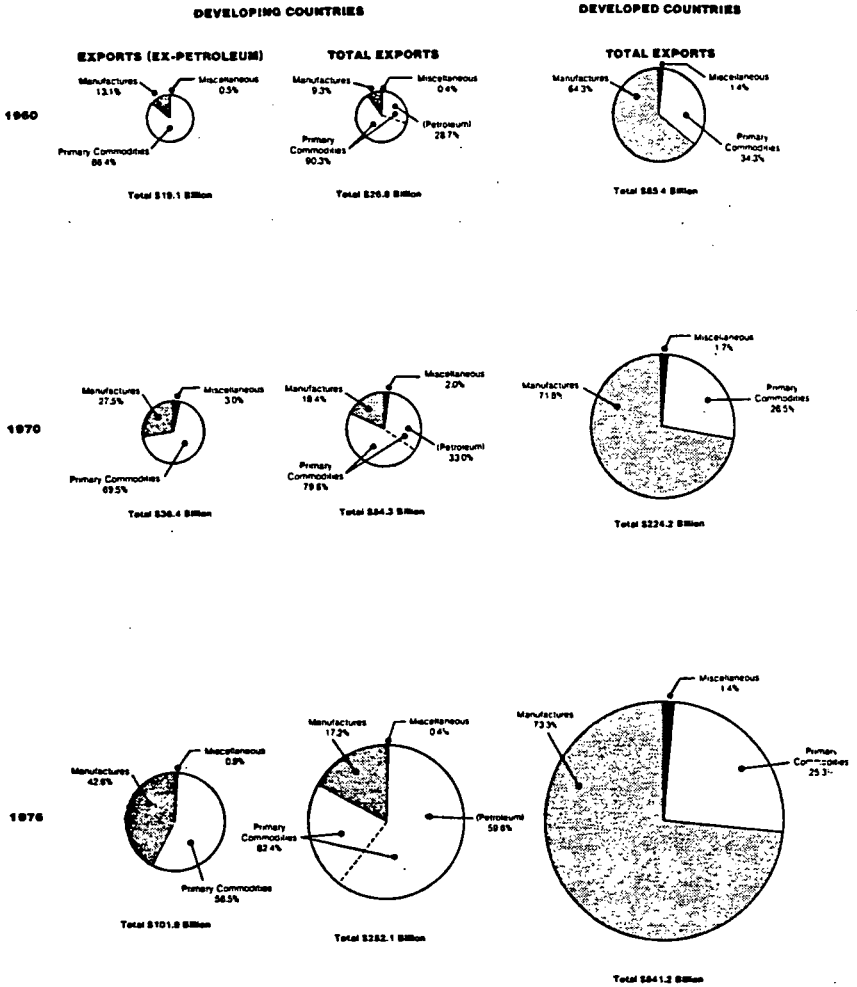
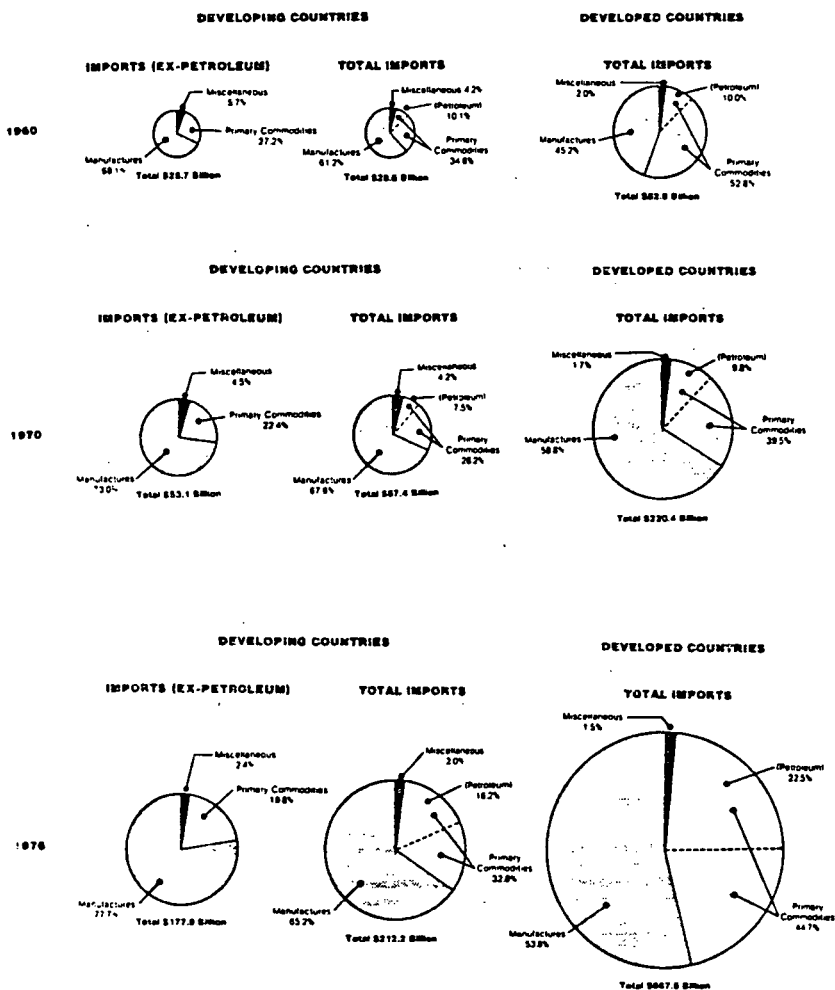


TABLE 4.—VALUE OF PRIMARY COMMODITIES AND MANUFACTURES AS A PERCENTAGE OF TOTAL IMPORTS  
1960, 1970, AND 1976

	Imports (billions of U.S. dollars)			Percentage of total imports		
	1960	1970	1976	1960	1970	1976
<b>Developing countries:</b>						
<b>Primary commodities:</b>						
America.....	1.6	2.9	7.6	17.0	16.9	13.2
Africa.....	1.5	2.2	7.3	23.1	18.5	17.1
Asia.....	3.9	6.6	20.1	31.0	24.7	18.2
Others.....		0.2	0.3		12.5	20.0
<b>Total.....</b>	<b>7.0</b>	<b>11.9</b>	<b>35.3</b>	<b>24.5</b>	<b>20.7</b>	<b>16.6</b>
<b>Petroleum:</b>						
America.....	1.4	1.7	16.1	14.9	9.9	28.0
Africa.....	0.5	0.7	3.3	7.7	5.9	7.7
Asia.....	1.0	1.8	14.5	7.9	6.8	13.1
Others.....		0.1	0.4		6.2	26.7
<b>Total.....</b>	<b>2.9</b>	<b>4.3</b>	<b>34.3</b>	<b>10.1</b>	<b>7.5</b>	<b>16.2</b>
<b>Manufactures:</b>						
America.....	6.1	12.4	32.8	64.9	72.1	57.0
Africa.....	4.3	8.8	31.6	66.2	73.9	73.8
Asia.....	7.1	17.1	73.2	56.3	64.0	66.3
Others.....		0.5	0.7		31.3	46.7
<b>Total.....</b>	<b>17.5</b>	<b>38.8</b>	<b>138.3</b>	<b>61.2</b>	<b>67.6</b>	<b>65.2</b>
<b>Miscellaneous:</b>						
America.....	0.3	0.2	1.0	3.2	1.1	1.8
Africa.....	0.2	0.2	0.6	3.0	1.7	1.4
Asia.....	0.6	1.2	2.6	4.8	4.5	2.4
Others.....	0.1	0.8	0.1	100.0	50.0	6.6
<b>Total.....</b>	<b>1.2</b>	<b>2.4</b>	<b>4.3</b>	<b>4.2</b>	<b>4.2</b>	<b>2.0</b>
<b>Total imports:</b>						
America.....	9.4	17.2	57.5	100.0	100.0	100.0
Africa.....	6.5	11.9	42.8	100.0	100.0	100.0
Asia.....	12.6	26.7	110.4	100.0	100.0	100.0
Others.....	0.1	1.6	1.5	100.0	100.0	100.0
<b>Total.....</b>	<b>28.6</b>	<b>57.4</b>	<b>212.2</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>
<b>Developed countries:</b>						
Primary commodities.....	35.4	65.4	148.4	42.8	29.7	22.2
Petroleum.....	8.3	21.7	150.4	10.0	9.8	22.5
Manufactures.....	37.4	129.7	359.3	45.2	58.8	53.8
Miscellaneous.....	1.7	3.6	9.4	2.0	1.7	1.5
<b>Total imports.....</b>	<b>82.8</b>	<b>220.4</b>	<b>667.5</b>	<b>100.0</b>	<b>100.0</b>	<b>100.0</b>

Source: United Nations, "Monthly Bulletin of Statistics," August 1978.

TABLE 4a.—Value of primary commodities and manufactures as a percentage of total imports, 1960, 1970, and 1976



Source: World Bank, "Commodity Trade and Price Trends," August 1978.

TABLE 5.—IMPORTANCE OF 18 UNCTAD COMMODITIES TO LEADING DEVELOPING COUNTRIES, 1977

[Percentages of total exports]

Country	Cocoa	Coffee	Tea	Sugar	Cotton	Jute	Rubber	Sisal	Copper	Tin	Core 10 total	Bananas	Beef	Rice	Wool	Bauxite	Iron ore	Oil seeds	Core 18 total
<b>Low income countries: 1</b>																			
Afghanistan					42						42								42
Bangladesh							74				74								74
Burma											0			50					50
Burundi		90			2						92								92
Ethiopia		75									75							2	77
The Gambia											0								0
Haiti		45									45					12			57
Malawi			26	6							32								32
Mali					43						43								43
Pakistan					9						9								9
Rwanda		64	7								77			20					29
Somalia										6	6								77
Sri Lanka			51				16				0	10	36						46
Tanzania					13			5			67								67
Zaire	19	42							41		60								60
<b>Lower middle income countries: 2</b>																			
Bolivia											59								59
Cameroon	31	31									62								62
Egypt					27						27			3					30
El Salvador		56			10						66								66
Grenada	36										36	21							57
Honduras	39										39	23	4						66
Indonesia							7				7								7
Jordan											0								0
Kenya		46	17								63								63
Liberia											0						64		64
Mauritania											0						79		79
Morocco											0								0
Nigeria	4										4								4
Papua New Guinea	14	23							46		83						4		4
Philippines				13					7		20								83
Sierra Leone	14	23									20								20
Sudan					57						37								37
Thailand				9			9				37								37
Uganda		93	3		2					7	25								25
Western Samoa	48										98								98
Yemen Arab Republic		18			58						48								48
Zambia									91		76								76
											91								91

See footnotes at end of table.

TABLE 5.—IMPORTANCE OF 18 UNCTAD COMMODITIES TO LEADING DEVELOPING COUNTRIES, 1977—Continued

[Percentages of total exports]

Country	Cocoa	Coffee	Tea	Sugar	Cotton	Jute	Rubber	Sisal	Copper	Tin	Core 10 total	Bananas	Beef	Rice	Wool	Bauxite	Iron ore	Oil seeds	Core 18 total
Upper middle income countries: <sup>1</sup>																			
Algeria.....											0								0
Argentina.....											0								23
Barbados.....					23						23								23
Brazil.....		19		4							23								23
Chile.....										52									52
Colombia.....		56									56								56
Congo.....											0								0
Costa Rica.....		41		3							44	15	6						65
Cyprus.....									1		1								1
Dominican Republic.....	12	25		26							51					3			54
Ecuador.....	4	14									18	14							32
Fiji.....				59							59								59
Guyana.....				28							28			10		39			77
Ivory Coast.....	9	48									57					16			57
Jamaica.....				10							10								26
Malaysia.....							23			12	35							12	47
Mauritius.....				71							71								71
Mexico.....		10		4	4						18								18
Nicaragua.....		33		2	25						55		5						60
Panama.....				9							9	26							35
Paraguay.....		3									3		9					10	22
Peru.....		11		5	3				24		43								43
Portugal.....											0								0
Syrian Arab Republic.....					23						23								23
Tunisia.....											0								0
Turkey.....					16						16								16
Uruguay.....											0		17		23				40
Yugoslavia.....											0								0

<sup>1</sup> According to the 1975 World Bank classification, these countries have a per capita income of less than \$200.<sup>2</sup> According to the 1975 World Bank classification, these countries have a per capita income between \$200 and \$499.<sup>3</sup> According to the 1975 World Bank classification, these countries have a per capita income between \$500 and \$1,999.

Source: Calculated from data contained in the International Monetary Fund, International Financial Statistics, October 1978.

TABLE 6.—U.S. EXPORTS TO DEVELOPING COUNTRIES, BY COMPOSITION, 1977 AND JANUARY-APRIL 1978

[Dollar amounts in billions]

Commodity description	1977			January-April 1978		
	Total to world	Value	As percent of total	Total to world	Value	As percent of total
Agricultural primary products <sup>1</sup> .....	\$16.0	\$5.2	33.0	\$6.0	\$1.9	31
Nonagricultural primary products <sup>2</sup> .....	12.8	3.0	24.0	4.7	1.1	23
Mineral fuels.....	4.2	.7	17.0	.5	.1	24
Manufactured products.....	79.9	38.0	48.0	26.2	11.3	43
Miscellaneous.....	7.3	2.3	32.0	5.6	.7	13
Total.....	120.2	49.2	40.9	43.0	15.1	35

<sup>1</sup> Includes food, beverages, and tobacco.<sup>2</sup> Includes raw materials such as hides, skins, crude rubber, and crude minerals.

Source: U.S. Department of Commerce, Highlights of U.S. Export and Import Trade, April 1978.

TABLE 7.—U.S. EXPORTS TO DEVELOPING COUNTRIES, BY COMPOSITION, 1977 AND JANUARY-APRIL 1978

[Dollar amounts in billions]

Commodity description	1977			January-April 1978		
	Total to world	Value	As percent of total	Total to world	Value	As percent of total
Agricultural primary products <sup>1</sup> .....	\$14.2	\$9.7	69.0	\$5.9	\$4.5	77.0
Nonagricultural primary products <sup>2</sup> .....	7.9	2.3	29.0	3.5	.7	19.0
Mineral fuels.....	44.3	34.1	77.0	14.7	11.0	75.0
Manufactured projects.....	77.8	18.7	24.0	28.1	4.7	17.0
Miscellaneous.....	2.6	.7	29.0	6.4	2.9	46.0
Total.....	146.8	65.7	44.7	58.6	23.8	40.6

<sup>1</sup> Includes food, beverages, and tobacco.<sup>2</sup> Includes raw materials such as hides, skins, crude rubber and crude minerals.

Source: U.S. Department of Commerce, Highlights of U.S. Export and Import Trade, April 1978.



TABLE 8.—U.S. NET IMPORTS OF SELECTED METALS AND MINERALS AS A PERCENT OF APPARENT CONSUMPTION<sup>1</sup>  
 [In percent; based on net imports<sup>2</sup> of metals, minerals, ores, and concentrates; major foreign sources listed in descending order of amount supplied]

Minerals and metals	Major foreign sources (1973-76)	1950	1955	1960	1965	1970	1973	1974	1975	<sup>3</sup> 1976	<sup>4</sup> 1977
Columbium	Brazil, Thailand, Nigeria, Malaysia	100	100	100	100	100	100	100	100	100	100
Mica (sheet)	India, Brazil, Malagasy Republic	98	95	94	94	100	100	100	100	100	100
Strontium	Mexico, Spain	100	98	100	100	100	100	100	100	100	100
Manganese	Brazil, Gabon, South Africa	77	79	89	94	95	98	98	98	98	98
Cobalt	Zaire, Belgium, Luxembourg, Norway, Finland	90	68	66	92	98	98	99	98	98	97
Tantalum	Thailand, Canada, Australia, Brazil	99	100	94	95	96	87	87	81	96	97
Platinum group metals	South Africa, U.S.S.R., United Kingdom	74	91	82	87	78	87	87	83	90	92
Bauxite and alumina	Jamaica, Australia, Surinam, Guinea	55	73	74	85	88	92	92	91	91	91
Chromium	South Africa, U.S.S.R., Turkey, Southern Rhodesia	95	83	85	92	89	91	90	91	89	89
Tin	Malaysia, Thailand, Bolivia, Indonesia	82	80	82	80	81	84	84	84	85	86
Asbestos	Canada, South Africa	94	94	94	85	83	82	87	<sup>5</sup> 82	85	85
Fluorine	Mexico, Spain, Italy, South Africa	33	55	48	77	80	79	81	<sup>5</sup> 85	79	80
Nickel	Canada, Norway, New Caledonia, Dominican Republic	90	84	72	73	71	69	72	72	70	70
Potassium	Canada, Israel	9	0	( <sup>6</sup> )	7	42	53	58	51	61	66
Gold	Canada, Switzerland, U.S.S.R.	25	34	56	72	59	48	63	52	76	60
Zinc	Canada, Mexico, Australia, Peru	41	51	46	53	54	64	59	61	59	58
Antimony	South Africa, People's Republic of China, Bolivia	33	32	43	36	40	50	44	49	54	52
Cadmium	Canada, Australia, Belgium, Luxembourg	17	20	13	20	7	41	46	41	64	51
Selenium	Canada, Japan, Mexico, Yugoslavia	53	18	25	44	11	57	59	66	59	47
Mercury	Spain, Algeria, Mexico, Yugoslavia	87	20	25	49	41	78	86	69	62	46
Silver	Canada, Mexico, Peru, United Kingdom	66	58	43	16	26	66	55	<sup>3</sup> 30	50	42
Barium	Peru, Ireland, Mexico	8	25	45	46	45	37	38	<sup>3</sup> 32	42	40
Tungsten	Canada, Bolivia, Peru, Thailand	80	( <sup>6</sup> )	32	57	50	66	68	55	54	38
Titanium (ilmenite)	Canada, Australia	33	40	22	9	24	28	33	<sup>25</sup>	29	38
Vanadium	South Africa, Chile, U.S.S.R.	4	( <sup>6</sup> )	( <sup>6</sup> )	15	21	43	36	38	37	37
Gypsum	Canada, Mexico, Jamaica, Dominican Republic	28	27	35	37	39	35	37	<sup>34</sup>	35	35
Iron ore	Canada, Venezuela, Brazil, Liberia	11	18	18	32	30	35	37	30	29	33
Iron and steel scrap		2	-14	-24	-17	-25	-21	-19	-27	-22	-11
Copper	Canada, Chile, Peru, Zambia	31	17	( <sup>6</sup> )	15	( <sup>6</sup> )	8	20	( <sup>6</sup> )	12	17
Lead	Canada, Peru, Mexico, Australia	40	39	33	31	22	29	19	11	15	14
Iron and steel products <sup>3</sup>	Japan, Europe, Canada	( <sup>6</sup> )	( <sup>6</sup> )	0	7	4	10	7	9	7	13
Salt	Canada, Bahamas, Mexico, Netherland Antilles	( <sup>6</sup> )	( <sup>6</sup> )	2	5	6	6	7	4	7	8
Aluminum	Canada	17	( <sup>6</sup> )	( <sup>6</sup> )	4	( <sup>6</sup> )	18	4	( <sup>6</sup> )	9	8
Pumice and volcanic clinder	Greece, Italy	3	2	3	5	11	8	7	4	2	5
Cement	Canada, Spain, Norway, Bahamas	( <sup>6</sup> )	1	0	3	3	7	4	5	4	4

<sup>1</sup> Apparent consumption equals U.S. primary plus secondary production plus net imports.  
<sup>2</sup> Net imports equal imports minus exports plus or minus Government stockpile and industry stock changes.  
<sup>3</sup> Revised.

<sup>4</sup> Estimate.  
<sup>5</sup> Net exports.  
<sup>6</sup> Data not available.

Source: U.S. Bureau of Mines, import and export data from U.S. Bureau of the Census.

TABLE 9.—U.S. DIRECT INVESTMENT IN DEVELOPING COUNTRIES, 1977

[In billions of dollars]<sup>1</sup>

	Total	Mining	Petroleum	Manufacturing	Other industries <sup>2</sup>
Latin America.....	27.7	1.6	3.4	10.0	12.8
Africa.....	2.8	.5	1.5	.3	.5
Middle East.....	-3.1	.01	-4.4	.2	1.1
Asia and Pacific.....	6.3	.1	2.5	1.8	1.8
Total developing countries.....	33.7	2.3	3.0	12.2	16.2
Percent of total developing countries.....	100.0	6.7	8.9	36.3	48.0
Developing countries as a percent of world total.....	22.7	32.1	9.8	18.7	35.8
Total world.....	148.8	7.1	30.9	65.6	45.2

<sup>1</sup> Due to independent rounding, column entries may not add to total. Percentages have been calculated in terms of millions of dollars, prior to rounding.

<sup>2</sup> Includes transportation, communication, public utilities, trade, finance, insurance, and all other industries not covered by specific title headings.

Source: U.S. Department of Commerce, Survey of Current Business, August 1978.

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# ADJUSTING TO IMPORTS OF MANUFACTURES FROM DEVELOPING COUNTRIES

By Charles Pearson\*

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## SUMMARY: INTRODUCTION AND MAJOR CONCLUSIONS

Developing countries have shown remarkable ability to expand their exports of manufactures. The growth of these exports, their concentration by commodity and by supplying country, and their prospective diversification, present adjustment problems for industrial countries. The question is not whether the Third World will industrialize, and comparative advantage will shift. Both are happening. The issue is what types of adjustment will become necessary within the U.S., and what policies to deal with these adjustments are desirable.

From a base of \$4.6 billion in 1965, developing country exports of manufactures have increased more than tenfold, to \$55 billion in 1977. Real growth has been at 14 percent per year over the past decade, and is projected to grow by at least 12 percent through 1985. The U.S. absorbs nearly half of the developing countries exports of manufactures to industrialized countries and over 40 percent of their total exports of manufactures. Over 20 percent of U.S. imports of manufactures now come from developing countries, and this share is increasing rapidly.

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Exports of manufactures from developing countries exhibit two other characteristics in addition to rapid growth. First, there has been substantial product diversification in recent years, although in absolute terms, textiles, clothing and consumer electronics are dominant. Second, there has been impressive growth in the number of developing country exporters, although again a small number of East Asian countries are the major suppliers.

There are many ways in which adjustment can be analyzed. This paper attempts to present both a general description of the issues (conceptual, magnitude of adjustment, policy implications), and an empirical analysis of the role of developing countries in recent U.S. trade actions, and the economic characteristics of industries facing an adjustment problem. Thus the paper is both an overview of the problems, and a report of data analysis.

Section one discusses conceptual issues in examining adjustment. The second section provides background data on trends and projections for developing country exports of manufactures to indicate the magnitude of the problem. Section three identifies and analyzes the economic characteristics of industries that apparently face an adjustment burden, and section four analyzes the role of developing countries in recent trade actions—escape clause, countervailing duty, dumping, and adjustment assistance cases. The final section discusses policy questions.

The major conclusions of the study are as follows:

Adjusting to Less Developed Countries (LDC) exports of manufactures is a micro economic problem, although the macro economic situation can make adjustment more or less costly.

Adjustment requirements for individual industries will be substantial, but the adjustment costs to workers who are actually displaced by imports are likely to be much smaller than the projected trade figures imply.

Industries facing a presumptive adjustment burden have unique economic characteristics (e.g. low labor productivity) and these may make adjustment more difficult.

Developing countries are deeply involved in current U.S. trade actions (e.g. escape clause), but the economic characteristics of industries successfully obtaining escape clause relief and adjustment assistance do not conform to a priori expectations.

Trade restrictions in the face of shifting comparative advantage can be costly and ineffective. Positive adjustment policies are preferable.

## I. CONCEPTUAL ISSUES

### *Macro vs. Micro Adjustments*

Do developing country exports of manufactures present a macro or micro economic adjustment problem? Two possible macro candidates for the United States are the trade deficit and aggregate unemployment. A moment's reflection suggests that neither is a credible candidate.

The causes of the current U.S. trade deficit are differential growth rates, sluggish trade response to currency changes, earlier currency market intervention, mainly by Japan, and perhaps oil imports. It is

not legitimate to put responsibility for a trade deficit on imports of one type of commodity (manufactures) from one group of countries (the less developed countries). Oil may be an exception to this general rule because of the inability of OPEC to spend its current earnings in the medium term, and the related inability of exchange rate change between OPEC and the rest of the world to adjust its surplus. Neither of these special features characterizes trade with developing countries. The non-oil exporting developing countries run an overall trade deficit, and a deficit in manufactures, with the world and with the United States. In 1977 U.S. imports of manufactures from developing countries were \$16 billion and our exports of manufactures to them were \$20 billion, giving us a trade surplus in this category of \$4 billion.

It is also difficult to make a persuasive case that imports of manufactures from developing countries create an aggregate employment problem for the United States. They cannot be responsible for insufficient aggregate demand when they account for only about 10 percent of total U.S. imports, and when the United States has a trade surplus in these products with these countries. It is the aggregate trade balance (total exports minus imports) that affects aggregate demand and employment. For those who see some merit in calculating bilateral trade or employment balances, or trade and employment balances in selected product groups, our surplus in manufactures trade with developing countries suggests a positive rather than a negative aggregate employment effect. But selective trade and employment balances have little merit in any case.

The U.S. trade deficit and the aggregate employment situation, nevertheless, are still extremely important in analyzing adjustment. The micro, or industry specific, adjustment burden arising from increased imports is much more difficult when unemployment is high, jobs are scarce, and growth is sluggish. As we have seen in the past few years, protectionism thrives when growth is slow and unemployment is high. The conclusion is that developing country exports of manufactures are not themselves the cause of a macro adjustment problem, but the macro economic situation is a critical aspect of the micro adjustment process.

### *Why Focus on Developing Country Exports?*

Even on an industry level, is it legitimate to attribute an adjustment burden to one group of suppliers, the developing countries? Is it not total imports, regardless of source, that create adjustment problems? There are two reasons for separate analysis of developing country exports of manufactures. The central question is still adjusting to imports, wherever the source. The first reason for separate treatment is that developing country exports are a dynamic element in U.S. trade, and responsible for a large portion of recent and prospective increases in import penetration. If import penetration is related to adjustment burden, focus on developing country exports may provide salient information on our adjustment problems. Second, products exported by developing countries are especially sensitive, and present unusual adjustment problems. Specifically, their exports tend to be labor intensive and may compete with U.S. workers who are least able to adjust due to skill levels, age, and occupational and geographic immobility.



These considerations justify separate examination of developing country exports of manufactures. But it should be clearly understood that the purpose of separate examination is to identify adjustment problems. For the purpose of trade policy, there is no reason to distinguish between old and new suppliers. Neither should have preferential access rights to the U.S. market, and neither should be subject to discriminatory treatment. (One exception to this rule is the U.S. Generalized System of Preferences, which is a deliberate attempt to stimulate exports and growth in the low income countries.)

### *Trade, Employment, and Adjustment Costs*

The relations between trade and trade policy, employment, and adjustment costs are often confused. Economists must bear some responsibility for the confusion. In an effort to meet protectionists on their own grounds, economists have neglected the theoretically sound but largely unheeded position that trade policy should not be used as employment policy. Instead the empirical literature on trade and employment concentrates on showing one or more of the following:<sup>1</sup>

The net employment impact of trade is positive or, at worst, only slightly negative.

Reduced trade barriers will not lead to serious unemployment. Increased imports are a small factor in employment loss as compared to other determinants such as labor productivity growth.

These studies provide valuable information on the relation between trade and employment, but do not directly focus on the costs of adjusting to imports. Nor do they separately examine imports from developing countries.

The term "adjustment" is much broader than adjustment costs. Adjustment is the process wherein the U.S. responds to changes in international comparative advantage, gaining competitiveness in some product lines and losing it in others. By itself adjustment need not imply costs. Indeed the failure to adjust to changes in comparative advantage implies inefficiency and cost to society in misallocation of resources.

Adjustment costs are borne in the first instance by workers and by the owners of capital in the import impacted industry. The costs can be of two types—reduced returns (wages or profits), or unemployment (workers losing jobs, firms driven out of business). The costs can be borne entirely by those directly affected, or subsequently shifted in part or full to the rest of society through adjustment assistance programs. Alternatively, the costs can be avoided by limiting import competition or by providing subsidies to the impacted industries. But these latter actions would create costs elsewhere in society through higher prices or taxes. In principle, the adjustment costs are transitional, until resources (labor and capital) are reemployed else-

<sup>1</sup> Walter Salant and Beatrice Vaccara, "Import Liberalization and Employment" (Washington, D.C.; The Brookings Institution, 1961); William Cline et al., "Trade Negotiations in the Tokyo Round" (Washington, D.C.; Brookings Institution, 1978); Robert Baldwin, "U.S. Tariff Effects on Trade Employment in Detailed SIC Industries" in U.S. Department of Labor, "The Impact of International Trade and Investment on Employment," (Washington, D.C.; GPO, 1978); Thomas Birnberg, "Economic Effects of Changes in Trade Relations Between Developed and Less Developed Countries" (Washington, D.C.; Overseas Development Council, 1978); Anne Krueger, "Impact of LDC Exports on Employment in American Industry", presented to International Economic Study Group, White House, Sussex, September 1978; Clifton Luttrell, "Imports and Jobs—The Observed and the Unobserved", Federal Reserve Bank of St. Louis Review, June 1978.

where. Finally, for rational policy formulation, the benefits from increased imports must be measured against these adjustment costs.

In this paper we do not consider downward pressure on wages of workers who keep their jobs to be a serious adjustment cost requiring policy measures. Nor do we say anything more about the cost borne by the owners of capital except the obvious—production will continue as long as revenues cover variable costs, and with sufficiently long adjustment periods, financial capital is diverted toward more profitable industries without the need for government policy.

The adjustment costs to workers who are laid off include the earnings they lose during their unemployment (net of adjustment assistance and unemployment payments that are costs absorbed by society), their job search and relocation costs, and the discounted value of any difference between their initial and subsequent earning streams.<sup>2</sup> Although difficult to quantify, there may be important psychic costs from job loss and job switching.

These adjustment costs occur when actual jobs are lost—workers become unemployed—and not when hypothetical jobs are lost. Hypothetical job loss means the calculation of the job equivalent of increased imports, and actual job loss means existing jobs that are extinguished because of increased imports. The distinction is critical. In the one case a real worker is laid off, and in the other case a hypothetical job that would have been created had imports not increased failed to materialize. The first implies real social (and personal) costs during the transition period before reemployment. The second has no such cost. It follows that studies calculating the domestic employment equivalent of imports (or imports plus exports) have nothing to say about adjustment costs as defined here, unless a serious attempt is made to distinguish between hypothetical and actual jobs lost.<sup>3</sup>

The loss of a hypothetical job due to increased imports is not a legitimate adjustment cost. If one views the purpose of trade policy to create general employment opportunities, there might be merit in calculating the domestic employment content of trade. But this would, of course, require netting job increases in the export sector against job losses in the import competing sector. More fundamentally, this view can lead to bad economics. Full employment can be consistent with surplus or deficit in the trade balance. Rapid expansion at home generally leads to improvement in employment simultaneous with a deteriorating trade balance. In any event, macro tools, especially the exchange rate, are preferable to trade policy for controlling the trade balance, and other macro tools are available to affect aggregate employment. (Calculating the domestic employment content of trade might, however, be useful as an input into aggregate demand management policy).

The distinction between hypothetical and real job losses suggests that calculating the job equivalence of increased imports from developing countries cannot itself measure adjustment cost. Imports or import penetration ratios can increase without job loss provided that

<sup>2</sup> Malcolm Bale, "Estimates of Trade Displacement Costs for U.S. Workers", *Journal of International Economics* 6 (August 1976); Louis Jacobson, "Earnings Losses of Workers Displaced From Manufacturing Industries" in U.S. Department of Labor, *The Impact of International Trade*, op. cit.

<sup>3</sup> Baldwin, Cline, and Salant and Vaccara, in analyzing the employment impact of tariff cuts, all acknowledge that gross estimates of job displacement should be adjusted downward to account for general growth of the industry and normal labor turnover before accurate estimates of actual job loss can be made. They did not, however, attempt to do this in their detailed work.

domestic consumption is increasing, or domestic employment is reduced through normal work force attrition. Also, estimates of net employment effects of trade, or of tariff reductions, in which losses in the import competing sector are netted against gains in the export sector, do not measure adjustment costs. Workers who lose jobs in the import competing sector are unlikely to find jobs in the expanding export industries (although they may take jobs that are vacated by workers moving to the export sectors). Finally, studies that deal with the employment effects of tariff cuts miss the most important effects of autonomously increasing imports. For example, Baldwin (1978) estimated increased imports of \$1.7 billion arising from a 50 percent multilateral tariff cut, presumably to be staged over as much as 10 years. In recent years the annual real increase in manufactured imports has exceeded \$5 billion. Thus autonomous growth of imports is likely to have greater adjustment costs than proposed reductions in tariff barriers. The conclusion is that adjusting to developing country exports of manufactures is only marginally related to prospective tariff cuts.

Some studies have gone too far in comparing jobs lost through increased imports to jobs lost through productivity changes, as has been done in some studies, can be pushed too far.<sup>4</sup> The proper way to compare adjustment costs must be between actual and not hypothetical jobs lost. Unions and management can blunt productivity related actual job losses by relying on attrition and reduced new hiring. The adjustment cost can be internalized to the firm precisely because productivity improvement gives some margin for maneuver. In contrast, weak firms under the pressure from imports may lack this flexibility. Also productivity growth is apt to be most pronounced in rapidly growing firms and industries, thus reducing the need to discharge existing workers. This is not generally the case in import impacted industries. Comparing hypothetical job losses due to imports with hypothetical job losses due to productivity growth provides little insight into adjustment costs.

Finally, increased imports of manufactures from developing countries as recorded in the trade data overstate the adjustment needs and the adjustment cost to the United States even if correction for actual rather than hypothetical job loss is made. To the extent that developing countries simply substitute for other suppliers no adjustment burden is created. The amount of substitution of LDCs for traditional suppliers is unknown, as we do not know what level of imports from traditional suppliers would have reached in the absence of LDC competition.<sup>5</sup> But shifts in comparative advantage among East Asian countries suggest considerable substitution. For example, during the past 20 years, Japan's share of U.S. imports of stainless steel flatware slipped from 95 percent to 28 percent while Korea and Taiwan's shares increased from virtually nothing to 70 percent (volume). Japan's share of U.S. imports of monochrome televisions dropped from 62 percent in 1971 to 33 percent in 1976 while the share from developing

<sup>4</sup> Krueger, "Impact of LDC Exports . . ." op. cit. Salant and Vaccara, however, acknowledge that actual job loss may be different with increased import as compared to technological change (Import Liberalization, op. cit., p. 268).

<sup>5</sup> Grossman, studying seven industries, found LDC exports were better substitutes for U.S. products than were exports from industrial countries. Gene Grossman, "Import Competition from Developed and Developing Countries" mimeo. July 1978.

countries rose from 28 percent to 66 percent (value). Similar shifts have occurred in plywood.

The difficulties in distinguishing hypothetical versus actual job loss and inferring adjustment cost from the trade data make comprehensive estimates of adjustment costs using this approach impractical. Accordingly, it becomes more useful to examine the characteristics of industries facing a presumptive adjustment burden (section 3), to examine the role of developing countries in U.S. trade actions (section 4), and to provide evidence of the costs of trade restrictions (section 5).

### *Benefits*

The benefits of increased imports are well known. Imports provide consumers with goods at a lower price, sometimes substantially lower than domestic producers charge. Imports also provide a wider range of consumer choice in terms of style, size and operating characteristics, and this broader choice again adds to consumer welfare. Imports play an important anti-inflation role, directly through lower prices, and indirectly by holding down the price of domestically produced import competing goods. This latter channel is perhaps most important in the U.S. case, in which imports are generally a small proportion of domestic consumption, but can have a strong effect on domestically produced substitutes. The anti-inflation effect of imports is especially important when domestic production is oligopolistic, for example in the case of steel and autos. Trade policy is part of inflation policy. Given the lack of effective anti-inflation tools available, trade policy takes on special importance.

A related benefit is improved efficiency with which domestic resources are allocated. Labor productivity and wages in sectors competing with imports from LDCs are relatively low, while wages are above average in export industries. This is not to argue that the workers displaced by imports wind up in higher paying jobs, or that the transition costs are negligible. Rather the adjustment costs of a liberal trade policy must be balanced by an improvement in allocative efficiency, especially through job opportunities arising in higher productivity and higher wage sectors. In the current situation of unsatisfactory trends in growth and productivity, the positive efficiency benefits of trade are all the more important.

## II. TRENDS AND PROSPECTS

Three features characterize developing country exports of manufactures: rapid growth, product concentration, and a small number of major suppliers. When viewed over the past decade, however, there has been a strong trend toward product diversification and a significant increase in the number of developing country suppliers. These features characterize both total manufactured exports of developing countries and the exports destined for the U.S. market. The United States takes a growing share of these exports.

The aggregate adjustment process over the next eight years appears manageable, but problems may be substantial in individual industries. The magnitude of adjustment may be somewhat greater than that required to accommodate imports from Japan over the past eight years.

### Total Manufactured Exports

Tables 1 and 2 present the broad trends in developing country exports by market destination over the past eight years. Exports of manufacturers increased from \$14 billion in 1970 to \$55 billion in 1977 (current dollars) for an average annual growth of 22 percent. Real growth averaged 13-14 percent in spite of the severe recession in 1975. Developing countries captured a modest but increasing share of world exports of manufactures, moving from 10 percent in 1970 to 13 percent in 1977.

There have been major shifts in destination. The United States and the oil exporters have provided the most dynamic markets for developing country manufactures. Intra-LDC trade (excluding oil exporters) declined from 26.6 percent to 21.8 percent. Exports to "other" which includes OPEC, rose from 4.1 percent to 14.4 percent. The share of exports to industrial countries, excluding the U.S., fell sharply from 42.1 percent to 33.1 percent while exports to the United States rose from 27.2 percent to 30.7 percent. The U.S. share of developing country exports of manufactures to industrial countries jumped from 39.2 percent to 48.1 percent.

TABLE 1.—DEVELOPING COUNTRY EXPORTS OF MANUFACTURES BY AREA OF DESTINATION, 1970-77<sup>1</sup>  
(In billions of dollars)

	Exports to—					Developing country exports as percent of world exports of manufactures
	World	Industrial countries	United States	Developing countries	Other <sup>2</sup>	
1970	13.81	9.58	3.76	3.67	0.56	10.2
1971	14.21	9.95	4.36	3.91	.35	9.4
1972	17.88	12.83	6.25	4.79	.26	9.7
1973	27.55	18.90	7.98	5.70	2.95	10.3
1974	37.35	24.15	10.80	8.20	5.00	11.9
1975	35.70	21.90	9.56	8.50	5.30	11.4
1976	47.50	30.57	13.98	10.20	6.73	12.9
1977	55.00	35.10	16.90	12.00	7.90	13.1
Average annual growth (percent)...	22	20	24	19	46	-----

<sup>1</sup> Non-OPEC LDC's; manufactures defined as SITC 6-8.

<sup>2</sup> OPEC plus centrally planned economies.

Source: General Agreement on Tariffs and Trade, "International Trade 1977/1978," (Geneva 1978) appendix table K and other volumes in this series.

TABLE 2.—DEVELOPING COUNTRY EXPORTS OF MANUFACTURES BY AREA OF DESTINATION: SHARES, 1970-77

	Industrial countries as percent total developing country exports of manufactures	United States as percent total developing country exports of manufactures	United States as percent developing country exports of manufactures to industrial countries
1970	69.4	27.2	39.2
1971	70.0	30.7	43.8
1972	71.7	34.1	48.7
1973	68.6	29.0	42.2
1974	64.6	28.9	44.7
1975	61.3	26.8	43.6
1976	64.3	29.4	45.7
1977	63.8	30.7	48.1

Note.—That if recent year trade flows were recalculated at initial year exchange rate for the dollar, the growth of the U.S. share would have been even more pronounced.

Source: Same as table 1.

TABLE 3.—SHARES OF MAJOR LDC EXPORTERS, 1965-75

	Percent total developing country exports of manufactures	
	1965	1975
Hong Kong.....	24.9	18.4
Taiwan.....	4.7	14.1
South Korea.....	2.6	13.6
Singapore.....	7.6	7.3
Brazil.....	3.1	7.2
India.....	20.4	6.9
Mexico.....	4.2	6.5
Total.....	67.5	74.0

Source: Derived from Donald Keesing, "World Trade and Output of Manufactures: Structural Trends and Developing Countries' Exports", International Bank for Reconstruction and Development, mimeo, February 1978, table 19. Yugoslavia excluded.

As shown in table 3, developing country exports of manufactures remain highly concentrated. In 1975 three countries (Hong Kong, Taiwan, South Korea) accounted for 46 percent and seven countries for 74 percent of the total. Over the decade India has lost its share position while Taiwan and South Korea made major advances. Share data, however, conceal the impressive number of countries that has become large exporters in absolute terms. Table 4 shows that in 1965 no LDC reached \$2 billion in manufactured exports (1975 dollars) while by 1975 nine countries did. The number of countries exporting over \$100 million (1975 dollars) more than doubled over the decade, from 18 to 40. The proliferation of major exporters reflects widespread reorientation of policies toward export promotion in the Third World.

Developing country exports of manufactures remain concentrated in a fairly narrow range of goods. For example, over 50 percent of their manufactured exports to the Organization for Economic Cooperation Development (OECD) were in three product categories, textiles, clothing, and electrical machinery (mainly consumer electronics).<sup>6</sup> But nontraditional exports are also important. For example, OECD imports of iron and steel exceed \$1 billion, imports of scientific, medical and optical instruments approach \$300 million, and veneers and plywood are \$820 million. Manufactures trade among developing countries is relatively more intense in machinery and transport equipment, textiles and chemicals, while exports to industrial countries are relatively more intense in clothing and miscellaneous manufactures.<sup>7</sup>

TABLE 4.—GROWTH OF LDC EXPORTS OF MANUFACTURES, 1965-75

(Constant 1975 dollars)

	1965	1970	1975
Number of developing countries with exports of manufactures over:			
\$2,000,000,000.....	0	2	9
\$1,000,000,000.....	3	6	12
\$500,000,000.....	7	11	15
\$200,000,000.....	12	15	25
\$100,000,000.....	18	22	40
\$50,000,000.....	27	37	46

Source: World Development Report, 1978, Background Paper No. 5, "This Changing Composition of Developing Country Exports," Hollis Chenery and Donald Keesing, Washington, D.C. September 1978.

<sup>6</sup> OECD, "Series B Trade by Commodities," 1976 (1978).

<sup>7</sup> Hollis Chenery and Donald Keesing, "The Changing Composition of Developing Country Exports" World Development Report 1978 Background Paper No. 5, September 1978, table 6.

TABLE 5.—U.S. IMPORTS OF MANUFACTURES BY SOURCE, 1970-77<sup>1</sup>

(In millions of dollars)

	From—				Developing countries as percent total
	World	Developed countries	Developing countries <sup>2</sup>	Communist	
1970 .....	25,525	22,243	3,160	98	12.3
1971 .....	30,375	26,332	3,882	117	12.8
1972 .....	37,414	31,657	5,552	153	14.8
1973 .....	44,131	36,365	7,489	236	17.0
1974 .....	54,539	44,034	10,066	423	18.4
1975 .....	52,052	42,399	9,308	333	17.9
1976 .....	65,197	51,420	13,278	493	20.4
1977 .....	77,355	60,867	15,919	557	20.6
Average annual growth (percent).....	17	15	26	28	-----

<sup>1</sup> Manufactures defined as Standard International Trade Classification (STIC) 5-9, excluding 68.<sup>2</sup> Includes OPEC.

Source: National Foreign Assessment Center, CIA, "The Role of the LDC's in the U.S. Balance of Payments," September 1978.

*U.S. Imports*

U.S. imports of manufactures from LDCs exhibit the same features described above: rapid growth, a trend toward product diversification, and an increasing number of significant suppliers. Table 5 shows that from 1970 through 1977 U.S. imports of manufactures from developing countries grew from \$3.2 billion to \$15.9 billion (current dollars), for an average annual growth of 26 percent. In the process, LDCs dramatically increased their share of the U.S. import market, moving from 12.3 percent to 20.6 percent.

Table 6 shows the value of imported manufactures from selected countries, and each country's market share. Again, there is a high degree of concentration, with three countries (Taiwan, Hong Kong, and South Korea) supplying over 57 percent of total U.S. imports of manufactures from developing countries. Table 7 shows the rapid gains made by LDCs in a wide spectrum of manufactures over the past 8 years. Imports from LDCs now exceed 25 percent share of the U.S. import market in eight of the 22 product categories, and exceed 50 percent share in wood manufactures, clothing and footwear. Some of the sharpest market share gains are well known—clothing, footwear and consumer electronics—but strong gains are also made in non-traditional products—metal manufactures, office machines, electrical machinery, and scientific, optical and photographic equipment. In absolute value, four product groups—electrical machinery, clothing, consumer electronics, and miscellaneous consumer goods—account for 57 percent of total U.S. imports of manufactures from the LDCs.

These data show dramatic gains but they must be kept in perspective. The World Bank has estimated that LDC exports of manufactures were only 1.2 percent of total industrial countries markets for manufactures in 1975, and accounted for only 7.1 percent of the growth of consumption of manufactures in industrial countries during the period 1970-75.<sup>8</sup> This suggests that the aggregate adjustment burden is modest, but may be substantial in individual industries.

<sup>8</sup> IBRD, "World Development Report," August 1978, table 26.

TABLE 6.—U.S. IMPORTS OF MANUFACTURES FROM SELECTED DEVELOPING COUNTRIES, 1977

	Imports (millions of dollars)	Share of total U.S. imports of manufactures from developing countries (percent)
Taiwan.....	3,485	21.9
Hong Kong.....	2,863	18.0
South Korea.....	2,804	17.6
Mexico.....	2,227	14.0
Singapore.....	681	4.3
Brazil.....	677	4.3
Malaysia.....	415	2.6
Philippines.....	355	2.2
Others.....	2,112	
<b>Total.....</b>	<b>15,919</b>	<b>100.0</b>

Source: Same as table 5.

TABLE 7.—DEVELOPING COUNTRY SHARES OF U.S. IMPORTS OF MANUFACTURES BY COMMODITY, 1970-77

	1970			1977		
	Imports from developing countries (dollars in millions)	Share of U.S. imports (percent)	Share of total U.S. imports of manufactures from developing countries	Imports from developing countries (dollars in millions)	Share of U.S. imports (percent)	Share of total U.S. imports of manufactures from developing countries
Wood, cork manufactures.....	NA	NA	NA	579	55.9	3.6
Paper, paperboard.....	NA	NA	NA	81	3.4	.5
Chemicals.....	192	13.2	6.1	552	10.1	3.5
Textile yarn, fabric.....	334	29.4	10.6	736	41.1	4.6
Iron and steel.....	73	3.6	2.3	484	8.1	3.0
Metal manufactures.....	58	7.0	1.8	458	18.2	2.9
Diamonds, pearls.....	46	9.4	1.4	299	18.3	1.9
Other, semifinished manufactures.....	NA	NA	NA	406	16.8	2.6
Agricultural machinery.....	2	.7	.1	6	.6	0
Industrial machinery.....	10	.6	.3	228	4.7	1.4
Office machines, computers.....	55	10.9	1.7	259	16.3	1.6
Electrical machinery.....	297	20.9	9.4	2,717	42.6	17.1
Road motor vehicles.....	21	.3	.7	349	1.8	2.2
Aircraft.....	1	.3	.0	4	.5	.0
Other transport.....	NA	NA	NA	113	10.1	.7
Clothing.....	646	51.0	20.4	3,276	79.4	20.6
Footwear.....	83	13.2	2.6	1,004	53.4	6.3
Scientific instructor.....	17	2.6	.5	496	21.1	3.1
TV, radio, phonograph.....	177	13.6	5.6	1,088	31.1	6.8
Miscellaneous consumer goods.....	575	32.0	18.2	2,061	41.0	12.9
Military equipment.....	0	0	0	0	0	0
Commodities not classified.....	265	20.8	8.4	723	26.9	4.5
<b>All manufactures.....</b>	<b>3,160</b>	<b>12.4</b>	<b>100</b>	<b>15,919</b>	<b>20.6</b>	<b>100.0</b>

Source: Derived from same source as table 5.

### Prospects

Future export growth prospects depend on economic growth in the industrial countries, and on the trade policies followed by both industrial and developing countries. To date, growth appears mainly due to improved supply performance. As more developing countries shift toward export oriented policies, total export supply will increase, with shifts in product composition within exporting countries. But the export base is much higher today than 10 years ago, and real growth of 14 percent is unlikely to be maintained.



The World Bank projects annual growth of developing country exports of manufactures at 12.2 percent over the period 1975-85.<sup>9</sup> Applying this rate to the 1977-85 period, developing country exports would grow from \$55 billion to \$138 billion in 1985 (1977 dollars). If the United States maintains its present market share its imports will increase to \$42.4 billion (1977 dollars) by 1985. Assuming further that U.S. imports of manufactures from other suppliers grew at 5 percent, the average over the past 8 years, by 1985 the share of U.S. imports of manufactures from developing countries would increase from its 1977 level of 20.6 percent to 30.6 percent.

The growth of imports can again be put into perspective by noting that by 1985 these products are expected to account for only 2.7 percent of the total manufactures market in industrial countries, and they are expected to account for only 5.4 percent of the market growth in industrial countries from 1975-85.<sup>10</sup> Another way of looking at the prospective growth is to observe that from 1970 to 1977 U.S. imports of manufactures from Japan increased from \$6 billion to \$18.4 billion, for a nominal annual growth of 21 percent per year and an estimated real growth of perhaps 13 percent. During that period U.S. imports from Japan increased their market share from 16.8 percent to 23.4 percent. From this perspective, the adjustment burden from developing country exports over the next 8 years may be slightly greater than adjusting to imports from Japan over the past 8 years.

The adjustment burden facing the United States depends in part upon absorption of manufactured exports by other countries. To indicate the importance of this factor, had U.S. imports from developing countries grown at the same rate as they did in other industrial countries, our 1977 imports from them would have been 30 percent lower than they actually were. Or, to put the matter slightly differently, if between 1977 and 1985 we increase our market share by another 9 percentage points, as we did between 1970 and 1977, our 1985 imports would be 30 percent higher than is projected on the basis of constant market share (i.e., \$54.8 billion vs. \$42.4 billion, 1977 dollars). There is no "appropriate" share for the United States, and indeed total developing country export supply is not a fixed amount, but instead depends on growth and access to each country market. But short run disruption in individual product markets may be more severe if access to other countries is closed and products are shunted to the U.S. market.

The aggregate adjustment process appears manageable but problems may be severe in certain industries. The World Bank sees sharp slowing of LDC export growth in clothing and textiles, but because the base is large, the absolute increases will also be large. Growth of chemicals is expected to slow modestly (from 16.5 percent to 13 percent) but iron and steel are expected to accelerate from 10.7 percent to 14.5 percent. Karlik and Watkins foresee some shift away from traditional manufactured exports (relatively simply labor intensive consumer goods) toward more sophisticated products including intermediate and producers goods (chemicals, agricultural machinery).<sup>11</sup>

<sup>9</sup> Ibid, table 27. This projection was made before the new and more restrictive Multifiber Agreement was negotiated.

<sup>10</sup> Ibid, table 26.

<sup>11</sup> John Karlik and Stephen Watkins, "Anticipating Disruptive Imports from Developing Countries," National Planning Association, *New International Realities*, Fall 1978.

Our best judgment is that competition in traditional goods will remain strong, but the source will shift from advanced developing countries to certain middle income developing countries (repeating the earlier shift from Japan to Korea and Taiwan). The current group of successful exporters will encounter increasing labor scarcity, and with larger and more sophisticated industrial sectors, they may move toward basic industrial products (steel, chemicals), and may attempt some sophisticated products (advanced electronics and scientific instruments). But this remains highly speculative, and much more detailed research is needed.

### III. INDUSTRIES FACING ADJUSTMENT BURDEN

This section identifies the economic characteristics of industries facing a presumptive adjustment burden. The purpose is to assist in planning.

#### *Methodology and Data*

Various methods have been used to anticipate import disruption. In a recent study, Watkins and Karlik screened U.S. imports by several criteria and assigned a vulnerability rating (high, medium, low, none) to each industry. The purpose of the screening was to identify rapidly growing imports of products that might cause disruption. The vulnerability rating was made on the basis of U.S. employment and production data, import penetration ratios, and the researchers' judgment concerning the industry.<sup>12</sup> On the basis of the empirical work and field inquiries, the researchers concluded that: (1) imports of manufactures from developing countries will become more diversified and will include more sophisticated products; (2) a shift in emphasis toward producer goods should moderate the adjustment burden for the United States; and (3) the United States will encounter stiffer competition from advanced LDC's in export markets.

Helleiner identifies the characteristics of manufacturing industries in which LDC's have shown themselves competitive in the U.S. market. Using multiple regression analysis with LDC share of U.S. imports as a measure of their competitiveness at the three digit SITC level, he concludes that average wage (his measure of skill intensity), and the extent to which capital intensity increases with scale are the best variables for explaining LDC competitiveness, but admits that more micro-level analysis is required before industrial adjustment planning should be undertaken.<sup>13</sup>

The purpose here is to test the hypothesis that the economic characteristics of industries facing an adjustment burden to LDC exports are distinct from those of industry as a whole. Identifying the distinctive characteristics of industries facing adjustment should assist in planning.<sup>14</sup> We first distinguished industries facing a presumptive adjustment burden (PAB industries) from the rest of the manufacturing sector on the basis of employment and import data. We then

<sup>12</sup> Karlik and Watkins, *op. cit.*

<sup>13</sup> G. K. Helleiner, "Industry Characteristics and the Competitiveness of Manufactures from Less Developed Countries", *Weltwirtschaftliches Archiv*, Bd 112, No. 3 (1976) p. 507.

<sup>14</sup> Gerhard Fels, "The Export Needs of Developing Countries and the Adjustment Process in Industrial Countries" in Giersch (ed.), "The International Division of Labor, Problems and Perspectives" (Tubingen, 1974); Frank Wolter, "Adjusting to Imports from Developing Countries", in Giersch (ed.), *Reshaping the World Economic Order* (Kiel; Tubingen, 1977).

made a paired comparison of the economic characteristics of the two groups, using a univariate t-test. Finally, we used a multivariate technique, discriminant analysis, to determine how systematic the differences among the groups are, and how well the characteristics as a set can serve to classify industries into two groups.

Obtaining correspondence between trade and industry data is a problem. U.S. trade data are reported in the TSUS (Tariff Schedule of the United States) classification system, while industry data are reported in the SIC (Standard Industrial Classification) system. In this section we use the concordance and compilation of trade and industry data published by the Trade Relations Council.<sup>15</sup> These data are at the four and five-digit SIC level, and are quite comprehensive, with data back to 1958. Unfortunately, the data are only complete through 1973 and the rapid expansion of LDC exports from 1974 through 1978 is not analyzed.<sup>16</sup>

The screening criteria for identifying industries facing a presumptive adjustment burden (PAB industries) were as follows. For inclusion as a PAB industry, domestic employment must have fallen over the previous three to five years, imports must equal at least 5 percent of domestic consumption, the ratio of imports to domestic production must have increased during the preceding five years, imports from LDCs must account for at least 10 percent of total imports and have grown more rapidly than imports from other countries. The purpose was to identify industries that experienced employment declines, and in which imports from LDCs were a substantial and increasing proportion. Thus, increases in import penetration ratios would not indicate an adjustment burden unless also accompanied by declining employment.

The 36 PAB industries were then compared to a random sample of 47 four-digit SIC industries (excluding PAB industries) on the basis of seven characteristics: (1) Labor intensity as measured by the ratio of total payroll to value added; (2) average production worker wage, which measures labor skill level and perhaps unionization; (3) labor productivity as measured by value added per production worker; (4) capital expenditures per production worker measuring capital intensity; (5) import penetration ratio measured as imports to U.S. consumption (production plus imports minus exports); (6) export propensity as measured by exports to value of domestic shipments; and (7) nominal duty rate as an approximation of the level of protection.<sup>17</sup> In most cases 3-year averages (1971-73) were used to reduce year-to-year fluctuations. All seven variables are unit-free ratios and therefore unaffected by the size of a specific SIC category.

Trade theory suggests that, as compared to other industries, PAB industries should show: (1) higher labor intensity; (2) lower wages; (3) lower productivity; (4) lower capital intensity; (5) higher import penetration ratios; (6) lower export propensities; and (7) higher duty rates. These should be the hallmarks of industries that face difficult adjustment burdens. (With perfect labor mobility, however, theory

<sup>15</sup> Trade Relations Council, "Employment, Output and Foreign Trade of U.S. Manufacturing Industries," 3 volumes (Washington, D.C.; Trade Relations Council, 1977).

<sup>16</sup> U.S. Department of Commerce, "U.S. Imports SIC-Based Products," FT 210 Annual 1977 (1978) provides an alternative concordance and data set, but the concordance is not adequate at the four digit SIC level.

<sup>17</sup> Strictly speaking because import penetration was used as a screen, it should not be tested as a distinguishing characteristic. However, the 5 percent screen was rarely a determining classifier.

suggests that wages for the same skill level should equalize among industries).

A statistical test (the "t" test) was used to determine if the means for the PAB set were different from the non-PAB industry average means. The analysis was done for the full set and for two subgroups, durable and nondurables. The results of the statistical analysis are reported in Table 8.<sup>18</sup>

TABLE 8.—DISTINGUISHING CHARACTERISTICS OF ADJUSTMENT BURDEN INDUSTRIES—COMPARISON OF CHARACTERISTICS: SIGNIFICANCE OF DIFFERENCES OF MEANS

(t statistic in parenthesis)

Characteristic	Total manufacturing industries		Nondurable manufacturing industries		Durable manufacturing industries	
	PAB industries	Random sample, non-PAB industries	PAB industries	Random sample, non-PAB industries	PAB industries	Random sample, non-PAB industries
	Means	Means	Means	Means	Means	Means
Labor intensity (total payroll/value added).....	0.4930 <sup>1</sup> (2.37)	0.4367	0.4962 <sup>1</sup> (3.56)	0.3740	0.4881 <sup>1</sup> (0.02)	0.4874
Wage rate (dollars/hour).....	3.28 <sup>1</sup> (3.18)	3.87	3.23 <sup>1</sup> (2.10)	3.85	3.36 <sup>1</sup> (2.33)	3.88
Labor productivity, dollar (value added/production workers).....	20,023 <sup>1</sup> (3.48)	33,583	20,507 <sup>1</sup> (3.43)	44,611	19,264 <sup>1</sup> (2.59)	24,676
Capital intensity <sup>2</sup> (capital expenditures/production workers).....	1446 <sup>1</sup> (1.66)	2421	1638 <sup>1</sup> (1.91)	3626	1145 <sup>1</sup> (0.95)	1449
Import penetration ratio percent (imports to domestic consumption).....	15.19 <sup>1</sup> (2.88)	8.01	15.40 <sup>1</sup> (3.28)	5.30	14.86 <sup>1</sup> (1.27)	10.20
Export propensity percent (exports to domestic shipments).....	4.32 <sup>1</sup> (1.39)	6.87	4.39 <sup>1</sup> (0.25)	5.00	4.22 <sup>1</sup> (1.86)	8.38
Nominal duty rate (in percent).....	12.50 <sup>1</sup> (2.86)	8.32	12.86 <sup>1</sup> (2.26)	8.27	11.90 <sup>1</sup> (1.65)	8.37

<sup>1</sup> Statistically significant at the 95 percent level.

<sup>2</sup> Capital intensity measured by average annual capital expenditures over number of production workers.

### Findings

In all cases, for the total set and for the durable and nondurable subsets, theoretical expectations were borne out, with the PAB industries showing higher average labor intensity, lower wages, lower productivity, lower capital intensity, higher import penetration ratios, lower export propensities and higher duty rates. For the total set, all of the differences were significant at the 95 percent confidence level except capital intensity and export propensity. The results are not quite as strong when comparing the durables and nondurables separately, partly because of smaller sample size. Interestingly, labor intensity in the durable sector is almost identical in the PAB and random sample set, while it is strongly different in the nondurables sector. Also, the difference between the PAB set and the random set as regards export propensity is almost entirely due to differences in the durable goods sector. The basic conclusion is that five of the seven variables representing industry characteristics can be used to distinguish between industries confronting a presumptive adjustment burden and typical manufacturing industries.

<sup>18</sup> Normal distribution has not been verified.

We were also interested in seeing if our hypothesis, that PAB industries have statistically distinct characteristics, passed a much more stringent test—that within any two-digit industry group, PAB industries are distinct from other industries within that same two-digit group. If so, our conclusion that PAB industries have distinct characteristics is strengthened. Moreover, this further test provided evidence that there are significant differences among finely defined industries within a broader industry group—thus shedding light on the phenomenon of intra-industry trade.

TABLE 9.—COMPARISON OF MEAN CHARACTERISTICS OF PAB AND NON-PAB INDUSTRIES AT 5-DIGIT LEVEL

Characteristic <sup>1</sup>	[t statistic in parenthesis]					
	Textile mill products (22) <sup>2</sup>		Electrical machinery (36) <sup>2</sup>		Miscellaneous manufacturers (39) <sup>2</sup>	
	PAB	Non-PAB	PAB	Non-PAB	PAB	Non-PAB
Labor intensity.....	0.564 (0.02)	0.566	0.481 (0.41)	0.497	0.532 * (1.96)	0.475
Wage rate.....	2.81 (1.78)	2.68	3.63 * (2.43)	4.38	3.18 (0.04)	3.17
Labor productivity.....	12,565 (0.02)	12,613	25,235 * (1.81)	29,703	17,472 (1.16)	19,347
Capital intensity.....	673 (0.05)	683	1285 (0.76)	1560	740 (0.66)	838
Import penetration (percent).....	10.92 (1.17)	6.65	22.63 * (2.06)	7.67	20.71 (0.17)	18.88
Export propensity (percent).....	9.57 (1.31)	8.33	14.92 (0.76)	10.84	6.09 (0.92)	18.85
Duty rate (percent).....	13.53 (0.96)	19.41	5.30 (0.71)	5.92	14.93 * (2.09)	10.75

<sup>1</sup> See table 8 for fuller description.

<sup>2</sup> For textiles, 3 PAB, 11 non-PAB industries; for electrical machinery, 8 PAB, 15 non-PAB industries; for miscellaneous manufacturing, 7 PAB, 20 non-PAB industries.

\* Statistically significant at the 90 percent level.

For this test, all five-digit SIC industries in three SIC categories (22, textile mill products; 36, electrical machinery; 39, miscellaneous manufactures) were screened and separated into PAB and non-PAB sets.<sup>19</sup> The means of the two sets were then compared and are reported in Table 9.

In 13 of the 21 comparisons of means, the results were as expected (i.e., PAB industries showing lower labor productivity, capital intensity wage rates and export propensity, and higher labor intensity, import penetration and duty rates). The differences, however, were statistically significant in only five cases (three in electrical machinery—wages, labor productivity and import penetration; and two in miscellaneous manufacturing—labor intensity and duty rates). For the other eight comparisons the expected results were not obtained, but the differences were not significant. The much smaller number of observations and the inclusion of textiles from southern Europe may account for these less robust results. The results do not say much about differences in finely defined industries. Perhaps a more direct test, classifying industries solely by import penetration and employment trends, would provide more meaningful results.

<sup>19</sup> Not all industries were included as some were at the four but not the five-digit level. Some five-digit industries excluded for insufficient data.

*Discriminant Analysis*

Finally, discriminant analysis was applied to the four-digit industries to obtain a linear combination of the variables that will optimally classify observations into one or the other group. Discriminant analysis maximizes the cross-category variation in the data relative to the within category variation. In discriminant analysis, variables whose means are not significantly different when measured by themselves in univariate analysis may in a linear combination with other variables contribute to differentiation. Furthermore, by using RAOs V, a step-wise technique, variables which were significant on a univariate basis are excluded from the discriminant function if they do not add to the maximization of cross-group variation. RAOs V thus helps to eliminate problems of correlation between variables.

Discriminant analysis provides the following information: (1) Tests of significance for differences between the groups in the variables; (2) allocation rules, expressed in the form of a discriminant function, for identifying further observations as belonging to one of the groups; and (3) estimates of the probability of correct allocation using the discriminant functions and by implication, the extent of overlap between two groups.

Significant group differences resulted in the analyses of the total data set and the nondurable and durable subsets. Table 10 shows a high Wilks Lambda statistic for each set which, when approximated by the chi square statistic, is significant at the 99 percent confidence level.

Table 10 also presents a standardized discriminant function for each set. For the total set, labor productivity, capital intensity and duty were the distinguishing variables. Thus, capital intensity, not significant by itself, becomes important when part of a function. Labor intensity, average wage, and duty were the distinguishing variables for the nondurable subset, while the average wage by itself was the distinguishing variable for the durable subset. Those findings reinforce the results of the simple t-tests. The group centroids indicate the mean vectors of the PAB and non-PAB groups associated with the corresponding discriminant functions.

The classification results in table 10 show a relatively high percentage of correct allocation using these discriminant functions. For the total set 72 percent of the PAB industries and 70 percent of the non-PAB industries were correctly classified, with an overall correct classification of 71 percent. In contrast, 74 percent of the overall nondurable subset was correctly classified and only 63 percent of the durable subset was correctly classified. Classification of the entire data set by separate functions for nondurables and durables yields correct classification of only 69 percent, less than the 71 percent correct classification of a single discriminant function for the entire set.

Discriminant analysis was also done at the five-digit SIC level. As Table 11 shows, discriminant analysis of the three five-digit SIC subsets yielded significant group differences at a 93 percent confidence level for the textiles and electrical machinery sets and at a 98 percent confidence level for miscellaneous manufactures. Discriminant analysis thus reinforces our tentative conclusion that even with a five-digit category PAB industries differ from non-PAB industries.

TABLE 10.—DISCRIMINANT ANALYSIS OF PAB AND NON-PAB INDUSTRIES

[4-digit SIC level]

	Total set	Nondurables	Durables	Combination of nondurable and durable discriminant functions
<b>Test of significance:</b>				
Wilk's lambda	0.821	0.713	0.122	
Chi square approximation	15.678	13.386	75.745	
Degrees of freedom <sup>1</sup>	3	3	1	
Significance (percent probability of group centroids being equal)	.001	.004	0	
<b>Discriminant function:<sup>2</sup></b>				
Labor intensity (total payroll/value added)		-1.303		
Wage rate (production worker payroll/production workers)		-.685	1.00	
Labor productivity (value added/production workers)	-1.038			
Capital Intensity (capital expenditures/production workers)	.565			
Export propensity (exports/value of shipments)				
Nominal duty (ad valorem)	.540	-.351		
<b>Group centroids:</b>				
PAB industries	.481	-.518	.261	
Non-PAB industries	-.368	.542	-.484	
<b>Classification (percent correct allocation using discriminant function above):</b>				
PAB	72.2	81.8	71.4	77.8
Non-PAB	70.2	66.7	57.7	61.7
Overall	71.1	74.4	62.5	68.7

<sup>1</sup> Number of variables included in the discriminant function.<sup>2</sup> Import penetration variable excluded because used in screening process. Function standardized.

TABLE 11.—DISCRIMINANT ANALYSIS OF PAB AND NON-PAB INDUSTRIES

[5-digit SIC level]

	Textiles (22)	Electrical machinery (36)	Miscellaneous manufactures (39)
<b>Test of significance:</b>			
Wilk's lambda	0.408	0.691	0.687
Chi square approximation	8.972	7.212	9.022
Degrees of freedom <sup>1</sup>	4	3	2
Significance (percent probability of equal centroids)	.062	.065	.011
<b>Discriminant function<sup>2</sup>:</b>			
Labor intensity			.790
Wage rate	.695	.989	.801
Labor productivity			
Capital intensity	.502	.360	
Export propensity	.557		
Nominal duty	.778	.524	
<b>Group centroids:</b>			
PAB Industries	-1.420	.745	.928
Non-PAB Industries	.387	.397	.325
<b>Classification (percent probability of correct allocation):</b>			
PAB	100.0	75.0	85.7
Non-PAB	90.9	73.3	75.0
Overall	92.9	73.9	77.8

<sup>1</sup> Number of variables included in the discriminant function.<sup>2</sup> Import penetration variable excluded because used in screening process. Function standardized.

Average wage, capital intensity, export propensity, and duty proved important variables for the textile discriminant function. Average wage, capital intensity, and duty were important in the electrical machinery set, and labor intensity and average wage important for the miscellaneous manufactures set. These results must be considered

with caution, since the means of several variables, especially of the textile set, did not compare as expected in the univariate analysis.

Because the sets are relatively small, there is a high percentage of correct classification for all three 5-digit sets. Ninety three percent of the textiles set, 74 percent of the electrical machinery set, and 78 percent of miscellaneous manufactures were correctly classified.

#### IV. DEVELOPING COUNTRIES AND U.S. TRADE ACTIONS

##### *Purpose and Findings*

The most direct evidence of difficulties in adjusting to imports is the trade related actions under U.S. legislation—escape clause, countervailing duty, anti-dumping and provision of adjustment assistance. The intent in this section is to document the role of developing countries in these actions, and, in the escape clause and the adjustment assistance areas to analyze the economic characteristics of the industries seeking assistance.

The principal findings are:

Developing countries are disproportionately involved in escape clause and countervailing duty cases, and in adjustment assistance actions.

Industries seeking escape clause relief have high import penetration ratios, but their economic characteristics do not conform to a priori expectations.

Within the apparel sector, recourse to adjustment assistance could not be explained on the basis of the economic characteristics of the subindustries.

##### *Escape Clause (Section 201)*

U.S. procedures are as follows. Petitions for escape clause relief are filed with the International Trade Commission. The ITC conducts an investigation and hearings to determine injury—whether increased imports are a substantial cause of injury to the domestic industry. Following an affirmative injury finding, the ITC recommends remedy—either adjustment assistance or some form of trade restriction (quotas, tariff quotas, or tariffs).

TABLE 12.—ITC ESCAPE CLAUSE CASES: 1975-78 SUMMARY; CONSOLIDATED

	Number of cases (1)	Value of imports (millions) (2)	Imports from LDC's (millions) (3)	Average of LDC to total imports <sup>1</sup> (percent) (4)	Number of workers (1,000) (5)
Positive injury finding.....	17	\$4,552	\$1,774	46.5	346
Negative injury finding.....	14	1,765	458	53.0	356
Total.....	31	6,317	2,232	49.4	702

<sup>1</sup> Mean of less developed countries' market shares in ITC cases (not ratio of 3 to 2).

Source: International Trade Commission, "201 Reports."



The President, required to look at the broader national interest, either accepts the ITC remedy recommendation or substitutes his own (including negotiating orderly marketing agreements—OMAs, or expediting adjustment assistance). Congress, by two thirds majority resolution, however, can override the President's recommendation, and remedy reverts to the ITC recommendation.

The ITC has acted on a total of 37 escape clause petitions (including resubmissions) since January 1, 1975, under the 1974 Trade Act. Basic data are summarized in table 12. The consolidated number of cases is 31, with 17 findings of injury and 14 negative determinations. The President has initiated trade restrictions in only 6 cases: televisions, shoes, ferro-chromium, stainless steel alloys, C.B. receivers, and industrial fasteners. Total value of trade in the 31 cases is \$6.3 billion, with imports from developing countries at \$2.2 billion. Imports from developing countries were 39 percent of total imports in positive findings, and 26 percent of imports in negative determinations (46 percent and 53 percent measured as the simple mean of LDC market shares in the ITC cases). Total number of workers involved was 700,000. These data clearly indicate that imports from developing countries play an important role in recent U.S. escape clause actions.

The economic characteristics of industries seeking and receiving escape clause protection are also of interest. Specifically, is there any systematic difference between actions with positive and negative findings; do industries petitioning for escape clause relief differ from other industries; and do industries that have positive injury findings differ from other industries? As complete a set of data as possible for the 201 cases covering 27 variables and identifying characteristics were assembled. The basic sources are the 201 Reports and the Annual Survey of Manufactures. The summary and analysis are presented in table 13. The full data set is available from the authors.

The variables are in four groups: Identification (1-4); trade variables (5-13); indexes of injury (employment, profits, capacity utilization, 14-19); and economic characteristics (wages, productivity, labor and capital intensity, vertical integration, skill levels, 20-27). Table 13 summarizes the data by presenting averages for the variables, where appropriate. The averages are computed separately for positive findings, negative findings, and all 201 cases filed, and similar averages were calculated for the manufacturing 201 cases. Finally, they are compared to the averages for all manufacturing.

TABLE 13.—SUMMARY OF ITC ESCAPE CLAUSE CASES

	Total imports (millions)	Imports from LDC's (millions)	Imports LDC as percent total: Simple mean <sup>1</sup>	Percent cases with increasing LDC share of imports <sup>1</sup>	Import as percent consumption <sup>2</sup>	Percent cases with increasing import penetration
	(5)	(6)	(7)	(8)	(9)	(10)
201 cases:						
All products:						
Positive decisions .....	\$4, 552	\$1, 774	46. 5	81	31. 1	88
Negative decisions .....	1, 765	458	53. 0	76	29. 8	71
All 201 cases .....	6, 317	2, 232	49. 4	80	31. 6	80
Manufacturing only: <sup>3</sup>						
Positive decisions .....	4, 205	1, 428	46. 5	80	33. 1	87
Negative decisions .....	1, 750	446	40. 3	73	35. 1	63
All manufacturing 201 cases ..	5, 955	1, 864	44. 1	76	33. 9	76
All manufacturing .....	4 77, 355	4 15, 919	4 20. 6	-----	5. 6	-----

See footnotes at end of table.

TABLE 13.—SUMMARY OF ITC ESCAPE CLAUSE CASES—Continued

	LDC imports as percent consumption	Percent cases with increasing LDC import penetration <sup>1</sup>	Level of protection: Simple mean of code <sup>2</sup>	Number of production workers	Percent cases with declining production workers <sup>3</sup>	Net profits to sales: Simple mean (percent)
	(11)	(12)	(13)	(14)	(15)	(16)
201 cases:						
All products:						
Positive decisions .....	14.7	93	2.8	345,786	56	4.7
Negative decisions .....	12.4	86	2.5	356,382	64	6.5
All 201 cases .....	13.6	90	2.7	702,168	60	5.5
Manufacturing only:						
Positive decisions .....	14.7	93	2.8	325,786	67	4.7
Negative decisions .....	13.0	82	2.7	205,082	64	4.2
All manufacturing 201 cases ..	14.0	88	2.7	530,868	62	4.5
All manufacturing .....	1.1	-----	2.0	13,625,000	-----	8.1

	Percent cases with declining profits/sales <sup>4</sup>	Capacity utilization: simple mean	Percent cases with declining capacity utilization <sup>5</sup>	Average wage production workers	Value of shipments per production worker (thousand)	Value added per man-hour
	(17)	(18)	(19)	(20)	(21)	(22)
201 cases:						
All products:						
Positive decisions .....	60	63.7	60	\$5.22	\$51.2	\$22.07
Negative decisions .....	50	47.0	100	4.42	40.0	15.80
All 201 cases .....	55	57.0	75	4.85	46.9	19.51
Manufacturing only:						
Positive decisions .....	64	63.7	60	5.22	51.2	22.07
Negative decisions .....	44	47.0	100	4.86	60.4	15.80
All manufacturing 201 cases ..	58	57.0	75	5.07	56.6	19.51
All manufacturing .....	-----	81.0	-----	5.43	90.5	20.17

	Total payroll/value added	Capital assets per production worker (thousand)	Capital assets/value of shipments	Production worker wages/total payroll	Value-added value of shipments
	(23)	(24)	(25)	(26)	(27)
201 cases:					
All products:					
Positive decisions .....	(Same as manufacturing only.)				
Negative decisions .....					
All 201 cases .....					
Manufacturing only:					
Positive decisions .....	0.403	\$42.88	0.366	0.685	0.419
Negative decisions .....	.475	31.20	.316	.704	.444
All manufacturing 201 cases ..	.432	38.68	.348	.693	.434
All manufacturing .....	.416	29.04	.333	.646	.431

<sup>1</sup> Over previous 5 years.

<sup>2</sup> Simple mean, consumption equals shipments plus imports minus exports.

<sup>3</sup> Excludes products with first-digit SIC code 0.

<sup>4</sup> From table 5.

<sup>5</sup> Code: 1. Duty free.

2. Nominal tariff between 0.1 and 10 percent ad valorem.

3. Nominal tariff between 10 and 30 percent.

4. Quantitative restrictions and/or nominal tariffs exceeding 30 percent.

Note.—Only cases for which data are available are included in column averages and percentages.

Sources: (1) Trade and injury variables from U.S. International Trade Commission, reports on TA-201 investigations; (2) SIC No. from U.S. Department of Commerce, "U.S. Foreign Trade Statistics: Classifications and Cross-Classifications, 1974, Section 5: Correlation Between TSUSA Import Classification and SIC-Based Product Codes;" (3) Economic characteristics from U.S. Census Bureau, "Annual Survey of Manufactures 1976, Industry Profiles" (except where noted). Also "Statistical Abstract of the United States."

Explanation of economic characteristics:

- Variable:
- 20 Average wage (production worker wages/production worker man-hours) is a measure of labor skill level and degree of unionization.
- 22 Value added per man-hour is a measure of labor productivity.
- 23 Total payroll/value added is a measure of relative labor intensity.
- 24 Capital assets per production worker measures capital intensity.
- 25 Capital assets/value of shipments is a measure of capital intensity.
- 26 Production worker wages/total payroll is a measure of skill level and technology.
- 27 Value added/value of shipments is a measure of vertical integration.

The results of the exercise are difficult to summarize, but some important findings are as follows. First, variable 7, measuring imports from LDCs as percent total imports, shows developing countries are disproportionately important in 201 cases, 49.4 percent vs. 20.6 percent for all manufacturing imports. The high proportion of imports from developing countries occurs in both positive and negative injury findings. Second, as expected, import penetration ratios (variable 9) are over five times higher in 201 cases than for the all manufacturing average (31.6 percent vs. 5.6 percent). Interestingly there is no apparent difference in import penetration ratios for positive and negative findings, and indeed for the manufacturing 201 cases, average import penetration in negative findings exceed positive findings. The high penetration ratios, and the disproportionate share of developing countries in 201 cases of imports, insure that LDC import penetration (variable 11) is far higher for the 201 cases than for all manufacturing (13.6 percent vs. 1.1 percent), but again there is no important difference between the positive and negative findings. Comparison of duty rates (variable 13) strongly suggests that the average duty on all 201 cases filed is considerably higher than the average duty for manufacturing, but there is little difference between positive and negative findings. Highly protected industries are seeking additional protection.

Data on indices of injury are relatively weak.<sup>20</sup> The table indicates that over a 5-year period, production worker employment declined in 56 percent of the cases with a positive finding of injury and 64 percent of the cases with a negative injury finding (variable 15), an unexpected result. For all 201 cases for which data are available, the average ratio of profits to sales (variable 16) is higher in the negative injury findings than the positive injury findings (as expected), but this is reversed for the manufacturing 201 cases (unexpected). Profits were less in both positive and negative cases as compared to all manufacturing. The ratio of profits to sales over the past 5 years (variable 17) declined in 60 percent of the positive injury findings, and 50 percent of the negative injury findings, a weak result but in the expected direction. Average capacity utilization (variable 18) was substantially higher in the positive injury findings than the negative injury findings (63.7 percent vs. 47.0 percent), an unexpected result. Both were far less than the average for all manufacturing (81.0 percent). Average capacity utilization declined in 60 percent of the positive injury finding cases, and in 100 percent of the negative injury finding cases (where data were available). Contrary to initial expectations, the objective indices of injury were slightly stronger for those cases where injury due to imports was not found by the ITC. One explanation could be that injury in the negative cases was from causes other than imports. But all applicants, successful and unsuccessful, were weaker than all manufacturing industry by the profit and capacity utilization measures.

Turning to the economic characteristics, average production worker wages (variable 20) in positive finding of injury cases were substantially above the negative injury findings (\$5.22 vs. \$4.42), and compares favorably with the average for all manufacturing (\$5.22 vs. \$5.43). This also is surprising, and demonstrates that industries suc-

<sup>20</sup> U.S. trade legislation requires the ITC to consider idling of facilities, profits, and unemployment in making injury determination.

cessfully seeking ITC escape clause relief are not characterized by low wages on the average.<sup>21</sup> It may be, however, that wage levels contributed to import penetration and thus to injury.

Variable 22 measures labor productivity, and displays an unexpected pattern. Productivity is considerably higher in the positive injury finding cases than in the negative injury finding cases (\$22.07 vs. \$15.8), and is higher in the positive injury cases than the average for all manufacturing (\$22.07 vs. \$20.17). This demonstrates that industries successfully seeking ITC escape clause remedy are not generally characterized by low labor productivity. Payroll to value added (variable 23) is a measure of labor intensity, and also displays an unexpected pattern, with the positive injury finding cases having lower labor intensity than either the negative cases or the average of all manufacturing industry.<sup>22</sup>

Variables 24 and 25 are two measures of capital intensity. The results are again somewhat surprising, with the positive injury finding cases having somewhat higher capital intensity than the negative injury finding cases. The positive injury finding cases also have higher capital intensity than the average for all manufacturing.

The ratio of production worker payroll to total payroll (variable 26) is one measure of skill intensity. As measured, skill intensity (low ratio implying high skill intensity) is somewhat higher in positive than negative findings, but is higher still in the average of manufacturing. Variable 27 is a measure of vertical integration, and shows less integration for the positive injury findings than for the negative findings or for all manufacturing averages.

The following conclusions emerge: First, imports from developing countries are a disproportionately large share of escape clause cases. Second, the trade variables are all as expected, although not sufficient to distinguish positive and negative injury finding cases. Third, the indices of injury were not as expected. If anything, injury appears more prevalent in the negative determinations than the positive ones. Finally, many of the economic characteristics of the 201 cases were unexpected, with wages, productivity, and capital intensity higher in the cases of positive injury findings than in the negative injury cases, or the average for all manufacturing. All these conclusions however are subject to data limitations.

These results may appear to be in conflict with the results of the PAB industry analysis, in which the PAB industries are shown to have distinctive characteristics including lower wages, productivity, and capital intensity. The conflict is more apparent than real, however. The escape clause cases and the PAB industries were drawn from different universities (all industries, including agriculture; manufacturing only), and from different time periods (1975-78 and 1973), so that only 6 of the 36 PAB industries were also included in the 31 escape clause cases. Moreover, the PAB industries were screened to include only industries in which LDC exports accounted for at least 10 percent of total imports whereas all escape clause cases were included.

<sup>21</sup> Based on incomplete data, wages increased more rapidly in the positive than the negative finding cases, another unexpected result.

<sup>22</sup> Error in classifying petition industries into SIC categories is possible.

*Countervailing Duties and Antidumping Cases*

U.S. procedures are as follows. Antidumping cases are investigated by the Department of the Treasury, after verification by the Customs Division. The issue is whether sales are made at less than fair value. Affirmative decisions are sent to the International Trade Commission to determine if U.S. firms are injured. If the ITC finds injury, Treasury imposes antidumping duties. Countervailing duty petitions are also investigated by Treasury. The issue is whether imports receive foreign government subsidies. With an affirmative finding on dutiable goods, countervailing duties are imposed (i.e., no injury test). An affirmative finding on duty free goods requires an injury finding by the ITC before duties are levied. The President had the right to waive countervailing duties while the Multilateral Trade Negotiations were in progress, but this waiver authority expired January 1979.

Table 14 displays the basic data concerning antidumping and countervailing duty cases filed since January 1, 1975. A total of 109 dumping cases covering imports valued at \$9.8 billion have been filed. Of these, 12 (11 percent) have involved developing countries with a trade value of \$475 million. Fifteen percent of the cases were decided affirmatively, 28 percent pending, and 57 percent have been decided negatively or terminated. The one affirmative finding against a developing country involved polyvinyl chloride sheets from Taiwan. Pending cases against developing countries include carbon steel plates (Taiwan, \$237 million), steel wire rope (Korea, \$12.6 million), bicycle tires and tubes (Taiwan, \$14 million; Korea \$11 million), and vegetables (Mexico, \$195.2 million).

Table 14 also gives basic data on countervailing duty cases. A total of 97 cases have been filed, with developing countries named 43 times (44 percent). Thirty-four percent of the cases have been decided affirmatively, 37 percent negative or terminated, and 29 percent are pending. Total developing country exports affected by the affirmative decisions are \$195 million, while \$1,353 million is in pending cases, the most important of which is textiles and apparel from Taiwan.

TABLE 14.—ANTIDUMPING CASES, 1975-78

	Number of cases involving—			Value of imports for LDC cases (million)
	Developing countries	Others	Total	
Total.....	12	97	109	\$475.1
Affirmative decisions.....	1	15	16	11.0
Pending.....	5	26	31	458.6
Negative or terminated.....	6	56	62	5.5
Countervailing duty cases, 1975-78				
Total.....	43	54	97	
Affirmative decisions.....	10	23	33	\$195.1
Pending.....	19	9	28	1,352.9
Negative or terminated.....	14	22	36	<sup>2</sup> 78.9

<sup>1</sup> Does not include imports in 10 of the 19 cases involving LDC's.

<sup>2</sup> Does not include imports in 9 of the 14 cases involving LDC's.

Source: Office of the Special Trade Representative "Trade Actions Monitoring System—Quarterly Report," December 1978.

The data suggest that in proportion to their share in U.S. imports of manufactures, developing countries are "under represented" in antidumping cases, but "over represented" in countervailing duty cases. The amount of trade in the affirmative and pending categories is substantial for dumping and countervailing duty cases. Finally, the higher proportion of developing countries in the pending category as compared to cases where decisions have been made suggests that the role of developing countries in these trade actions may be increasing.

### *Adjustment Burden*

Between April 1975 and December 1978 a total of 399,571 workers were certified for adjustment assistance, with 388,066 receiving payments totaling \$560 million.<sup>23</sup> The trend of payments is up modestly from \$166 million in 1976, the first full year of the new program, to \$216 million in 1978 (first 11 months). Monetary benefits are almost exclusively unemployment payments, with 0.3 percent of workers receiving job search funds, 0.2 percent receiving relocation payments, and 2.4 percent entering training programs.<sup>24</sup>

The industry breakdown shows high concentration, with 21 percent of certified workers in primary metals, including steel, 20 percent in autos, 15 percent in apparel, 10 percent in electronics, and 9 percent in leather, including footwear.

The role of developing countries in adjustment assistance cases can not be directly identified as data on imports by source are not collected at the time of certification. But table 15 makes it quite clear that, with two exceptions (autos and steel), imports from developing countries are a major proportion of total imports and thus play an important role in adjustment assistance cases.

TABLE 15.—MAJOR INDUSTRIES RECEIVING ADJUSTMENT ASSISTANCE

Industry	Workers certified for payment	Imports (million 1976)	Imports from LDC's (million)	Imports from LDC's as percent of total	Imports as percent of domestic consumption
Copper.....	11,288	1,472	1,245	51.9	118.1
Textiles.....	9,304	1,653	729	44.1	-----
Apparel.....	53,429	3,613	2,925	80.9	-----
Footwear.....	30,849	1,725	965	55.9	126.8
Steel.....	82,968	4,513	416	9.2	-----
Electronics.....	37,856	3,500	1,088	31.1	-----
Autos.....	69,937	9,417	-----	-----	-----
Flatware.....	2,749	71	39	54.9	150.1
Sporting goods <sup>2</sup> .....	874	910	468	51.4	-----

<sup>1</sup> From 201 cases.

<sup>2</sup> Includes toys, games.

Sources: OECD "Trade by Commodities," market summaries, series C 1976 (1978); U.S. Department of Labor, Bureau of International Labor Affairs; ITC "201 Reports."

The more interesting question, however, is why some finely defined industries within a broader industry group receive high levels of adjustment assistance, while others apparently do not seek (or require) assistance. For example, within the apparel group (SIC 23), the ratio of certified workers to total workers ranges from zero (e.g. 2351

<sup>23</sup> U.S. Department of Labor, Bureau of International Labor Affairs, Report KG63 ORP2, September 1978.

<sup>24</sup> Data supplied by Bureau of International Labor Affairs, Department of Labor.

millinery) to 34 percent (2311 mens' and boys' suits and coats). A priori, industries receiving adjustment assistance would be expected to have many of the same characteristics as the industries identified in section 3 facing a presumptive adjustment burden: that is, low wages, low productivity, low capital intensity, high import penetration, decreasing employment, and increasing imports.

Attempts to test this hypothesis by a regression of percent labor certified (as the dependent variable) with economic characteristics (as the independent variables) were unsuccessful. The analysis was restricted to the apparel industry broken down to 33 four-digit SIC categories. The economic characteristics consisted of 1976 levels of average wage (total wages/total manhours) labor productivity (value added/total manhours), capital intensity (assets/number of production workers) and import penetration level (imports/value of shipments), as well as the change in employment (number of workers in 1976/number of workers in 1973), and either change in imports (1976 imports/1973 imports) or change in import penetration (import penetration in 1976/import penetration in 1973).

No single regression equation was significant at the 95 percent level nor did any one have all its coefficients significantly different from zero. Various treatment of missing data, combinations of variables, and logarithmic transformations did not improve the regression analysis. Contrary to expectations, average wage was positively correlated with the percentage of labor certified, both in simple correlations and as a coefficient in the regression equations.

A comparison of the characteristic means of those apparel categories with less than 2 percent of labor certified for adjustment assistance and of those with 2 percent or more certified yielded unexpected results in four of the seven characteristics tested, but none of these unexpected results had a significant t-statistic. The level of import penetration was the only characteristic significantly distinguishing the two groups, with the import penetration of the low certification group averaging 9 percent versus 20 percent for the high certification group. The findings thus suggest that with the exception of import penetration, economic characteristics do not explain differences in levels of adjustment assistance among sub-industries of the apparel industry group. It should be remembered, however, that we have only analyzed subindustries within the apparel section. Perhaps recourse to adjustment assistance can be explained by these economic characteristics if the full universe of manufacturing industries were included.

## V. ADJUSTMENT POLICY

The preceding analysis suggests the following conclusions relevant for U.S. trade policy. First, developing country exports of manufactures should not present a serious macroeconomic adjustment burden, either in terms of the trade balance or aggregate employment. In aggregate, imports of manufactures from developing countries will be large, but still modest relative to increases in consumption of manufactures, or relative to imports to which the United States has already accommodated itself over the past decade.

Second, the adjustment required in individual industries could be substantial. It is the concentration of imports in particular product

lines, and not the average level of imports or import penetration ratios that creates adjustment costs. The number of developing countries that export manufactures in volume to the United States is increasing, and will include larger semi-industrial countries. Although the growth rate of manufactured imports from LDCs may slow somewhat, the current base is far larger, and continued adjustment costs should be expected. Nevertheless, as explained in section I, actual job losses will be much less than the trade flows imply.

Third, developing countries are intimately involved in U.S. escape clause, countervailing duty, and adjustment assistance cases, and to a lesser extent in dumping cases. Fourth, the industries that have already encountered a presumptive adjustment problem have a distinct set of characteristics—low wages, low productivity, low capitalization, high labor intensity, high import penetration and high current protection. These characteristics imply special difficulty in adjusting. Both industries seeking escape clause protection and industries in which a relatively high proportion of workers receive adjustment assistance have high import penetration, but their economic characteristics do not generally conform to a priori expectations.

On a more speculative level, it is likely that the more advanced developing countries will continue to diversify their exports. Accordingly, a new group of industries within the United States, with higher technology and skill levels and producing more sophisticated (but still standardized) products such as steel, machine tools, and some chemicals, may encounter increasing import (and perhaps export) competition. In some instances the LDC competition will substitute for import competition from traditional foreign suppliers, and in some instances will be additional. Except for a still restricted OECD exercise, and some work at United Nations Industrial Development Organization there is no comprehensive research designed to anticipate this type of adjustment. This suggests that studies of a global supply/demand nature for specific basic industries be considered.

### *Choices*

Even though developing country exports of manufactures will not present an aggregate employment problem, macroeconomic conditions remain critical. Adjustment will be far more difficult with high unemployment, underutilized capacity, stagnant productivity, slow growth, and high inflation rates. It follows that achieving the conventional macroeconomic goals of full employment, price stability, and growth, desirable on their own merits, would also have a strongly positive effect on adjustment. Conversely, attempts to impede adjustment through trade restrictions would worsen the macroeconomic situation by contributing to inflation and slowing productivity growth. Also, because developing countries are expected to spend their export earnings, restrictive trade policy may actually worsen aggregate employment and capacity utilization within the United States.

On the micro or industry level, the United States has four choices for dealing with prospective increases in manufactured imports from developing countries: to do nothing, letting the market force adjustments; to compensate workers and perhaps firms that are injured; to facilitate adjustment by becoming more competitive or transferring



resources to other activities; or to resist adjustment through restrictive trade measures.<sup>25</sup>

The advantages and disadvantages of these options have been extensively examined elsewhere.<sup>26</sup> We will not repeat the full arguments, but rather make four comments.

First, the choice between adjustment assistance and import relief is especially confusing because they ostensibly have the same purposes—to prevent or remedy injury (an equity motive), and to facilitate adjustment of resources (an efficiency motive). Adjustment assistance accomplishes these objectives, in principle, by offering special compensation to displaced workers going beyond normal unemployment benefits (remedying injury), and by offering retraining, and job search and relocation funds to workers, and technological assistance and low cost mechanization loans to industry (promoting adjustment). Trade relief assists workers in the import competing industry to retain their jobs, and in principle should facilitate adjustment by offering firms a breathing spell which enables firms to become competitive.

The main criticisms are that adjustment assistance can assist, but is not effective at “adjusting” capital and especially labor, and that trade restrictions can protect but in practice do not promote adjustment. The two approaches are not identical. Adjustment assistance is clearly preferable when the United States has permanently lost its competitive position in a particular product. It is a onetime cost as compared to the continuing cost of protection.

Second, the costs of trade restrictions can be high. There are two measures of cost—the “deadweight” loss or efficiency cost of producing goods more expensively at home than they can be imported, and the cost to consumers, which include transfers to domestic producers and workers. No one has estimated the total cost of affirmative ITC escape clause recommendations. But estimates have been made, mainly by the Council on Wage and Price Stability, of the costs of proposed trade restrictions in six cases. Table 16 summarizes these studies. Total costs to consumers of the proposed remedies would have been between \$3 and \$4 billion dollars annually; the average cost to consumers per job protected would have been over \$130,000; and the

TABLE 16.—COST OF PROPOSED REMEDIES FOR SELECTED ITC 201 CASES

	Annual consumer cost of proposed remedy (million)	Consumer cost per job protected	B/C ratio <sup>1</sup>
Zinc	\$154	\$385,000	0.03
Copper	1,400	168,000	.25
Televisions	221	53,000	.09
Shoes	509-1,000	15,850-31,700	-----
Meat (beef and veal) <sup>2</sup>	1,167	NA	NA
Stainless steel flatware	27.2	33,677	NA

<sup>1</sup> The costs are deadweight (efficiency) losses plus transfer to foreign suppliers. The benefits are transitional unemployment avoided.

<sup>2</sup> Consumer cost of complete elimination of imports.

Source: Council on Wage Price Stability submissions to the ITC; C. Pearson, “Protection by Tariff Quota: Stainless Steel Flatware Case,” *Journal of World Trade Law*, July 1979.

<sup>25</sup> Setting aside present legislative requirements.

<sup>26</sup> Richard Blackhurst, Nicolas Mariani, Jan Tumliar, “Trade Liberalization Protectionism and Interdependence; GATT, 1979.

average benefit: cost-ratio would have been 0.12. The annual dead-weight (efficiency) loss per job gained would have been \$12,650 for televisions and \$3,571 for shoes. On the face of it, these are unacceptably large costs.

Third, if trade restrictions are employed, the important choices are between quantitative measures and tariffs, and between discriminatory and nondiscriminatory restrictions. Other important questions are the severity of the restrictions, and whether they are temporary. Quotas, Voluntary Export Restraints (VER's), and Orderly Marketing Agreements (OMA's) are quantitative restrictions. The main advantage claimed for them are their certainty, which may be more important in a floating exchange rate system in which currency charges can erode or augment the protective effect of tariffs.<sup>27</sup> There are numerous disadvantages to quantitative restrictions. These include removing price restraints on domestic producers, loss of tariff revenue, and possible transfer of windfall gains to foreign exporters. If they are applied on a country by country basis (i.e., they are discriminatory), as VER's and OMA's invariably are, they encourage the formation of foreign oligopolies and cartels, and tend to shift foreign supply to noncontrolled countries.

An OMA is a formal agreement between the U.S. Government and a foreign government that exports will be restrained; a VER is a "voluntary" agreement on the part of the foreign country to limit exports. Both can be inefficient, ineffective, and inequitable. They can be inefficient because they are apt to discriminate against the lowest cost foreign suppliers, while smaller, higher cost suppliers may escape controls. They can be ineffective if production shifts to non-controlled sources. And they are inequitable as they often single out new and large suppliers as the disruptive element in trade.

Developing countries can, on occasion, benefit from OMA's. For example the OMA with Japan on color television negotiated in 1977 helped improve the competitive position of Korea and Taiwan. But the advantage was short-lived as OMA's have now been placed on these two countries. As new suppliers in an inferior bargaining position, developing countries are apt to be especially vulnerable to OMA's and VER's.

These trade controls have additional disadvantages—the cost to consumers is difficult to calculate; they avoid the compensation requirements of General Agreement Tariff and Trade and thus may be used more freely; because they are superficially "amiable" agreements, there may be fewer restrictions on their use; they share the disadvantage of country specific quotas in encouraging cartelization of foreign suppliers. Finally, VER's pose a special problem because they can go unrecorded and undetected. In fact, the Office of the Special Trade Representative can initiate a VER on any product with any country, without the safeguards provided by going through the International Trade Commission hearing and determination process.

The prospective shift in comparative advantage suggests that the government might make a positive contribution to adjustment by providing better information and projections to the private sector, and by making its policy intentions clear and consistent. Adjustments by the private sector to changes in comparative advantage are less

<sup>27</sup> Tariffs continue to change the structure of prices in a floating system.

costly if accomplished by diverting financial capital from declining industries, and if employment reductions result from attrition, not layoffs. Better information regarding the longer term international competitive position of individual industries, including comparative production cost studies and trends in foreign supply, would assist private sector planning.

The earlier work on the presumptive adjustment burden (PAB) industries and the escape clause industries suggest that some form of early warning system may be feasible. In that exercise we identified industries facing a presumptive adjustment burden from LDC exports based mainly on data from 1970-73. Six of the PAB industries identified turned up as escape clause cases between 1975 and 1978. When one excludes agricultural escape clause cases, and cases in which imports from LDCs were a trivial amount, there were a total of 20 escape clause actions of which six, or 30 percent were identified in the PAB analysis. Prior identification techniques can be improved so that an early warning system could be devised to facilitate adjustment.

A clarification of the government's intentions with regard to specific industries and the procedures for relief would also promote adjustment. In the present situation labor and industry take a calculated risk that they can obtain a positive finding by the ITC, and that the President will agree to trade restraints. The ITC decision is extremely uncertain—our analysis failed to identify any differences between positive and negative findings with respect to injury indices or economic characteristics. The President's action is also highly uncertain and subject to domestic political pressures. It is instructive to note that three of six Presidential recommendations for trade restrictions involved resubmission of cases that had been rejected earlier. If the criteria for finding injury and recommending trade restrictions rather than adjustment assistance were made more clear in advance, and if the type and level of import relief were known with greater precision, labor and industry could adjust more easily.

The final policy issue concerns phasing out special and differential treatment of LDCs within the international trading system.<sup>28</sup> The issue is complex and serious. Nevertheless, the preceding discussion reveals that developing countries have become exporters of a wide range of manufactures, that they play an important role in recent U.S. trade actions, and that these trends are likely to continue. It would be naive to think that U.S. adjustment policies will be independent of the trade rules to which LDCs adhere.

Developing countries "enjoy" five types of differential trade treatment. The Generalized System of Preferences (GSP) schemes adopted by the industrial countries provide preferential access to industrial country markets by reducing tariff barriers against LDCs, although these schemes contain important exceptions with regard to sensitive products, quantitative limits, and value limits. Second, the U.S. has often waived countervailing duties against subsidized LDC exports. Third, LDCs are given liberal permission under GATT to use trade protection measures for their infant industries. Fourth, LDCs are exempted from the GATT prohibition against using quantitative

<sup>28</sup> Isaiah Frank, "The 'Graduation' Issue in Trade Policy Toward LDCs," *Journal of International Trade Law*, forthcoming.

restrictions for balance of payments purposes. Finally, LDCs are not bound by the general GATT principle of reciprocity in negotiating trade concessions. The trading system is not totally bent in their favor, however. Studies show that both tariff and nontariff barriers in industrial countries have the effect of discriminating against LDCs.

No one suggests that differential treatment be completely eliminated. But, except for some aspects of the General Specialized Preferences (GSP), there is no systematic procedure wherein the upper tier of successful LDC exporters assumes the full trade responsibilities of GATT. In short, there is no procedure for graduation.

One reason for encouraging advanced LDCs to accept GATT trade rules is that it is often in their own interest to do so, although difficult for them because of special interests within the countries. Graduation of advanced LDCs can also improve the export prospects of the least developed, both in the advanced LDCs markets through lower trade restrictions, and by limiting preferences to the smaller group of least developed countries.

Graduation would not have a large direct impact on the adjustment needs within the United States. Reducing import barriers in advanced developing countries could stimulate our exports but would not directly touch our import competing sectors. The indirect effects may be important, however. It is increasingly difficult for the United States to resist restrictive measures against successful exporters who fail to accept general trade obligations with respect to their imports, and who subsidize their exports to us. Our experience with Japan is instructive. Its commercial policies have reflected an underdeveloped country mentality long after it became a successful exporter. The result has been continuing trade tension. Similar situations with advanced developing countries should be avoided.

#### APPENDIX: PAB INDUSTRIES

The following industries were screened from the four-digit Standard Industrial Classification industries to identify presumptive adjustment burden (PAB) industries. The requirements for inclusion in the PAB set were declines in U.S. employment, imports exceeding 5 percent of U.S. consumption, increasing import penetration ratio, growth of imports from developing countries exceeding growth of imports from other sources, and developing countries supplying 10 percent or more of total U.S. imports. These screens identify industries that, presumptively, have faced an adjustment burden arising from imports of manufactures from developing countries. It should not be implied, however, that this is an exhaustive listing of industries confronting an adjustment burden.

#### DURABLES

- 3253 Ceramic wall and floor tile.
- 3313 Electrometallurgical products.
- 3333 Primary zinc.
- 3621 Motors and generators.
- 3641 Electric lamps.
- 3671A Electron tubes, receiving type.
- 3675A Electronic capacitors.
- 3676 Electronic resistors.
- 3873 Watches, clocks and watchcases.
- 3914 Silverware and plated ware.
- 3942 Dolls.
- 3944 Games, toys, and children's vehicles.
- 3961 Costume jewelry.
- 3991 Brooms and brushes.

## NONDURABLES

- 2011 Meat packing plants, including sausages and other prepared meats.
- 2061 Raw cane and beet sugar, and cane sugar refining.
- 2076B Vegetable oil mills, not elsewhere classified, including shortening and cooking oils.
- 2211 Cotton weaving mills.
- 2261 Cotton finishing plants.
- 2292 Lace goods.
- 2311 Men's and boys' suits and coats.
- 2337 Women's, misses', and juniors' suits, skirts, and coats, including girls', children's, and infants' coats and suits.
- 2342 Brassieres and allied garments.
- 2351 Millinery, including hats and caps.
- 2371 Fur goods.
- 2381 Dress and work gloves, except knit and all-leather
- 2385 Waterproof outer garments.
- 2386 Leather and sheep lined clothing.
- 2816 Inorganic pigments.
- 2911 Petroleum refining.
- 3142B Shoes (except rubber), including house slippers.
- 3143B Male dress, work, and play shoes.
- 3144 Women's footwear except athletic.
- 3171 Women's handbags and purses.
- 3172 Personal leather goods, not elsewhere classified.
- 3199 Industrial leather belting, including leather goods, not elsewhere classified.

Source: Trade Relations Council: Employment, Output, and Foreign Trade of U.S. Manufacturing Industries 1958-74.

# MONETARY AND FISCAL POLICY WITH ADJUSTABLE EXCHANGE RATES

By William H. Branson\*

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## I. INTRODUCTION

From the 1944 Bretton Woods Agreement to 1971, more-or-less fixed exchange rates were a central characteristic of the international monetary system. During this period, three propositions about the behavior of a hypothetical floating exchange rate system were widely accepted. First, a floating, or freely flexible, exchange rate was expected to follow fairly closely the difference between national rates of inflation. This implied that the exchange rate would move fairly smoothly, following a "purchasing-power-parity" (PPP) path. It also was taken to imply the second proposition: That a floating exchange rate would insulate the domestic economy from international disturbances. If the rate adjusted to foreign, or world, price disturbances, the domestic price level would not have to adjust. Given the insulation effect of a floating rate, the third proposition seemed to follow. A floating exchange rate would free monetary policy to pursue domestic policy targets. Monetary policy could aim at a zero rate of inflation,

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for example, and the exchange rate would automatically and smoothly move to offset the world rate of inflation.

None of these appealing propositions have held since the system shifted from more-or-less fixed rates before 1971 to more-or-less floating rates since 1973. Exchange rates have shown much more volatility than relative price levels; movement of the "real exchange rate," the exchange rate adjusted for relative price movement, has been a major mechanism of adjustment of current account imbalances. Exchange rate changes have been a major transmitter of international economic disturbances, rather than insulating single economies from them. This has been the case with real disturbances that move relative prices of major categories of goods, such as oil, as well as with monetary disturbances. Finally, exchange rate movements have constrained monetary policy since 1973 much as balance-of-payments implications constrained it before 1971. The shift to more-or-less floating rates has not "freed" monetary policy in any significant way.

This paper shows why these propositions have not held, and draws the implications for exchange rate and balance-of-payments adjustment, and for monetary and fiscal policy. In section II we review international monetary developments since the mid-1960's. This review shows the volatility of exchange rates relative to differences in rates of inflation, and relates exchange rate movements to international monetary developments. In section III we show the relationships among exchange rates, monetary and fiscal policy, relative price levels, and the balance-of-payments which explain movements of exchange rates since 1973. This model of exchange-rate dynamics has become known in the recent literature as the "asset-market" view of exchange-rate determination. In section IV we present projections of trade and exchange rate movements to the year 2000 for the Organization for Economic Cooperation and Development (OECD) countries and major blocs in the centrally planned and developing worlds. These are based on a long-run projection model developed at the OECD's project Interfutures, which is built on the "asset-market" view.

The principal implications of the paper for monetary and fiscal policy are summarized in section V. Two basic points are worth stressing here. First, movement of exchange rates relative to differences in inflation rates—movements in the "real exchange rate"—are a principal part of the international adjustment mechanism. Second, the need for international coordination of monetary policy is as great under more-or-less floating exchange rates as it was when rates were fixed.

## II. REVIEW OF MONETARY DEVELOPMENTS, 1966-78

It is useful to begin the discussion of exchange rate determination under flexible rates (and the policy problems the flexible rate system raises) with a brief review of the actual developments in exchange markets, and policy reactions to these developments. This brief review is not intended to be a history of monetary developments during the past 10 years, but rather a sketch of developments which permits us to note points that will turn out to be significant after the economic analysis of exchange rate determination is completed.

This analytical review will focus on four major exchange rates: the prices of the Deutschmark (DM), yen, Canadian dollar, and pound

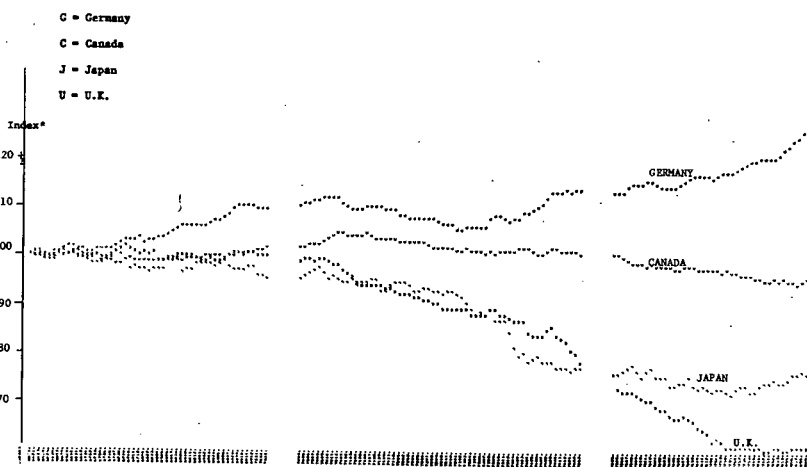
sterling in terms of U.S. dollars. These four rates span experience since 1971, and provide usefully different examples of this experience. The other major currencies in the OECD world have either followed the experience of one of these currencies, such as the European Communities (EC) "snake" countries and Switzerland following the DM, or fall between the extremes provided by the DM and pound sterling, as in the cases of Italy and France. These currencies also represent a variety of policy approaches, ranging from episodes of virtually free floating to attempts to hold the dollar rate stable for periods up to a year. Thus, these four exchange rates give us a useful and informative sample of experience since 1971.

We begin below with a very brief look at developments of exchange rates, reserves, and relative prices in the period 1966-70, mainly to provide background for the period since 1971. It is against the "stable" background of the earlier period that the volatility of the period since 1971 stands out most strongly.

### 1966-70

The stability of exchange rates and reserves and the lack of striking divergence in inflation trends in the 1966-70 period can be seen only by comparison with developments in the 1970's. The monthly data on relative prices, official reserves, and exchange rates are given in figures 1-3. In figure 1, we show the ratios of the U.S. industrial price index to those of Canada, Germany, Japan, and the United Kingdom (line 63 in International Financial Statistics (IFS)). Each relative price ratio is indexed to 1966.1=100. The plots show the U.S. price index rising against the German index by 1978, and falling against the U.K. index.

FIGURE 1.—Movements of U.S. industrial price index relative to those of Canada, Germany, Japan, and United Kingdom (1966 = 100)

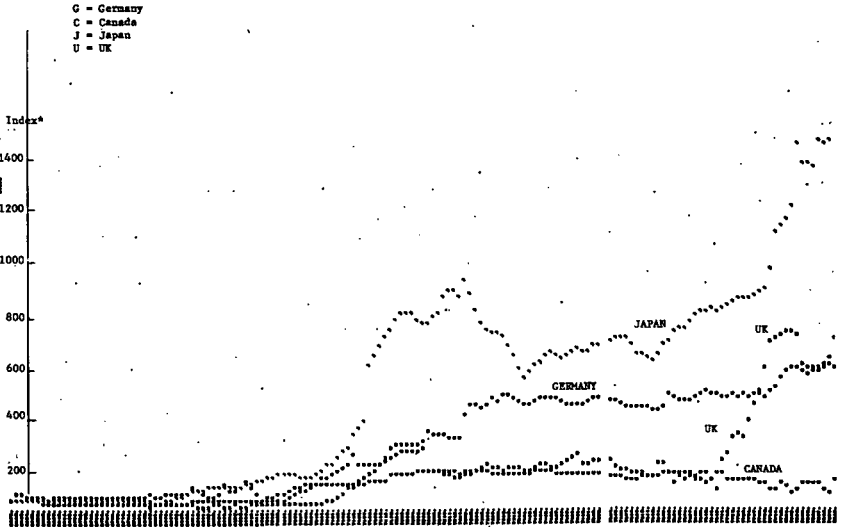


\*Vertical axis is an index of U.S. industrial prices relative to those of Canada, Germany, Japan, and United Kingdom, 1966=100, monthly data.



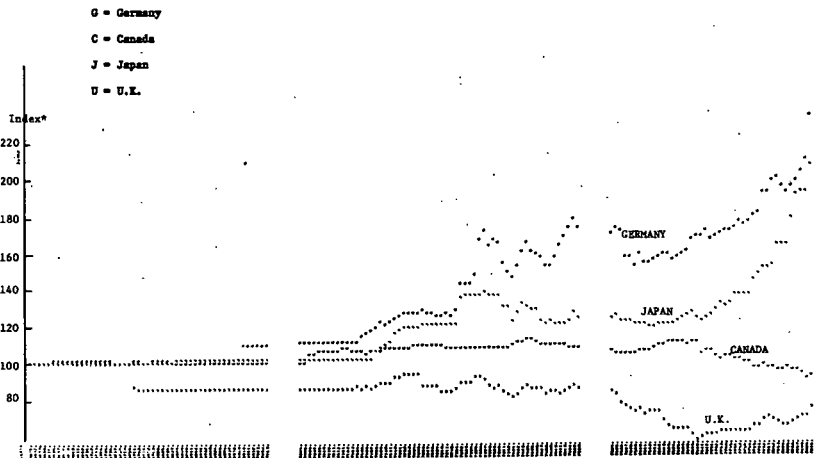
Figure 2 displays movements of official net reserves in dollars for the same four countries; again indexed to 1966.1=100. Finally, in figure 3, we see movements in the dollar price of each of the four currencies, indexed to 1966.1=100. By the end of the period, the dollar price of the DM shows a substantial increase while the dollar price of sterling falls.<sup>1</sup>

FIGURE 2.—Movements of official reserves in U.S. dollars, indexed to 1966 = 100



\*Vertical axis is an index of official dollar reserves, 1966=100, monthly data.

FIGURE 3.—Movements of the U.S. dollar price of the Deutschmark, yen, Canadian dollar, pound sterling, indexed to 1966 = 100



\*Vertical axis is an index of the U.S. dollar price of each foreign currency, monthly data, 1966=100.

<sup>1</sup> In the plots, where several observations coincide, only one symbol is printed. Thus all four exchange rates stayed at 100 (1966.1=100) until 67.11 (November, 1967) when sterling was devalued, for example.

The stability of relative economic performance during the period 1966–70 can be seen in the price movements in figure 1. From 1966 to March 1970, the U.S. industrial price index relative to those of Canada, the United Kingdom, and Japan showed little trend, with Japanese prices rising a bit slower in early 1968, opening a small gap between Japanese relative prices and those of Canada and the United Kingdom. From 1966 to April 1968 the German price index rose more slowly than that of the U.S., pulling the U.S.-German series above the other three. After spring of 1968, U.S. and German prices moved roughly together, with a bump in the U.S. price index in mid-1969 that was reversed.

Compared with the divergence of relative price performance that began in early 1970, with the United Kingdom's relative rate of inflation picking up and the Canadian and Japanese rates falling relative to the United States, the previous five years had shown relatively stable performance, with U.S. industrial prices rising by 6.5 percent relative to Germany and 1.7 percent relative to Japan, and showing essentially flat movement relative to Canada and the United Kingdom. The values for the five indexes (1966.1=100) in March 1970 are shown in table 1.

TABLE 1.—*Industrial price indexes in five countries, 1966.1=100*

	<i>March 1970</i>
United States.....	111.9
Canada.....	113.1
Germany.....	105.1
Japan.....	110.0
United Kingdom.....	114.1

To some extent, this relatively consistent price performance across these five countries resulted in relatively stable reserve paths needed to maintain par values for exchange rates. The reserve accumulations of Canada, Germany, Japan and the United Kingdom are shown in figure 2 and the dollar prices of their currencies are shown in figure 3, all indexed to 1966.1=100.

The exchange rate data of figure 3 for 1966–70 simply reflect the par values of the Bretton Woods system. In November 1967, sterling was devalued from \$2.80 to \$2.40, a drop of 14.3 percent. After a month of floating, the DM was upvalued at the end of October 1969 by 9.3 percent to \$0.27. This followed a devaluation of the French franc (not shown in figure 3) by 11 percent in the previous August. Finally, at the end of May 1970, the Canadian dollar was effectively floated, indefinitely as the sequel showed. The dollar price of the Japanese yen was maintained throughout the period 1966–70, not giving way until August 1971.

More interesting than the exchange rate data for the period are the data on official reserve assets, shown in figure 2. These show the movements in net official assets required to hold the parities of figure 3. As private buying or selling pressure on the exchange market threatens to pull the price of foreign exchange above the top of the band prescribed about parity, or to push it below the bottom, Central Banks are committed to sell or buy to hold the rate within the band. These sales or purchases are the movements in reserve assets; reserves exist to permit the Central Bank to move the rate away from the value the market would set.

While the period 1966-70 appears to have been fairly stable by comparison with the subsequent period, it hardly seemed so to the monetary authorities charged with defending existing parities. To guard reserves against speculative attacks on parities that seemed clearly out of line, a series of reciprocal credit, or "swap" arrangements was developed among the major central banks, providing credit lines which could be drawn down to stabilize the foreign exchange markets. The swap arrangements were begun under the initiative of the Federal Reserve Bank of New York, acting as agent for the Federal Reserve System and the Treasury. As of September 10, 1970, the amounts in the Federal Reserve's swap lines were as shown in table 2.<sup>2</sup>

A brief review of the reserve movements of figure 2, and their interaction with exchange rate changes in figure 3, is instructive. The major movements in reserves in the 1966-70 period in figure 2 are for Germany and Japan. Beginning in mid-1968, Japan started accumulating reserves, with fairly steady growth up to the end of 1970, when the growth rate jumped. Persistent accumulation of reserves indicates continuing purchases of foreign exchange (and corresponding sales of yen) to keep the dollar price of yen from rising. This accumulation continued in Japan until the system broke down in August 1971.

TABLE 2.—Federal Reserve reciprocal currency arrangements

	<i>Amount of facility, Sept. 10, 1970</i>
Austrian National Bank.....	200
National Bank of Belgium.....	500
Bank of Canada.....	1, 000
National Bank of Denmark.....	200
Bank of England.....	2, 000
Bank of France.....	1, 000
German Federal Bank.....	1, 000
Bank of Italy.....	1, 250
Bank of Japan.....	1, 000
Bank of Mexico.....	130
Netherlands Bank.....	300
Bank of Norway.....	200
Bank of Sweden.....	250
Swiss National Bank.....	600
Bank for International Settlements:	
Swiss francs/dollars.....	600
Other authorized European currencies/dollars.....	1, 000
<b>Total.....</b>	<b>11, 230</b>

Source: Federal Reserve Bulletin, 9/70, p. 695.

In the German case, there was a small accumulation in late 1968 which was reversed by January 1969. Then a build-up of reserves began that peaked in September 1969. This was the accumulation needed to preserve the \$/DM parity. When the accumulation became excessive, as viewed by the German authorities, the DM was floated in early October and refixed with a 9-percent upvaluation at the end of the month. Subsequently, the Bundesbank was able to work its reserves down to the pre-1968 level, but accumulation began again in mid-1970, leading to the further upward movement of the \$/DM rate beginning in early 1971.

<sup>2</sup> An interesting discussion of development of the swap arrangements, in the context of the story of international monetary management of the period, is given in Charles H. Coombs, *The Arena of International Finance* (New York, 1976), especially ch. 11, "Defense of the Dollar, 1965-1968."

The movement of reserves in figure 2 and exchange rates in figure 3 for Germany and Japan are roughly consistent with their relative price behavior in figure 1. There, U.S. industrial prices rose relative to Germany and Japan, but stayed about even relative to Canada and the United Kingdom, over the period to 1970. This improved the competitive position of Germany and Japan, resulting in upward pressure in the dollar prices of their currencies and reserve accumulation.<sup>3</sup>

The Canadian case in figures 1 to 3 is consistent with the story for Germany and Japan. Until the beginning of 1970, the Canadian dollar remained at parity against the U.S. dollar (figure 3) with Canadian industrial prices moving with those in the United States (figure 1), and no significant reserve accumulation in Canada (figure 2). Then in early 1970 (perhaps March or April) Canadian price performance began to improve relative to the United States and reserve accumulation began in Canada. At the end of May, the Canadian dollar was freed to float, and the U.S. dollar price of the Canadian dollar began to rise.

In the case of the United Kingdom, industrial prices moved roughly with those of the United States until early 1970. This put the United Kingdom at a competitive disadvantage vis-a-vis Germany and other Western European countries. U.K. reserves fell slightly from 1966-67 to 1969-70. The small size of the reserve loss was made possible by the devaluation of sterling in 1967, and a host of *ad hoc* support arrangements provided by the monetary system to support sterling as an office reserve currency.

The relatively stable period of 1966-70 tells a story that is fairly consistent across the experience of the different currencies. Persistent improvement in relative industrial prices eventually resulted in reserve accumulation under the fixed-rate system for Germany and Japan, and, toward the end of the period, Canada. Eventually, the reserve accumulation became excessive, as measured by some combination of domestic monetary authorities and the rest of the responsible parties in the system. At that point, reserve accumulation generally was stopped or reversed as the exchange rate was either upvalued or floated. This is not a surprising story, but confirmation by the data of prior views is always welcome.

### 1971

Differential price performance in 1971 was not particularly striking, as can be seen in figure 1. German and Canadian prices moved roughly parallel to U.S. prices during the year, while U.K. prices rose faster and Japanese prices more slowly, continuing trends begun in 1970. It would be hard to explain reserve and exchange rate developments in 1971 by the modest movements in relative prices in 1970 and 1971.

Through early 1971, the European and Japanese central banks absorbed dollars at increasing rates in their attempt to hold parity levels against an increasing U.S. payments deficit. In figure 2, we see Japanese reserves climbing rapidly all through 1971, with an enormous jump in July. U.K. reserves rose throughout the year, despite the gradual erosion in U.K. competitiveness that began in early 1970. German reserves continued their increase to a peak in May 1971.

<sup>3</sup> For evidence pointing in the same direction, see R. Dornbusch and P. Krugman, "Flexible Exchange Rates in the Short Run", Brookings Paper on Economic Activity 3: 1976, pp. 558-82.

To a certain extent, this worldwide accumulation of dollar reserves was the spillover of monetary ease in the United States, as interest rate differentials widened between the United States and Europe.<sup>4</sup>

The pressure of rising reserves became excessive, in the view of several major European central banks, in May 1971, when the Bundesbank floated the Deutschemark, with Austria, the Netherlands, and Switzerland following. Beginning in May 1971, the dollar price of the DM rose steadily into early 1972. As the DM floated up, German dollar reserves were roughly constant from July through October 1971, and then rose a bit to the end of the year as the Bundesbank presumably intervened to slow the rise of the DM slightly.

The growing payments deficit during 1971, shown in table 3 below, resulted in the August 13 speech by President Nixon, ending convertibility of the dollar into gold. This effectively floated the dollar, and as figure 3 shows, the dollar price of yen and sterling began to rise. Sterling floated upward through July 1972, while the yen rose more sharply to December 1972, when its dollar price was again stabilized.

TABLE 3.—U.S. official settlements balance, 1971

Period, 1971:	OSB (Deficit -) (\$ billion)
I.....	-5.9
II.....	-6.2
III.....	-11.8
IV.....	-5.8
Total.....	-29.7

A good example of policy reaction as the system shifted from fixed to floating exchange rates is the reduction in the Bank of England's bank rate in September 1971, as sterling rose. During the fixed-rate period, typical monetary response to fluctuations in the balance of payments was rising bank rate in reaction to increasing deficit, and falling bank rate as the deficit was reduced. The translation of this policy reaction function to a flexible-rate world is rising bank rate as sterling weakens (\$/£ falls), and falling bank rate as sterling strengthens. The September 1971 cut in bank rate was an initial example of this policy reaction, which has persisted throughout the flexible-rate period.

By December 1971, the dollar price of almost all major currencies had risen since floating began in April. The percentage change of the values of major currencies from April 30 to December 31, 1971, are shown in table 4.<sup>5</sup>

### 1972

During 1972, the first full year of price controls in the United States, U.K. and Canadian prices rose relative to those in the United States, Canadian rather more sharply, as shown in figure 1. The long trend of Japanese prices growing slower than U.S. prices began in 1968 or so, peaked in mid-1972, and reversed to a trend more rapid than the U.S. extending to early 1974. German prices moved roughly parallel to those in the United States.

<sup>4</sup> See Charles H. Coombs, "Treasury and Federal Reserve Foreign Operations", Federal Reserve Bulletin (10/71), p. 783.

<sup>5</sup> W. H. Branson, "Trade Effects of the 1971 Currency Realignments", Brookings Papers on Economic Activity 1: 1972, p. 34.

The dollar prices of the DM, Canadian \$, and yen were held stable during 1972 with substantial central bank intervention. The U.S. official settlements deficit in 1972 was \$10.3 billion, and the German and Japanese central banks accumulated further balances of dollar reserves holding their exchange rates, as is shown in figure 2.

In June 1972, there was a sudden run on sterling, and after an attempt to hold the exchange rate, the Bank of England permitted sterling to float.

Table 4.—Percentage changes in exchange rates of 13 major OECD countries and the rest of the world April 30–December 31, 1971

Country:	Percentage change in terms of U.S. dollars 1
Canada.....	0.79
Japan.....	16.88
Austria.....	11.59
Belgium.....	11.57
Denmark.....	7.45
France.....	8.57
Germany.....	13.58
Italy.....	7.48
Netherlands.....	11.57
Norway.....	7.49
Sweden.....	7.49
Switzerland.....	13.88
United Kingdom.....	8.57
Rest of the world.....	3.76

1 All exchange rates (e) are stated in \$1 units of foreign currency. The percentage change formula is:

$$[(e(12/31)/e(4/30)) - 1] \times 100.$$

Sources: Data for all countries except as noted are from International Monetary Fund, International Financial News Survey, Vol. 23 (December 22–30, 1971), p. 421; Switzerland is from Economic Report of the President, January 1972, p. 143; Canada is from *ibid.* and IMF, International Financial Statistics, various issues; rest of the world is from *ibid.* and International Financial News Survey, cited above.

The loss of reserves in defense of sterling from May to June 1972 is apparent in figure 2, and the drop in the dollar price of sterling shows up in figure 3. After sterling was floated in June, the Bank of England seems to have permitted it to float rather freely until mid-1973, as evidenced by the lack of movement of U.K. reserves in figure 2 during that period.

1972 was a year of monetary ease in the United States, with substantial further accumulation of dollars by the major non-U.S. central banks. There was general upward pressure on the dollar price of the major currencies, and the exchange markets were looking for a break in rates at the end of the year.

### 1973

During 1973 Germany and U.K. prices moved roughly parallel to U.S. prices, while those in Japan and Canada rose substantially faster, as is shown in figure 1. The Canadian price level rose relative to the U.S. in the first half of the year, and then stabilized in relative terms in the second half, while the Japanese price level rose at an increasing rate relative to the U.S. through the year. This substantial deterioration of Japanese price performance in 1973 may have been at least partially reflected in the substantial drop in Japanese reserves during

the year (figure 2) combined with a flat-to-downward path for the dollar price of the yen (figure 3) after February's "revaluation."

The accumulation of reserves in 1972 reflected increasing pressure on the European and Japanese exchange rate against the dollar. The central banks let the rates go in February 1972, and there was an immediate rise in the dollar price of the DM, yen, and sterling, as shown in figure 3. The second sharp jump in the \$/DM rate in June and July of 1973 was viewed as an over-adjustment by the authorities. The semiannual report on exchange markets in the Federal Reserve Bulletin viewed the jump as "unwarranted," and suggests that reports of a major enlargement of the swap network and the imminent reentry of the Federal Reserve into the foreign exchange market ended the "speculative wave."<sup>6</sup> However, in retrospect it seems that such an adjustment could have been expected given the build-up of pressure on this rate during 1972 and the tight stance of Germany monetary policy in 1973.<sup>7</sup>

The DM, yen, and sterling all went through a complete cycle in 1973, as can be seen in figure 3. Several more such cycles appear in the data after 1973, when the general float began. These cycles show no clear relation to price trends, which are widely believed to control the longer term movement of the exchange rate. To understand the shorter term fluctuations, we have to consider movements in monetary policy and, in general, conditions of equilibrium in asset markets. The determinants of short term fluctuations will be discussed later in section II.

#### 1974

During 1974, price trends began to diverge substantially. At the same time, the new system of rates floating more freely than in the 1970-72 period began to "settle down" in the sense that fluctuations in exchange rates began to diminish with a concurrent reduction in the volume of central bank intervention. Thus, the period of adjustment to more-or-less equilibrium rates seemed completed by the end of 1973, and movements in rates from 1974 on may be reflecting current movements in asset demands and supplies, and in relative prices.

From the beginning of 1974, U.S. industrial prices rose more rapidly than German, Japanese, and Canadian prices. In figure 1 we see that the movement of U.S. prices relative to German and Japanese prices was substantial, while U.S.-Canadian relative prices moved much more gradually, as would be expected. After moving roughly parallel to U.S. prices from late 1971, U.K. prices began to rise rapidly relative to U.S. prices in August-September 1974. These relative price movements are not strongly related to the exchange rate movements of figure 3, certainly not in the short run. From January to September of 1974, there was a complete cycle in the dollar price of the DM and yen as German and Japanese prices fell steadily relative to U.S. prices. U.K. prices began to rise relative to U.S. prices in August or September 1974. The dollar price of sterling did not begin to fall until February 1975. Thus, relative price movements do not seem to "explain"

<sup>6</sup> Charles H. Coombs, "Treasury and Federal Reserve Operations," Federal Reserve Bulletin (3/74), p. 191.

<sup>7</sup> For both the over-adjustment view and the comment on the German policy stance see Charles H. Coombs, "Treasury and Federal Reserve Foreign Exchange Operations", Federal Reserve Bulletin (9/73), pp. 623-4. An explicit asset-market view of exchange rate determination would have made the \$/DM adjustment in 1973 more explicable.

short-run movements in exchange rates in the data of figures 1 and 3 very well. For this explanation, we must go to monetary conditions, as is indicated from time to time in the Coombs reports.

The "settling down" aspect of exchange markets in 1974 is reflected in the reserve data of figure 2. Compared to the earlier years, reserve levels were fairly steady in 1974. With reserve levels fairly steady, overt intervention by central banks in the exchange markets was fairly mild. The only clear movement in the figure 2 data is the accumulation of reserves in Japan as the Bank of Japan presumably intervened to keep the dollar price of the yen from rising.

Against the background of only mild intervention, fluctuations in exchange rates beginning in 1974 seem to decrease in figure 3. Some of the movements are undoubtedly due to shifting portfolio preferences among the major oil-exporting countries. Movements in the \$/DM rate reflect differential movements in money supply and demand. For example, the increasingly severe recession in the United States in late 1974 probably generated expectations of a drop in interest rates in the United States, leading to a shift from the dollar to the DM. This is reflected in the rising \$/DM rate in late 1974 in figure 3.

Compared with the turbulent period of 1971-73, the floating-rate system seemed to be settling down near a shortrun equilibrium in 1974. This shortrun equilibrium did not seem to be closely related to relative price trends, but rather to current movements in money and asset markets. This points the way for research in the area.

#### 1975-76

By the beginning of 1975, the floating exchange rate system seemed to have adjusted to a shortrun equilibrium. During the period 1971-73, a significant proportion of exchange-rate change was probably due to the accumulated disequilibrium generated by attempts by central banks to stabilize rates in the face of substantial movement or underlying trends in relative prices, productivity, and monetary developments. The rapid movement of the \$/DM and \$/yen rates in early 1973 very likely reflected such a cumulation of disequilibrium pressure. But by 1975, this pressure was dissipated, and exchange rates were moving in reaction to current movements in their determinants—a loose combination of relative prices, expectation of current account balances, and monetary developments. The account of exchange market developments during this period by Charles Coombs of the New York Federal Bank emphasizes the interest rate movements and current account expectations as factors moving the current values of exchange rates.<sup>8</sup> Relative price developments could enter this implicit model of exchange rate developments as they influence current account expectations.

Since by early 1975 exchange rates had reached the neighborhood of shortrun equilibrium and were reacting to movements in their current determinants, fairly smooth movements in these determinants would yield fairly smooth movements in exchange rates. Thus, from the beginning of 1975, we could expect to see shortrun movements of exchange rates reacting to differential monetary developments, around a longrun trend related to relative price developments.

<sup>8</sup> See, for example, "Treasury and Federal Reserve Foreign Exchange Operations", Federal Reserve Bulletin (9/75), p. 554.



The relative price data of figure 1 show fairly steady trends in industrial prices in Germany, Japan, Canada and the United Kingdom relative to the United States from the beginning of 1975. German, Japanese, and Canadian prices all fell gradually relative to U.S. prices, while U.K. prices rose substantially faster.

Exchange rate trends tended to follow relative price movements a little more closely in 1975-76 than in the previous period. In figure 3, the downtrend in the dollar price of sterling coincides fairly well with the falling ratio of U.S. to U.K. prices in 1975-76. The slowly rising dollar price of the Canadian dollar is also consistent with the movement of the U.S./Canadian price ratio. The connection of relative prices and exchange rate is not so clear in the German and Japanese cases, though.

The Japanese exchange rate went through a mild cycle from February 1975 to September 1976, with a bottom at December 1975-January 1976. The reserve path for Japan in figure 2 has roughly the same shape, but around a rising trend. The reserve cycle began in April or May 1975, bottomed in December, and flattened out along a rising trend in August-September 1976. This movement of Japanese reserves—a cycle coincident with an exchange rate cycle, superimposed on a rising trend—is consistent with a central bank policy of "leaning against the wind" as the rate fluctuates, combined with an attempt to flatten a rising trend in the rate.

Interpretation of the trend in reserves is straightforward. A flat trend in the exchange rate combined with rising reserves signals central bank intervention, selling the home currency (yen in this case) to keep the market from pushing the dollar price of home currency up. A coincident cycle in reserves and the exchange rate signals a policy of buying home currency as its dollar price falls and selling as it rises, reducing the size of the rate fluctuation. This is the policy termed "leaning against the wind."

The \$/DM rate in figure 3 shows a large cycle from August 1974 to September 1975, and then a rising trend, compared with a fairly steady but slow rise of the U.S./German price ratio. The movement of the exchange rate in the 1974-75 cycle is probably due to differential monetary growth rates in Germany and the United States. German monetary policy was fairly steady through the period, while U.S. policy conditions eased in 1974 as the recession hit, and then began to tighten in 1975 as recovery began. During 1976, conditions did not change markedly in either country, giving a gradual upward movement to the \$/DM rate.

#### *1977 to Mid-1978*

The relative price data of figure 1 show U.S. inflation rising relative to Germany from the beginning of 1977 to mid-1978. After a pause in the movement in relative prices during the period November 1977-February 1978, the U.S. price level rose 4 percent faster than the German from February to August 1978. The U.S. price level drifted down relative to Canada's during the period, with a small increase at the end. It rose slowly and irregularly relative to the Japanese price level. From the beginning of 1977 to August 1978, the U.S. inflation rate ran about 3 percent (annual rate) faster than the Japanese. Over the same period the U.S. and U.K. inflation rates were virtually the same. In figure 1 the relative price path is flat from March 1977 on.

In figure 2 we see that the dollar price of the Deutschmark rose gradually, more or less along with relative prices, to November 1977. It then went through a short cycle to May 1978 and rose rapidly to the end of 1978. The irregular movement of the dollar-DM rate during 1978 cannot be attributed to relative price movement. Neither is it due to differential monetary growth rates; the German money stock was growing faster than expected when the dollar-DM rate jumped in early 1978. The explanation, as we see later, is probably in the growing current account deficit of the U.S. as expansion continued faster than in Europe.

This is probably also part of the explanation for the accelerating rise of the dollar-yen rate during the period. From November 1977 to November 1978 the dollar price of the yen rose in steps by more than 40 percent. This movement is obviously faster than relative price or monetary growth.

In figure 3, we see reserve accumulation by both Japan and Germany as the dollar prices of their currencies rose. Both the Bundesbank and the Bank of Japan intervened heavily to slow the rise of their currencies. The Bank of Japan left the market in July of 1978 when the pressure eased.

The Canadian exchange rate drifted down, somewhat faster than relative prices, during the period 1977 to mid-1978. In figure 3, we see Canadian reserves falling substantially during the period, as the Bank of Canada intervened to slow the fall of the Canadian dollar.

The dollar-sterling rate was flat until September 1977, and then began to rise as the U.K.'s anti-inflationary restraint package seemed to take effect. The Bank of England accumulated reserves heavily during the period, intervening to keep the dollar price of sterling from rising.

### *Summary*

In 1971 the pressure of increasing divergence in relative prices and the reserve accumulation necessary to maintain fixed exchange rates became too much for the Bretton Woods system to bear. In the second half of the year the system broke down and by early 1973 the major rates were all more or less floating.

Since 1973, exchange rate movements have followed relative price trends at most in their broad movements. There have been major movements in exchange rates not related to relative prices. The explanation for these movements is in financial market equilibrium conditions. In particular, changes in monetary policy and in current account positions, which determine the rate of accumulation of net foreign assets, are cited repeatedly in the literature as factors moving exchange rates around the relative price path. And, in volatile financial markets, expectations of shifts in monetary policy or current account positions can move exchange rates in anticipation of actual outcomes.

Policy reaction to exchange rate movements since 1971 has been "leaning against the wind," as reflected in reserve changes. Central banks have intervened to slow down movements in exchange rates, up or down. This policy is consistent with an overall monetary policy which moderates fluctuations in financial market prices, while attempting to keep trend growth of demand steady.

Exchange rate movements can thus be interpreted as part of the process of financial market equilibration in an open international system. Next, we turn to an explicit analysis of this process.

### III. THE EXCHANGE RATE, MONETARY POLICY, AND THE PRICE LEVEL

The historical review of section II intentionally tried to match annual movement in exchange rates to annual movements in relative price levels. The purpose of this comparison was to see if exchange rates tended to follow relative price movements in the short run, as suggested by purchasing-power-parity (*PPP*) theory. As Dornbusch and Krugman put it, "Under the skin of any international economist lies a deep-seated belief in some variant of the *PPP* theory of the exchange rate."<sup>9</sup> Unfortunately, there seems to be only occasional (perhaps random?) short run correlation of movements in the relative price series of figure 1 and the exchange rates of figure 3.

As a result, in the review, we tended to stress equilibrium in monetary and financial markets as the proximate determinants of the value of the exchange rate in the short run. This is consistent with Coombs' emphasis on monetary developments, including interest rate movements, as determining movements of the exchange rate.

The *PPP* theory says that the exchange rate should follow the relative price level in the relevant two countries. For example, if we begin with an equilibrium situation with one country's trade balance at the desired equilibrium level, perhaps zero, and then increase that country's price level by half, its trade balance will tend to deteriorate. If the exchange rate (home currency price of foreign exchange) increases by half, the original relative prices as seen in foreign exchange will be reestablished and the trade balance will return to its original equilibrium value. Thus, proportional movements in exchange rates following relative price changes would maintain the initial equilibrium situation. This relationship between equilibrium movements in relative prices and exchange rates is usually used in a rate of change form, in which the equilibrium rate of increase in the exchange rate is given by the relative rate of home world inflation. This is the usual *PPP* theory.

Most international economists hold *PPP* to be a reasonable longrun theory linking relative price and exchange rate movements. But, even as a longrun theory, application of *PPP* runs into serious problems.

(1) It is not clear what price indexes to use. The literature runs from only traded goods to only nontraded goods or unit labor costs.

(2) The initial period from which we measure price changes must have been in equilibrium.

(3) *PPP* will hold from the initial equilibrium *PPP* only if there are no real disturbances that change the trade balance for given values of the exchange rate and relative price levels.

(4) *PPP* is in fact an equilibrium relationship between the exchange rate and relative price levels. Using *PPP* to go from price to exchange rate movements ignores the feedback from exchange rates to prices.

Even with these reservations, *PPP* may be a reasonable place to start in studying longrun movements in equilibrium exchange rates. In

<sup>9</sup> R. Dornbusch and P. Krugman, "Flexible Exchange Rates in the Short Run", *BPEA* 3: 1976, p. 540

figure 1, we see that from the initial position of 1966, by 1976 there was a clear ranking of the four countries by inflationary experience. Relative to movements in U.S. industrial prices, in ascending order of rates of inflation we see Germany, Canada, Japan, and the United Kingdom. In figure 3, we see the same order of countries, except for Japan, with regard to the dollar price of their currencies. Japan had 23 percent more inflation than the United States, but a 91 percent appreciation, presumably because export prices move independently from industrial prices. In table 5, we show percentage changes in relative prices and exchange rates for 1966:1 to 1978:9. The longrun correlation for the three countries between relative price movements and exchange rates is clear. Thus, while the shortrun exchange rate movements do not follow PPP, longer run movements might. To understand shortrun movements, we must turn to monetary and financial-market developments.

TABLE 5.—PERCENTAGE CHANGE IN RELATIVE PRICES AND EXCHANGE RATES, 1966-78

Country	Percentage changes in—	
	U.S. industrial prices relative to each country	U.S. dollar prices of currency
Germany.....	+26	+107
Canada.....	-4	-9
United Kingdom.....	-38	-30
Japan.....	-23	+91

In his recent review of the experiences of the DM from 1948 to 1975, Otmar Emminger focusses on monetary movements as the prime determinants of shortrun exchange rate changes. For example, Emminger notes that the crisis in early 1973, which ended with the sharp upward float of the DM and yen, followed the exceptional monetary expansion in 1972—with the money stock rising 9 percent in one year.<sup>10</sup> In general, his argument runs from monetary expansion to interest rate changes to movements in exchange rates.

Charles Coombs of the Federal Reserve Bank of New York, in his semiannual reports on exchange market developments, also generally ascribes movements in the rate to monetary shifts coupled with expectations. He also notes the decline in interest rates in the United States in 1972 as contributing to the crisis in early 1973.<sup>11</sup> Again, as the dollar price of the DM rose in late 1974, Coombs mentions falling U.S. interest rates as the recession hit.<sup>12</sup> In Coombs' implicit model, shortrun exchange rate determination also runs from monetary policy to exchange rates via interest rates and expectations. Thus, in the shortrun, we should think of exchange rates as being determined by conditions of equilibrium in financial and money, or, in general, asset markets.

#### *Shortrun Determination of the Exchange Rate: The Role of Asset Markets*

For shortrun determination of exchange rates—over periods up to a quarter or so—we should look to the determinants of asset-market

<sup>10</sup> O. Emminger, *The D-Mark in the Conflict between Internal and External Equilibrium, 1948-75*, Princeton Essays in International Finance No. 122, June 1977, p. 33.

<sup>11</sup> Coombs, *Federal Reserve Bulletin*, 9/72, p. 764.

<sup>12</sup> Coombs, *Federal Reserve Bulletin*, 3/75, p. 136.

equilibrium. The exchange rate is both the relative price of national outputs and the relative price of national monies. But markets for output—for goods and services—adjust slowly relative to asset, or stock, markets. So in thinking about exchange rate determination, it is useful to classify the exchange rate with asset prices and interest rates as determined by short-run requirements of asset-market equilibrium. The values of the exchange rate and interest rate, so determined, feed with a lag into trade and investment decisions, and thus over time feed back onto themselves through lagged effects on the accumulation of asset stocks, both abroad and at home.

In the short run, portfolio balancing wealth holders in the private sector face a fixed total supply of the various assets they might hold. In the familiar closed-economy theory of interest rate determination, the private sector's demands for the various assets interact with the fixed total supplies to determine their prices and rates of return (see Tobin for example). With one money stock and  $J$  earning assets in this system ( $J+1$  assets in all) market equilibrium determines values for the  $J$  rates of return. These are the equilibrium values which make the private sector willing to hold the existing stocks of assets, given their total wealth. If, at any initial set of rates of return  $R(0)$ , the private sector were not willing to hold the existing stocks, they would be attempting to sell same and to buy others, pulling up the rates of return on the former and pushing down the rates on the latter. This process continues until an equilibrium set of rates  $R(1)$  is determined.

If we extend this analysis to a world of two countries, each with  $J$  earning assets and a money, with total supplies of each asset fixed in the short run, the role of the exchange rate as the relative price of monies becomes evident. In this system, we have  $(2J+2)$  assets, and the interaction of their demands and the fixed supplies determines the  $2J$  rates of return plus one exchange rate  $e$ . The equilibrium value of the exchange rate is the value at which the two private sectors together are willing to hold the existing stocks of the two national monies.

Further extension of this general equilibrium problem of determination of interest rates and exchange rates to a real world with  $N$  countries, each with  $J$  earning assets and a money, gives us  $NJ+N$  assets in all ( $NJ$  earning assets and  $N$  monies). The interaction of supply and demand now determines equilibrium values for the  $NJ$  interest rates and  $(N-1)$  exchange rates. Each of the exchange rates is the relative price of the two relevant monies. Here we see the familiar  $N$ th currency problem with central bank intervention in the system; there are only  $N-1$  exchange rates, so active exchange rate policies by all  $N$  central banks will be inconsistent.

In this system an increase in the stock of one of the money supplies, relative to the others, will drive up the price of the other currencies in terms of the one whose quantity increased. Frequently we think in step-by-step partial equilibrium terms, with the increase in one country's money stock pushing down its interest rates, leading to an outflow of capital and thereby a rise in the price of foreign exchange. But in fact the values of exchange rates and interest rates are simultaneously determined, with an increase in the home country's money stock pushing domestic interest rates down and at the same time raising the price of foreign currencies in terms of home currency. Below we examine this process of simultaneous determination of interest rates

and exchange rates in more detail, including the crucial role of monetary policy. Then we introduce the relationship between the exchange rate and inflation.

#### ASSET-MARKET EQUILIBRIUM

To make the analysis manageable, let us consider one country in a many-country world. We can aggregate the assets available in this country into a domestic money stock  $M$ , which is a nonearning asset, net holdings of domestically issued assets  $B$ , which are denominated in home currency, and net holdings of foreign-issued assets  $F$ , which are denominated in foreign exchange.<sup>13</sup>  $B$  (for bonds) is essentially government debt held by the domestic private sector.  $F$  (for foreign assets) is the net claims on foreigners held by the domestic private sector. The current account in the balance of payments gives the rate of accumulation of  $F$  over time. The rate of accumulation of  $B$  is new government debt issue sold to the private sector, and the rate of accumulation of  $M$  is given by home central bank (Fed) purchases of government debt.

The rate of return on  $F$  is given by  $\bar{r}$ , fixed in the world capital market. The rate of return on  $B$  is the domestic interest rate  $r$ , to be determined in domestic financial markets. Total private-sector wealth, at any point in time, is given by  $W = M + B + eF$ , so here the exchange rate  $e$ , in home currency per unit of foreign exchange (e.g. \$0.50 per DM), translates the foreign-exchange value of  $F$  into home currency.

The total supplies of the three assets,  $M$ ,  $B$ , and  $F$ , to domestic holders are given at each point in time. Each can be accumulated only over time through foreign or domestic investment.<sup>14</sup> These interact with demands for the three assets in determining equilibrium values for the home interest rate  $r$  and exchange rate  $e$ . The demand for each asset depends on wealth,  $W = M + B + eF$ , and both rates of return  $r$  and  $\bar{r}$ . As either rises, asset holders attempt to shift from money into the asset whose return has risen.<sup>15</sup>

We can study short-run equilibrium determination of the exchange rate and the interest rate using figure 4. There, we show the pairs of interest rate  $r$  and exchange rate  $e$  that alternatively hold the demand for money equal to its supply ( $MM$ ), the demand for domestic assets equal to their supply ( $BB$ ), and the demand for foreign assets equal to their supply ( $FF$ ). To obtain the slopes of  $MM$  and  $BB$ , consider what happens as  $e$  rises. This increases the home currency value of wealth  $W$ , increasing the demand for both  $M$  and  $B$ . As the demand for money rises, the equilibrium  $r$  that maintains demand for money equal to the fixed supply rises, giving the positive slope to  $MM$ . As the demand for domestic assets rises, this pulls up their price, depressing the equilibrium interest rate. This gives the negative slope to  $BB$ .

<sup>13</sup> Since the analysis here applies to any single country in the international financial system, I use the terms "home" and "foreign" to denote the country being discussed and the rest of the system, respectively. At the level of generality of this discussion no damage would be done if the reader substituted "U.S." for "home country," "dollar" for "home currency" and "Fed" for "central bank."

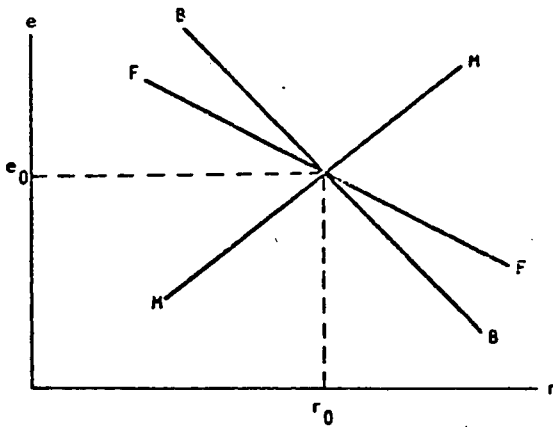
<sup>14</sup> Since  $F$  is home claims on foreigners less home liabilities to foreigners, an asset swap which exchanges a claim and a liability with a foreign asset-holder is a transaction within  $F$ , changing claims and liabilities by the same amount. This transaction would leave  $F$  and  $B$  unchanged. The reason for using this particular aggregation will become clear when we study dynamic adjustment below. Basically, we want to define net foreign assets consistently with the balance of payments and national income and product accounts, which record the capital account balance as the change in U.S. private holdings of net foreign assets. The assumptions outlined above make  $M$  and  $B$  non-traded assets. This implies that the total stocks of  $M$ ,  $B$ , and  $F$  in domestic portfolios are given at any point in time.

<sup>15</sup> A formal analysis of the entire theoretical system is present in Branson (1979), beginning with a precise specification of the asset-demand system just described.

For the slope of  $FF$ , consider what happens as the home rate of return  $r$  rises. As the domestic  $r$  rises, the demand for foreign assets falls, and  $e$  falls as asset-holders attempt to sell  $F$ . This gives  $FF$  a negative slope. Since a given increase in  $r$  reduces the demand for  $F$  by less than it increases the demand for  $B$ , a smaller drop in the exchange rate is required to restore equilibrium in the foreign asset market than would restore equilibrium in the domestic asset market. This makes  $BB$  steeper than  $FF$ .

Movements of equilibrium  $r$  and  $e$  can be analyzed by asking how the market-equilibrium curves of figure 4 shift as monetary policy or the world rate  $\bar{r}$  or  $\bar{F}$  shift, for example. This analysis can be done by using any two of the three curves. Since the three assets sum up to total wealth, if a given change in  $e$  and  $r$  restore equilibrium in two markets, it must in the third. Thus, since all three curves go through the same equilibrium  $r, e$  point (the one that yields equilibrium in all three markets simultaneously), we need use only two to analyze changes in short-run equilibrium; the third will follow implicitly

FIGURE 4

Equilibrium  $r$  and  $e$ .

## EFFECTS OF ASSET ACCUMULATION

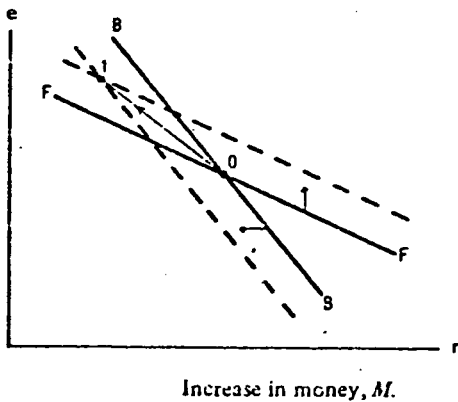
There are two basic types of change in asset stocks to analyze: (a) Accumulation of one or more with the others unchanged; or (b) exchanges of two between the government or central bank and the private sector. Accumulation involves both wealth effects, as  $W$  increases, and substitution effects, as asset-holders try to rebalance their portfolios. Exchanges are generally the result of open-market operations by the central bank, in which it buys (or sells) either domestic or foreign assets ( $B$  or  $F$ ) in exchange for money ( $M$ ). Open-market operations generate only substitution effects, since the initial swap holds wealth constant.

The stock of money or bonds can increase exogenously through an aggregate government deficit. The Treasury sells government debt,

a major component of  $B$ , to the public or to the central bank to finance a deficit. The fraction of the new debt sold to the public appears as an increase in  $B$ , the fraction sold to the central bank is an increase in  $M$ . The stock of net foreign assets  $F$  is increased by a surplus or current account in the balance of payments. In a purely floating exchange rate system, official foreign exchange reserves never change since the central bank is not intervening in the foreign exchange market. Thus, the sum of the current and capital accounts must be zero, and the capital account deficit is the current account surplus. A capital account deficit is an increase in holdings of net foreign assets  $F$ . This will be the key to the dynamic adjustment of the exchange rate, which will be discussed later. Here, we focus on the effects of changes in  $M$  or  $F$ .

*Increase in  $M$ .*—The effects of an increase in the supply of money  $M$  through a money-financed budget deficit are clear. As the public's holdings of money increase, they attempt to rebalance portfolios by buying both  $F$  and  $B$ . With given supplies of these two assets, the increased demand pulls  $e$  up and pushes  $r$  down (as bond prices rise). These effects are illustrated in figure 5. The increased demand for bonds reduces the interest rate that would maintain bond-market equilibrium at a given exchange rate  $e$ , shifting  $BB$  left. At the same time, the increased demand for foreign assets raises the value of the exchange rate that would maintain  $F$ -market equilibrium at a given  $r$ , shifting the  $FF$  curve up. The result is an increase in  $e$  and a drop in  $r$ , with the equilibrium point moving from point zero to point 1 in figure 5.<sup>16</sup>

FIGURE 5



*Increase in  $F$ .*—The initial effect of an increase in domestic holdings of net foreign assets  $F$ , which happens through a current account surplus, is to create excess supply in the foreign exchange market. Domestic portfolio balancers attempt to sell some of the increment in  $F$  in order to rebalance portfolios, and in doing so, push the exchange rate down. As the exchange rate falls, the home-currency

<sup>16</sup> The positively sloped  $MM$  curve through point zero also shifts left to pass through point 1. At any given exchange rate, the increase in money supply would require a decrease in the interest rate to maintain money-market equilibrium. The  $MM$  curves are not drawn into Figure 5 since they are unnecessary and would confuse the diagram.



value of total foreign assets is reduced. If the exchange rate falls by the same proportion that  $F$  increased, home-currency value of net foreign assets,  $eF$ , is restored to its original value. In this case, wealth,  $W = M + B + eF$ , is unchanged, and the money and bond markets are undisturbed, so there is no change in the domestic interest rate  $r$ . Thus, an increase in  $F$  generates an opposite but equiproportionate reduction in  $e$  in this (overly) simple model, leaving the rest of the asset markets undisturbed. The movement would be illustrated by a vertical downward movement of the original equilibrium point in figure 4, with  $MM$ ,  $BB$ , and  $FF$ , all shifting proportionately down. This negative reaction of  $e$  to accumulation of  $F$  is a crucial element of the dynamic process which will be discussed later.

#### EFFECTS OF MONETARY POLICY

In this framework, monetary policy is a purchase by the central bank of either domestic or foreign assets in exchange for money. Since money is taken to be a nontraded asset, the bank's instantaneous open-market operation has to be an exchange with a domestic assetholder.

Two features distinguish open-market swaps from asset accumulation, as described above. First, the open-market operation is an instantaneous asset exchange at one point in time—while asset accumulation goes forward through time as a government deficit, or current account surplus cumulates. Strictly speaking, open-market swaps are part of the instantaneous equilibrium of the system, while accumulation is part of the dynamic adjustment. Second, accumulation involves an increase in wealth, and thus both wealth and substitution effects on  $r$  and  $e$ . Open-market operations hold initial wealth constant in an asset exchange, so they involve only substitution effects, and give clear-cut results for both  $r$  and  $e$ .

*Money and domestic assets.*—The usual open-market operation is a swap of money for domestic assets, with  $\Delta B = -\Delta M$ .<sup>17</sup> At the initial value of  $e$  and  $r$ , domestic asset holder find themselves with an excess supply of money and demand for bonds. As they attempt to buy bonds, they push the rate of return  $r$  down. This redirects demand to foreign assets, pulling the exchange rate up. In the final equilibrium,  $r$  has decreased and  $e$  has increased.

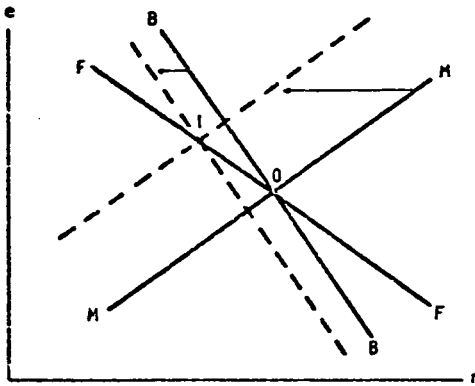
The effect of an open-market swap of money for domestic assets is illustrated in figure 6. With a swap between  $B$  and  $M$ , the  $FF$  market-equilibrium curve is unshifted, but, at a given exchange rate, the  $r$  value that would maintain equilibrium in the bond and money markets falls. Thus,  $MM$  and  $BB$  shift left along  $FF$ , giving movement from point zero to point 1 in figure 6.

*Money and foreign assets.*—The central bank could do open-market operations in foreign assets, buying foreign-denominated assets from domestic asset holders. The Federal Reserve does this as part of its exchange-market operations, although in quantities that are infinitesimally small compared to usual open-market operations.<sup>18</sup> In

<sup>17</sup> In general, we will discuss expansionary open-market operations, in which  $\Delta M > 0$ . Results would be symmetrically opposite for contractionary open-market swaps where  $\Delta M < 0$ .

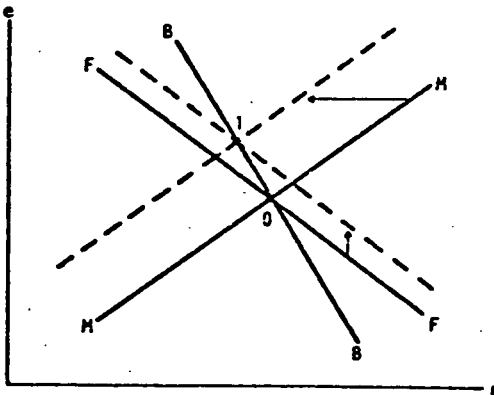
<sup>18</sup> For example, in 1975 the Federal Reserve bought \$9.1 billion in U.S. government debt, and \$0.3 billion in foreign assets, not all of which was purchased from domestic asset holders.

FIGURE 6

Open-market operations in *B*.

this case the initial shifts come in the money and foreign-asset markets. With an excess supply of money, the interest rate that would maintain equilibrium in the money market falls, shifting *MM* left in figure 7. With excess demand for foreign exchange, the value of *e* maintaining equilibrium in the *F*-market rises, shifting *FF* up. The intersection of *MM* and *FF* shifts up along the *BB* curve of figure 7 from point zero to point 1.

FIGURE 7

Open-market operations in *F*.

It is clear from figures 6 and 7 that open-market operations in domestic assets have a greater effect on *r* and a smaller effect on *e* than do open-market operations in *F*. Thus, the split of the real effects of monetary policy between the sector producing traded goods (through *e*) and the sector producing interest-sensitive durable goods (through *r*) will depend on the mix open-market operations between *B* and *F*.

## EMPIRICAL APPLICATIONS

The asset-market model of shortrun exchange rate determination has been implemented empirically for the dollar-Duetsche mark (DM) exchange rate in different forms by Jacques Artus (1976) and Branson-Halttunen-Masson (BHM) (1978). Branson and Halttunen (1978) have also reported initial results for major Organization for Economic Cooperation and Development (OECD) currencies. Typical results from the BHM study of the \$/DM rate are shown in table 6.

TABLE 6.—EXCHANGE-RATE ELASTICITIES WITH RESPECT TO ASSET STOCKS

	United States		West Germany	
	Money (MI)	Private foreign assets	Money (MI)	Private foreign assets
Elasticity of $e$ (dollar per deutschemark).....	1.85	-0.22	-0.73	0.05

Source: BHM (1978), table 6.

As the U.S. money stock rises by 1 percent, the \$/DM rate rises within the month by 1.85 percent. A U.S. current account deficit that draws down net U.S. private foreign assets by 1 percent raises the \$/DM rate by 0.22 percent. A deficit raises the rate, and a surplus reduces it. These results conform well with the asset-market model.

### *Dynamic Adjustment of the Exchange Rate*

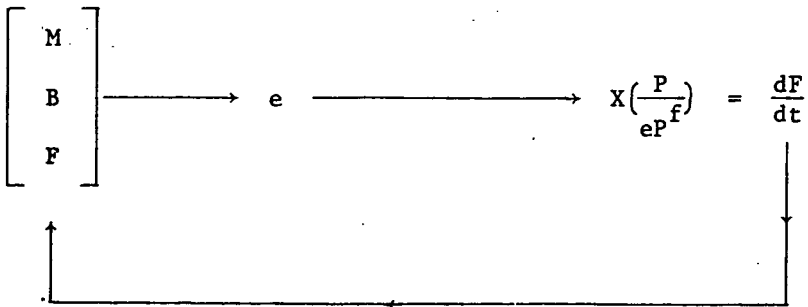
In the short run, the exchange rate is determined by requirements of asset-market equilibrium, giving existing stocks of money, domestic assets, and foreign assets. But, this is not the end of the story. The value of the exchange rate at one point in time,  $t(0)$ , given income, the domestic price level, and other real variables, may yield a nonzero balance on current account. With flexible exchange rates and no central bank intervention in foreign exchange markets, the sum of the balances on capital account and current account is identically zero. Thus, a nonzero current account balance implies an equally nonzero capital account balance of the opposite sign. If the current account shows a surplus, the capital account is in deficit and the private sector is accumulating foreign assets;  $F$  is increasing. If the current account is in deficit,  $F$  is decreasing. As  $F$  changes, the exchange rate changes through the shortrun mechanism described above. Thus, if the initial value of the exchange rate  $e(0)$  yields a nonzero current account balance,  $F$  is either increasing or decreasing, moving  $e$  from  $e(0)$ . The point of this section is to study the dynamic adjustment through the current account, and to show the condition under which it leads to a stable longrun equilibrium value for  $e$  where the current account balance is zero and the stock of net foreign assets is not changing.

An overview of the adjustment mechanism is shown in figure 8. The initial values of  $M$ ,  $B$ ,  $F$ , determine a value for  $e$ . This, in turn, yields a value for net exports ( $X$ ), given the internal price level  $P$  and the foreign price level  $P^f$ . Implicitly, here  $eP^f$  is the price of a basket of foreign goods, and  $P$  is the price of a basket of home goods;

the two baskets are assumed not to be perfect substitutes, so the *real exchange rate*  $E=P/eP^f$  has some freedom of movement.<sup>19</sup>

FIGURE 8.—Exchange rate adjustment over time

Initially  
Fixed



#### THE ROLE OF THE CURRENT ACCOUNT

We have seen that an increase in  $F$  brings a reduction in the short-run equilibrium value of  $e$  in about the same proportion. The other important step in the dynamic feedback mechanism of figure 8 is the effect of changes in  $e$  on the current account  $X$ . If the initial  $e(0)$  yields a positive value for the current account,  $dF/dt$  will be positive and  $F$  will be increasing. If the increase in  $F$  tends to reduce the current account surplus, it will reduce the rate of accumulation of  $F$  itself and the system will approach a stable  $F^*$ ,  $e^*$  equilibrium where  $X=0$ . On the other hand, if the increase in  $F$  were to increase the current account surplus, the rate of accumulation of  $F$  would itself increase,  $e$  would continue to fall, and the system would be unstable. Thus, the stability of the system depends on the effect of a change in  $F$  on the current account. If it is negative, the system is stable, as shown in figure 9.

Movements in net foreign assets affect the current account (measured in terms of foreign exchange) mainly by moving the trade balance. As  $F$  increases, the exchange rate is driven down. This reduces the relative price of foreign goods and services, reducing net exports. Thus, the effect of an increasing  $F$  on the current account is a negative effect on the trade balance so that  $X=dF/dt$  falls as  $F$  rises.

#### THE ADJUSTMENT MECHANISM

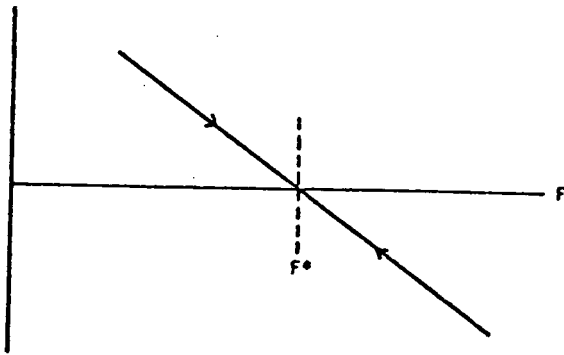
Now we are in a position to study the path of adjustment of  $e$  and  $F$  from an initial shortrun equilibrium to a final longrun equilibrium, following figure 10. We begin with a case in which the initial exchange rate  $e(0)$  (determined by the initial value of net foreign assets  $F(0)$ , along with the initial values of  $M$  and  $B$ ) is higher than the longrun equilibrium  $e^*$ , at which the balance in current account is zero.<sup>20</sup>

<sup>19</sup> Here, and throughout, the balance of payments items are stated in terms of foreign exchange. This is simply a matter of analytical convenience; multiplying by  $e$  will convert them into home currency.

<sup>20</sup> The following analysis, of course, assumes that  $M$  and  $B$  remain constant through the adjustment period. We are focusing here on the channel of adjustment running from  $e$  to  $F$  and back.

FIGURE 9

$$X = dF/dt$$



Stable adjustment to long-run equilibrium.

Suppose that in an initial equilibrium the exchange rate is higher than the longrun equilibrium value, given the initial stocks of  $M$ ,  $B$ ,  $F$ , the price level  $P$ , the foreign price level  $P'$ , and the real variables in the economy, such as income. The latter will be held constant throughout most of the discussion in this section since we are focusing on exchange rate dynamics. Endogenous adjustment of the price level to changes in the money stock will be introduced in the next subsection, where we focus on monetary disturbances. Reaction of the price level to movement in the exchange rate will come in the following section. Here, we simply assume that some disturbance such as a shift in asset preference (moving  $e(0)$ ), or a shift in technology or tastes (changing  $X$ , given  $E$ ), has given us a shortrun equilibrium in which  $e(0) > e^*$ , and  $X$  is positive, so that  $F$  is increasing.

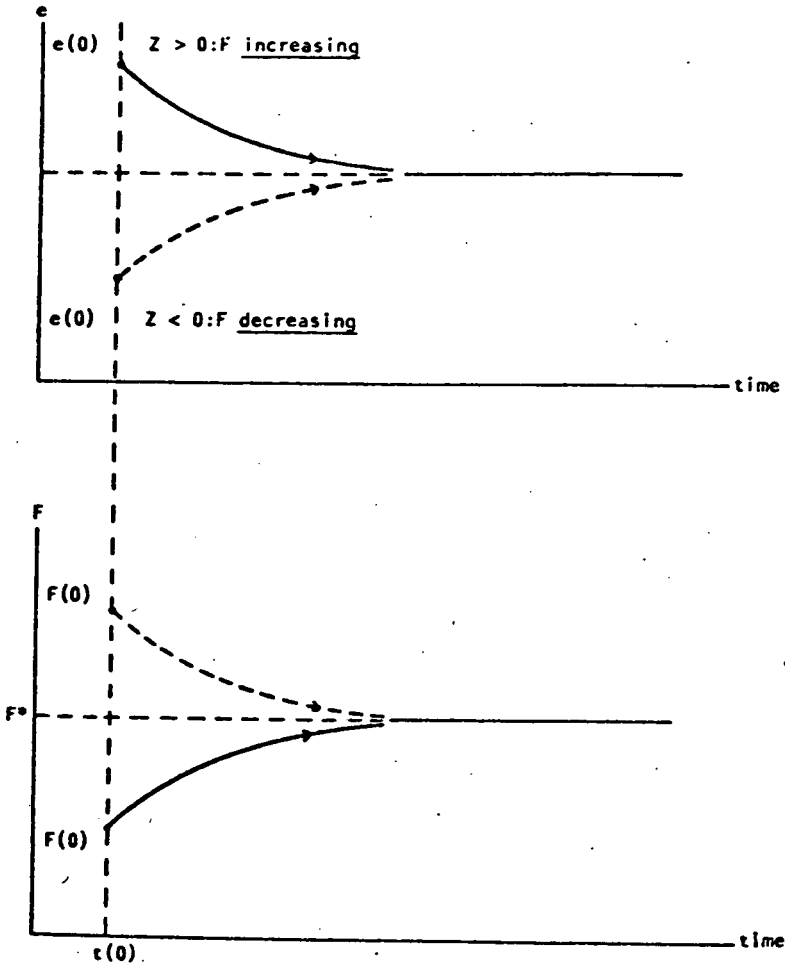
As the stock of foreign assets increases, the shortrun equilibrium exchange rate falls. With  $F$  increasing and  $e$  falling (given  $P'$  and  $P$ ), the trade surplus decreases (or deficit increases). This continues, with  $F$  increasing, until the current account is back in balance. At that point, the rate of accumulation of net foreign assets is back to zero, so the system is back in longrun equilibrium.

If we had begun with an initial value for  $e(0)$  that gave a current account deficit, the story would have been the same, with signs reversed. The deficit decreases  $F$ , pulling the exchange rate up and shrinking the current account deficit. This continues until the current account is back in balance, with  $e^*$  higher than  $e(0)$  and  $F$  smaller than its initial value.

#### *The Effect of a Monetary Disturbance*

The analysis of shortrun impact effects and of the longer-run dynamic adjustment can now be combined to study the effect of monetary disturbances. We will follow the path of adjustment of the

FIGURE 10

Stable dynamic adjustment of  $F$  and  $e$ .

exchange rate following a one-time shift arising in the monetary sector. Such a disturbance could originate on the supply side, owing to a shift in monetary policy or the supply behavior of the banking system, or on the demand side, owing to a shift in the public's demand for money. A sudden decrease in the demand for money, at initial values for exchange rates and interest rates, should produce the same results as an increase in the supply of money—due to monetary policy, for example. Just such a downward shift in the demand for money seems to have happened in the U.S. beginning in the second half of 1974, as indicated by general overprediction of the extent of the rise in interest rates during the 1975–76 recovery.<sup>21</sup>

<sup>21</sup> See J. Enzler, L. Johnson and J. Paulus (1976) for a discussion of this shift.

In the discussion below, we will focus on the example of an increase in the money supply (expansionary open-market operation). The result would be equally applicable in the event of a reduction in money demand.

We begin with the effects on the domestic price path of a monetary shift. This is the underlying path about which the exchange rate is moving as the current account adjusts. Then, we move on to study the impact and adjustment effects on the exchange rate, relative to the price path.

#### MONETARY EXPANSION AND THE PRICE LEVEL

In the short run, the exchange rate is determined by asset-market equilibrium conditions. In the longer run, as asset stocks (especially foreign assets) change, the exchange rate moves towards the value which balances the current account. This is the value that yields a real exchange rate  $E = P/eP^f$ , such that the current account balance is zero, and the system comes to a longrun equilibrium position. Thus, in the dynamic adjustment process, it is the level of  $e$  relative to the relative price level that matters.

The domestic price level will probably be increased by an increase in the money supply (or decrease in its demand). Here, we simply establish that there will be a gradual adjustment of the domestic price level following the monetary shift in a closed economy; in the next subsection, we open the analysis to price sensitivity to the exchange rate. The proposition that, in general, the price level will rise with an increase in the money stock is widely accepted by economists. Franco Modigliani (1977, p. 392), discussing longrun purchasing power parity (exchange rate adjusting to relative price levels in the long run), put it:

I can hardly see that there can be much dissent among economists on this issue. Whether purchasing power parity holds precisely or not, we can agree on the very general proposition that, in the long run, the price level will be roughly proportional to the quantity of money after adjustments for productivity and population growth (and changes in money holding habits) . . . . I do not think there can be much disagreement about this, given enough. How long it takes is another issue and will depend upon many other things intervening.

The speed and extent of the reaction of the price level to an increase in the money supply will depend on the level of resource utilization in the economy. An expansion at full employment will pull prices up faster than an expansion in a period with substantial unemployment of capital and labor. In his discussion of the division of an increase in nominal GNP (following an increase in the money stock) between an increase in real output and a rise in the price level, Milton Friedman (1970, pp. 223–235) includes these factors as influencing the shortrun outcome, while holding to longrun proportionality. Blinder-Solow (1974, p. 73) outline an aggregate supply curve that also reflects these shortrun factors.

Given the general agreement that some price increase will follow a monetary expansion, and the general uncertainty about the speed or magnitude involved, we will assume a gradual adjustment to a longrun increase that is at most proportional to the increase in the money stock. The domestic price level begins at an initial equilibrium value  $P^*$ , indexed to  $P^* = 1.0$  at time  $t(0)$ , and rises gradually to a new equi-

librium value  $P^{**}$ , which exceeds  $P^*$  by a proportion less than  $\Delta M/M$ , the increase in the money stock. This adjustment path is a standard assumption (see e.g., Dornbusch, 1976b), and it is illustrated in figure 11. The price path, there, is the path about which the exchange rate adjusts following an increase in the money stock.

#### EXCHANGE RATE ADJUSTMENT

We begin with the system in full equilibrium with the current account balance zero, and with given initial stocks of  $M$ ,  $B$ ,  $F$ . We want to trace the path of the exchange rate following an initial increase in the money supply, through an open-market operation. To avoid the second-order complications that came from a reallocation of investment income on foreign assets between the private sector and the government if the open-market operation is done in the foreign exchange market, we will focus on the case where  $\Delta B = -\Delta M$ : an open-market operation in government debt. Again, the effects of a downward shift in the demand for money would be the same. The results of a contraction of supply or increase in demand would be symmetrically opposite.

*Shortrun impact effects.*—The initial effect of the increase in the money stock is an upward jump in the exchange rate, to maintain asset-market equilibrium. This was illustrated in figure 5. The proportional increase in the exchange rate on impact may be more or less than the percentage increase in the money stock, depending in a fairly complicated way on the initial proportions of assets in portfolios, and on the relative substitutability of the assets.

Figure 11 shows the likely adjustment path of the exchange rate. Initially,  $e^*$  and  $P^*$  are normalized to 1.0. The increase in the money stock pushes the exchange rate up to  $e_1$  instantaneously. The next step is to trace the dynamic adjustment path as net foreign assets accumulate.

*Dynamic adjustment.*—At  $e_1$  in figure 11, the real exchange rate  $E = P/eP'$  has fallen below the value that gave  $X=0$  at the original value of  $F$  at time  $t(0)$ . Assuming the Marshall-Lerner condition holds, the movement of the price ratio increases net exports, so that the current account becomes positive at  $t(0)$ , and net foreign assets  $F$  begins to accumulate. As  $F$  increases,  $e$  falls and  $X$  falls, following the dynamic adjustment path discussed above, and shown in figure 11.

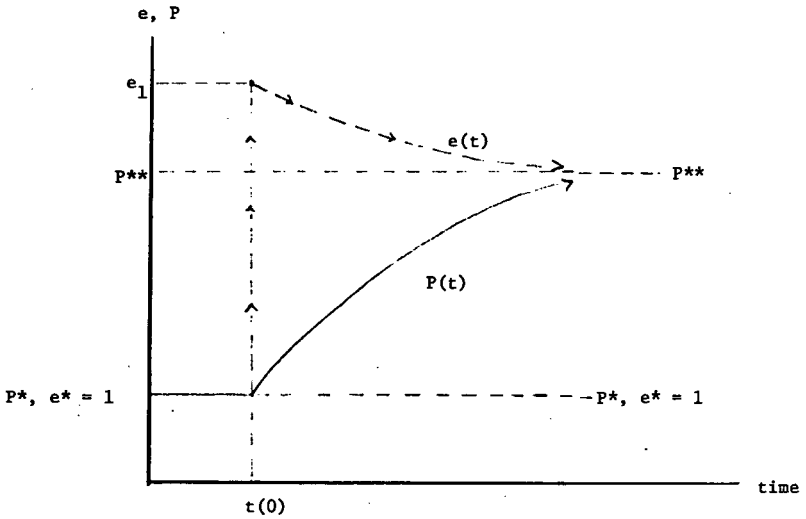
With  $F$  accumulating, at a decreasing rate since the current account surplus is shrinking, the exchange rate  $e$  follows the  $e(t)$  path in figure 11 converging toward the rising  $P(t)$  path. When the  $e$  and  $P$  paths meet, the original value of the real exchange rate has been restored, and the current account is back in balance. Thus the expansion in the money stock raises the price level, and in the long run the exchange rate, by the same proportion. However, in the short run the exchange rate jumps more than proportionately to the price level. This is the standard result with the price level independent of the exchange rate.

#### *Effects of Exchange Rates on the Price Level*

In the analysis of exchange rate determination summarized above, we held internal price levels constant to focus on exchange rate dynamics. The next step in the analysis is to recognize the feedback



FIGURE 11.—Adjustments of price level and exchange rate



effect of exchange rates on price levels. This is a key part of the “vicious circle” problem facing devaluing currencies with flexible exchange rates.

A devaluation, raising the nominal price of foreign exchange  $e$ , raises the price of internationally traded goods in the economy in home currency units. Not only do prices of actual imports rise, but world prices of exports rise, in home currency, and prices of substitutes tend to rise as firms take advantage of the room offered by the exchange rate increase. In a second round of price effects, wage rates tend to rise to offset the effect of the price increase on real wages, and the price level follows as profit margins are restored. The effect of increments in the Consumer Price Index (CPI) on wage rates is well-known. Robert Gordon’s (1977) recent estimates show a 100 percent pass-through of nominal price increases into wages, holding unemployment constant. Thus a rise in the exchange rate increases the price level directly, and through the effect on nominal wages, begins an internal wage-price spiral.

Recent papers by Michael Bruno (1978) and Rudiger Dornbusch (1978) give estimates of both one-quarter and long-run effects of a

devaluation on the internal price level. These come from econometric studies relating movements in internal prices, measured by the CPI, to import prices, which move with the exchange rate. Bruno's results, from regressions run across 16 OECD countries, excluding the United States, show that for Europe and Japan, the one-year effect of a devaluation on the CPI is 15-20 percent; a 10 percent devaluation will raise the CPI by 1.5-2 percent within one year. The long-run effect is about twice as large. Dornbusch's results, for the U.S., are more striking. He shows a one-quarter coefficient of 15 percent, with a long-run coefficient of 30 percent. It is a puzzle why the U.S. CPI responds more quickly than that of Europe or Japan, but the point here is that movements in the exchange rate influence domestic prices quickly and significantly.

### *International Magnification of Price Disturbances*

We can now use the analytical apparatus developed above to see how movements in the exchange rate magnify exogenous price disturbances originating within the economy. Suppose the U.S. CPI rises by an initial percentage amount, which we'll call  $\Delta P$ , due to increased wage demands or food prices, for example. We can now trace out the effect on the exchange rate and the feedback to a yet longer rise level.

The initial  $\Delta P$  raises the real exchange rate  $E$  from  $E = P/eP^f$  to  $(P + \Delta P)/eP^f$ . The increase in the real exchange rate will reduce the current account surplus or increase the deficit. If we begin the illustration in full equilibrium with a balanced current account, a deficit appears. This reduces U.S. net foreign assets, the sale of which finances the deficit, which in turn creates an excess stock demand for foreign assets, raising  $e$ . As we saw earlier, a decrease in net foreign assets  $F$  increases the nominal exchange rate  $e$ .

If the U.S. price level did not react to the movement of the exchange rate, we would see a gradual increase in the exchange rate, rising by the same amount  $\Delta P$ , restoring equilibrium with the original value of the real exchange rate. But as  $e$  rises  $P$  reacts; there is an endogenous adjustment to  $P$  on top of the initial  $\Delta P$ . How far does this exchange rate-price level spiral go? It must continue until the initial value of the real exchange rate is restored, and the current account is back in balance.

A rough estimate of the effect of a rise in the nominal exchange rate on the price level in the U.S. is  $dP = .3de$ , from Dornbusch (1978). This means that as  $e$  rises due to asset decumulation, the price level goes up by .3 of the  $e$  increase. Thus for the rise in the exchange rate to bring the real exchange rate back into line,  $e$  must rise by  $[1/(1-.3)]\Delta P$ , or about 1.4 times the initial  $\Delta P$  shock. The total increase in the price level will be the same. Thus the exchange rate-price level feedback magnifies the initial price shock by nearly half.<sup>22</sup>

<sup>22</sup> Formally, we have:

$$(a) \quad \Delta P + dP = de,$$

where  $dP$  is the endogenous price increase and  $de$  is the exchange rate change. Also, from section 4,

$$(b) \quad de = \alpha de;$$

Dornbusch's  $\alpha = 0.3$ . Combining (a) and (b) and solving for  $de$  gives

$$(c) \quad de = \frac{1}{1-\alpha} \Delta P.$$

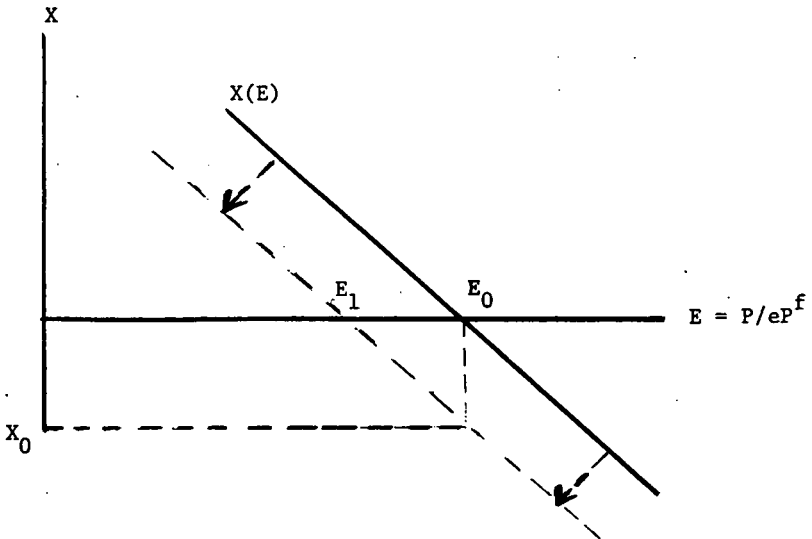
This is one form of the "vicious circle." The response of the exchange rate to current account imbalance, combined with the sensitivity of  $P$  to  $e$ , magnifies price disturbances originating within the economy. The size of the magnification rises with the sensitivity of  $P$  to  $e$ . If there were a one-for-one effect ( $\alpha=1$  in the footnote below), the real exchange rate would never re-equilibrate and the spiral would continue indefinitely.

### *Inflationary Consequences of a Loss in Competitiveness*

The exchange rate feedback can also lead to inflationary pressure when international competitiveness is reduced. The U.S. competitive position vis a vis Germany, Japan, and the industrializing Less Developed Countries (LDC's) is in a state of deterioration, according to many observers [e.g., Dornbusch (1978)]. This can push up U.S. internal prices as the exchange rate adjusts to reduce the real exchange rate.

In figure 12 we see the current account balance as a function of the real exchange rate  $E=P/eP^f$ . A reduction in international competitiveness is a downward shift in the  $X(E)$  function; at any value of  $E$  the current account surplus is smaller. With a deterioration in competitiveness, the equilibrium value of  $E$  where the current account balance is zero falls from  $E_0$  to  $E_1$  in figure 12. Let us call this drop  $\Delta E$ .

FIGURE 12.—Loss of competitiveness



At the initial level of the real exchange rate  $E_0$  the loss in competitiveness would give a current account deficit equal to  $X_0$  in figure 12. This again reduces the U.S. net foreign asset position, tending to raise the exchange rate  $e$ . As  $e$  rises,  $E$  falls toward  $E_1$ . If the price level did not react, the nominal exchange rate  $e$  would rise in percentage terms enough to take  $E$  to  $E_1$ , and that would end the story.

But if  $P$  reacts to the rise in  $e$ , then further nominal devaluation is necessary, with the concomitant rise in the price level. Again, we can ask how far will  $e$  and  $P$  rise to obtain the required reduction of the real exchange rate  $\Delta E$ ?

The answer, again, is that the nominal exchange rate will rise by  $1/1-\alpha$  times the drop in  $E$ ; if  $\alpha=0.3$ , this gives  $de=1.4(-\Delta E)$ . The rise in the price level is  $\alpha$  times this; here we would have  $dP=0.4(-\Delta E)$ . Thus for a given percentage reduction in U.S. competitiveness, measured by the drop in the equilibrium real exchange rate, the nominal rate would have to rise by 1.4 times as much, with the price level rising by about 0.4 of the drop in equilibrium real  $E$ .<sup>23</sup>

The exchange rate-price level feedback magnifies the effect of a loss of competitiveness on the real exchange rate, and raises the internal price level. The effects again rise with an increase in sensitivity of internal prices to changes in the exchange rate, as given by the  $\alpha$  estimate.

### *Effects of Monetary Expansion*

Earlier we saw that a shift to expansionary monetary policy at home would eventually raise the exchange rate roughly proportionately to the increase in the price level that follows. There we assumed that the price level reacts slowly to domestic monetary expansion, and is independent of the exchange rate. The exchange rate adjusts in that case to restore the original value of the real exchange rate  $E$ , with roughly proportional rises in  $P$  and  $e$ .

If the price level responds directly to movement in the exchange rate, then the price response to monetary policy is quickened, and the price response becomes somewhat independent of the level of capacity utilization. Earlier we saw that a domestic monetary expansion causes a jump in the exchange rate, with a subsequent slide back to meet the slowly rising price level. With a direct price response, the price level also jumps, within a quarter, and continues to rise with lagged effects, as adjustment continues.

Thus the slow response of the price level to monetary expansion in the standard closed-economy model, and in the large econometric models, may be short-circuited with flexible exchange rates. In the econometric models, monetary expansion reduces interest rates, raising expenditures on investment and consumption with a lag. This increase in demand pulls up prices with a pace depending on the degree of capacity utilization. This is the "long and variable" lag of prices behind monetary expansion. But with flexible rates, the increase in the money stock moves the exchange rate immediately, and this speeds up the inflation response significantly. As we see below, this may be the source of reluctance of OECD monetary authorities to expand and generate an investment-led recovery.

Effects of expansion in home and foreign monetary policy have opposite effects on the exchange rate in the asset-market view; it is the relative rates of expansion that matter. Thus an expansion in Germany

<sup>23</sup> Again, formally we have in percentage terms:

$$(a) \quad dP - de = \Delta E.$$

Using  $dP = \alpha de$ , this gives us:

$$(b) \quad de = \frac{1}{\alpha-1} \Delta E \text{ and (c) } dP = \frac{\alpha}{\alpha-1} \Delta E.$$

will reduce the dollar-DM rate, and a monetary policy significantly tighter than in the U.S. will raise it. This means that a shift to tighter monetary policy in Germany will be inflationary in the short run in the U.S., as  $e$  rises, and vice versa. A shift to ease in the U.S. relative to Germany will raise  $e$  and be inflationary in the United States, anti-inflationary in Germany, and vice versa if the United States tightens relative to Germany.

Exchange-rate flexibility thus introduces a new twist to the international transmission of effects of monetary expansion. With fixed rates, an increase in money in one country spills over into all, pulling up prices everywhere. With flexible rates, expansion in one country may raise prices there and be anti-inflationary elsewhere. This could make the resulting movement in the exchange rate even greater, and magnify the effects on price levels.

The quickened and magnified effect of monetary expansion on the rate of inflation, via the exchange rate, makes international coordination of monetary policy during recovery extremely important. One of the striking characteristics of the OECD-wide recession since 1974 is the continued sluggishness of investment. As the capital stock falls below the level previously consistent with full employment, recovery becomes more and more difficult. Thus recovery policy now should lean toward fiscal tightness and monetary ease to stimulate investment. However, if any single country, or group of countries, shifts to monetary expansion significantly faster than the others, it will see its nominal exchange rate  $e$  rise immediately, with the price level following rapidly. Thus the inflationary consequences of being the international leader in a shift to monetary ease tend to make all reluctant to lead. Following is much more attractive, with a falling exchange rate dampening inflationary pressure internally.

This may be part of the explanation for the persistence of the recession. In early 1979 the outlook in the OECD area is deeper recession, rather than recovery. If the major countries can agree on a coordinated monetary expansion that holds nominal exchange rates relatively stable, it might be possible to stimulate investment and recovery without activating the "vicious circle" from expansion to exchange rate to inflation. If not, it is unlikely that any single country will lead, as the Administration's program of November 1978 shows.

The need for monetary coordination with flexible exchange rates gives us another validation of Milton Friedman's remark on the non-existence of a free lunch. Some of us thought in the 1960's that going to flexible exchange rates would "free" monetary policy to focus on domestic targets. This is not the case, however. Earlier, monetary policy was constrained by balance-of-payments effects; now it is constrained by exchange-rate effects.

#### IV. EMPIRICAL DYNAMICS OF THE EXCHANGE RATE AND THE CURRENT ACCOUNT

In the short run, exchange rates are determined proximately by financial market equilibrium conditions. But in the longer run, current account imbalances accumulate or decumulate net claims abroad, putting pressure on the exchange rate. This effect of asset accumulation

through the current account drives the exchange rate toward an equilibrium where current accounts or basic balances balance at full employment. Here we will discuss an empirical model of this dynamic process that yields projections of trade flows and exchange rates along a trend growth path to the year 2000. The model was built as an application of the model of exchange rate dynamics described in section III. We show some of the results of research at the OECD Project Interfutures on international trade and monetary systems by introducing a trade model including exchange rate determination. The Interfutures trade model is designed specifically to concentrate on trade and exchange rate questions of the OECD Member countries, however it also covers oil exporting countries, other developing countries and Centrally Planned Economies as separate regions.

In what follows we discuss the trade model in connection with equations for six major exchange rates to generate trade and exchange rate projections under different policy alternatives. This gives us an indication of the long-term stability of the floating rate system.

### *The Interfutures Trade Model*

This section presents projections of trade flow and exchange rates up to the year 2000 from the Interfutures trade model. The modeling effort was not focused on producing original research in the international trade and financial fields, but on constructing a calculating machine that would give us reasonable projections of trade volume and exchange rates, given assumptions on alternative development in the OECD economies and other regions in the world.

The model borrows heavily from research previously carried out by the OECD and other economists. Its structure is presented in detail in an annex, and here we give only the basic outlines which should help in the interpretation and evaluation of the scenarios. The model is designed to concentrate on the trade positions of the OECD Member countries, non-oil LDC's, OPEC and centrally planned economies. The geographic disaggregation reflects this. The model covers 26 regions, of which 23 are members of the OECD. The regions are:

- |                        |                                  |
|------------------------|----------------------------------|
| 1. Australia.          | 14. Norway.                      |
| 2. Austria.            | 15. Portugal.                    |
| 3. Belgium-Luxembourg. | 16. Spain.                       |
| 4. Canada.             | 17. Sweden.                      |
| 5. Denmark.            | 18. Switzerland.                 |
| 6. Finland.            | 19. United Kingdom.              |
| 7. France.             | 20. United States.               |
| 8. Germany.            | 21. Greece.                      |
| 9. Iceland.            | 22. New Zealand.                 |
| 10. Ireland.           | 23. Turkey.                      |
| 11. Italy.             | 24. Nonoil LDC's.                |
| 12. Japan.             | 25. OPEC.                        |
| 13. Netherlands.       | 26. Centrally planned economies. |

The key building blocks of the model are import equations for goods and services where imports are a function of GDP and relative prices, equations for oil imports, trade share matrices of goods, services and

oil which change according to relative prices (except the oil share matrix) and relative potential outputs, transfers and factor payments in the current account. Domestic prices respond to changes in import prices. Changes in export and import prices are also modeled. Export prices are functions of competitors' prices and domestic costs and import prices are weighted averages of relevant export prices. The model also contains current account equations.

The model is driven by time paths of several macroeconomic variables and the values of the parameters in the equations forming the model. The list of variables that control the external sector differs by regions. For the 23 OECD regions, the main exogenous variable is Gross Domestic Product (GDP), in 1975 prices. Other exogenous variables for the OECD regions are net labour incomes and private transfers and abroad. For the non-OECD regions the list of exogenous variables is different. For OPEC, imports of goods and services are exogenous. The small current account items, labour incomes and private transfers are also exogenous. The only difference for the Centrally Planned Economies region is that capital flow level is the main exogenous variable rather than imports. For the non-oil LDC's the treatment is similar to that of OECD countries.

#### USES OF THE MODEL UNDER DIFFERENT EXCHANGE RATE REGIMES

The trade projections can be carried out in several alternative modes. First the model can be used to project developments of trade and current account for each country and region with the assumption of fixed exchange rates. This alternative means only projecting world trade with exogenously projected market shares as there are no endogenous changes in relative prices. On the other hand, the model lends itself easily to analysis of a case of *adjustable exchange rates*. The model can be used to estimate the exchange rate changes required to achieve some target current account. It thus provides information about pressures on different currencies caused by domestic developments and possibly by exogenous changes in prices or traded goods. This approach assumes that exchange rates are adjusted to maintain target current account balances, and then calculates the necessary changes under the projection assumptions. The calculations use estimates of trade price elasticities to move the trade share matrix through time.

The adjustable exchange rate projections are not the same as projections of what could happen with flexible rates. In section III we described the asset market model of flexible exchange-rate determination. In this model, short-run stability of the foreign exchange market depends on asset substitution, while trade elasticities determine long-run stability. This approach has been used to estimate equations for six key exchange rates, and these equations have been linked to the trade model. It is important to introduce this linkage on the empirical level in order to study the dynamic stability of the exchange rate in the long-run.

A plausible dynamic adjustment process that is stable can be described as follows for a country with no underlying tendency to be a net saver or borrower internationally. Suppose in an initial short-run equilibrium the asset market-determined exchange rate (units of foreign currency per unit of local currency) of the home country is low

enough for the current account to be in surplus. Accumulation of net foreign assets through the current account drives the exchange rate up. Here accumulation of foreign assets shifts down their stock excess demand, pushing the exchange rate up. This element of the adjustment process involves the short-run equilibrium movements of the exchange rate over time toward a long-run equilibrium. The rising exchange rate would reduce the trade surplus through the traditional relative price effects, and enough to offset the effect of growing net claims on investment income. In this case rising exchange rates would reduce the current account surplus. This process is described by the Interfutures trade model. The longrun dynamic adjustment thus happens through the interaction of exchange rate equations and the trade model. The effect of the exchange rate movement on trade takes time, and enough time must pass to bring the current account to zero. However, in the projections, we would not necessarily expect to see balanced current accounts, since exports and imports change in response to growth rates of GDP which may differ from country to country.

Exchange-rate equations have been estimated for Germany, Japan, Canada, the United Kingdom, France, and Italy.<sup>24</sup> These provide the link from asset accumulation through the current account to the exchange rates. The trade model provides the feedback from the exchange rate to the current account. With the integration of exchange rate equations into the trade model, it can be used to analyze outcomes from choices of different exchange rate regimes. Countries can be classified as independent floaters, joint floaters, basket peggers, etc., depending on countries' structural characteristics or policy targets.<sup>25</sup>

### *Exogenous Inputs Into the Projections*

The assumptions of scenario A of Project Interfutures are behind the projections described here; they are translated into quantitative terms to run the trade model as follows. The discussion here concentrates on five variables or policy assumptions which are exogenous to the model. These are: (i) Growth rates of GDP; (ii) energy assumptions; (iii) LDC's, OPEC's, and centrally planned economies (CPE's) imports; (iv) aid; and (v) exchange rate regime.

The model takes as inputs actual and potential GNP growth rates. The projected growth rates of actual GDP are shown in table 7. For OECD countries actual and potential growth rates differ during the recovery period between 1975 and 1990, the growth rates of potential GDP being lower. Other regions in the model, nonoil LDC's, OPEC and CPE's are assumed to be on their potential throughout the period 1975-2000.

Energy assumptions are integrated into the model through: (a) changes in oil import functions; and (b) changes in the price of oil. They reflect assumptions of Scenario A in the field of energy consumption and a decreased share of oil in the world energy balance. The projected growth on the volume of oil trade is some 2 per cent per annum on average, which yields an estimate of some 1.7 MMTOE (millions of metric tons of oil equivalent) for the world oil imports in

<sup>24</sup> See Branson-Halttunen (1978) for details.

<sup>25</sup> Branson and Papaefstratiou (1978) offer an extensive discussion of criteria of choosing an exchange rate regime; see also Heller (1976).



TABLE 7.—AVERAGE ANNUAL GROWTH RATES OF GDP

1975-2000		1975-2000	
1. Australia.....	4.4	14. Norway.....	4.4
2. Austria.....	5.7	15. Portugal.....	7.4
3. Belgium.....	4.3	16. Spain.....	6.2
4. Canada.....	3.5	17. Sweden.....	2.8
5. Denmark.....	4.1	18. Switzerland.....	4.1
6. Finland.....	5.0	19. United Kingdom.....	3.1
7. France.....	4.7	20. United States.....	3.2
8. Germany.....	4.1	21. Greece.....	6.2
9. Iceland.....	3.6	22. New Zealand.....	3.5
10. Ireland.....	5.9	23. Turkey.....	6.6
11. Italy.....	6.0	24. LDC's.....	6.3
12. Japan.....	6.9	25. OPEC.....	7.0
13. Netherlands.....	5.0	26. Centrally planned economies.....	5.8

Note: The GDP growth rates shown in table 7 may differ slightly from those shown in the Interfutures Scenario A document for 2 reasons: (1) the initial conditions are different due to the use of different data sources; and (2) the estimates in table 7 are from GDP equations using a lagged adjustment mechanism. The use of a lagged response in output due to imperfections in factor markets generates a slightly different output path between any pair of initial and terminal years. These differences are, however, of minor importance.

the year 2000. The peak of oil trade is reached in the early years of the 1990's; then oil imports level off and stabilize approximately at this level. Japan's import share constantly increases up to some 30 percent. North American and European shares decrease due to their better substitution possibilities. Nonoil LDC's become self-sufficient by the year 2000, and centrally planned economies remain net exporters, the amount of exports being of minor importance at the world level. In the projections, the price of oil is assumed to stay stable until 1985 and then increase at the rate of 2.5 percent per year, reflecting the stagnating supply due to depletion of oil stocks.

The World Bank's model provides projections for LDC's and OPEC's imports. These are incorporated into the model as follows. OPEC's import growth rate numbers were used as such and they are: 1975-80, 15 percent; 1980-85, 9.6 percent; 1985-90, 8.4 percent; 1990-95, 5.9 percent; and 1996-2000, 5.2 percent per year. If there are no changes in relative prices, World Bank's estimates also apply to nonoil LDC imports. If relative prices do change, there are substitution effects, and imports projected by Interfutures' trade model differ from the World Bank's figures; the import price elasticity for LDC's is taken to be 0.3 on the basis of an internal IMF study. Centrally Planned Economies' imports are constrained by their foreign currency earnings from exports of goods and capital flows: capital imports are decreased from their present level to zero in 2000, according to the World Bank assumptions. We have also assumed no changes in Centrally Planned Economies' foreign exchange reserves.

For aid, it is assumed that donor countries are all OECD countries (except Greece, Portugal, Spain and Turkey) and OPEC, and each of them gives some proportion out of its nominal GDP. This proportion grows linearly from the 1975 actual value to 0.7 percent out of nominal GDP in 1990 and then up to 1 percent in the year 2000.

For the basic projections, the model is used under two different exchange rate regimes: fixed and flexible. Under the fixed rate run, all the exchange rates are kept at their 1975 levels. For the flexible-rate runs, policy assumptions become more complicated as (since the breakdown of the Bretton Woods par-value system) countries have been faced with a choice between alternative exchange rate systems. Con-

ceptually, the proper approach to the problem is clear: the authorities try to estimate the costs and benefits associated with each alternative exchange rate system and then choose the system which maximizes the benefits for their economy. However, there has been little historical experience upon which countries could rely in their choice of an exchange rate system appropriate to their needs. From the early 1970's onward, countries adopted a wide variety of exchange rate systems. Major OECD countries have had more-or-less floating exchange rates since 1973, while several small OECD economies and developing countries have chosen to peg their currencies to some basket or a single currency. Table 8, reported in Branson and Papaefstratiou (1978), indicates the exchange rate regime in 1976 of 23 OECD countries and a sample of developing countries. Countries are identified as independent floaters (*F*), joint floaters (*JF*), countries which change their exchange rate parity according to formula (*FF*), and countries which have adopted a composite (*PC*) or a single peg (*PS*).

TABLE 8.—EXCHANGE RATE POLICY FOR 45 COUNTRIES IN 1976

Country	Policy	Country	Policy
1. Australia.....	Composite peg.	Developing countries:	
2. Austria.....	Composite peg.	24. Argentina.....	Formula.
3. Belgium.....	Joint floaters.	25. Barbados.....	Single peg.
4. Canada.....	Independent floaters.	26. Bolivia.....	Not available.
5. Denmark.....	Joint floaters.	27. Brazil.....	Formula.
6. Finland.....	Composite peg.	28. Burma.....	Composite peg.
7. France.....	Independent floaters.	29. Cameroon.....	Composite peg.
8. Germany.....	Joint floaters.	30. Chile.....	Formula.
9. Iceland.....	Independent floaters.	31. Columbia.....	Formula.
10. Ireland.....	Single peg.	32. Ecuador.....	Sinclg peg.
11. Italy.....	Independent floaters.	33. Egypt.....	Single peg.
12. Japan.....	Independent floaters.	34. Gambia.....	Single peg.
13. Netherlands.....	Joint floaters.	35. Ghana.....	Composite peg.
14. Norway.....	Joint floaters.	36. Israel.....	Formula.
15. Portugal.....	Independent floaters.	37. Malaysia.....	Composite peg.
16. Spain.....	Composite peg.	38. Mexico.....	Single peg.
17. Sweden.....	Joint floaters.	39. Pakistan.....	Single peg.
18. Switzerland.....	Independent floaters.	40. Peru.....	Single peg.
19. United Kingdom.....	Independent floaters.	41. Philippines.....	Single peg.
20. United States.....	Formula.	42. South Korea.....	Single peg.
21. Greece.....	Formula.	43. Thailand.....	Single peg.
22. New Zealand.....	Composite peg.	44. Uruguay.....	Formula.
23. Turkey.....	Independent floaters.	45. Zambia.....	Single peg.

Source: Branson and Papaefstratiou (1978) and IMF annual report (1977).

We have tried to take into account basic lines of present policies as much as possible: the currencies of the big seven OECD countries float; smaller OECD countries and developing countries peg their currencies in an adjustable way to a trade-weighted basket; oil exporters' and Centrally Planned Economies' trade, with the rest of the world, is in dollars.

#### PROJECTED CHANGES IN THE WORLD TRADE STRUCTURE AND EXCHANGE RATES

With the basic assumptions of GDP growth, increase in the development aid share out of GDP and substitution of other sources of energy for oil, the trade model implies a world market share structure as shown in table 9 under fixed and flexible exchange rates. It also indicates changes of the real exchange rate of each country or region.

The first column gives the world market shares of goods (excluding oil) of each individual OECD country and of the other three regions for 1976. The second and third columns show the projections of market shares up to 2000 under two different exchange rate regimes: fixed and flexible exchange rates. The fourth column gives the index of real exchange rates.<sup>26</sup> If a country's real exchange rate index goes up (down), its currency is appreciating (depreciating) against its trading partners currencies in real terms.

TABLE 9.—WORLD MARKET SHARES AND REAL EXCHANGE RATES  
[Real exports of goods (excluding oil) as a percentage of total real trade of goods]

	1976	2000		Real exchange rate (1975=1)
		Fixed rates	Flexible rates	
1. Australia.....	1.67	1.79	1.01	1.57
2. Austria.....	1.08	1.12	1.18	.76
3. Belgium.....	4.18	3.42	3.47	.93
4. Canada.....	4.65	2.72	2.74	.98
5. Denmark.....	1.16	.80	.84	.72
6. Finland.....	.81	.69	.81	.44
7. France.....	7.29	7.51	5.96	1.24
8. Germany.....	13.00	11.01	8.44	1.66
9. Iceland.....	.05	.03	.03	.96
10. Ireland.....	.43	.40	.44	.74
11. Italy.....	4.72	5.31	5.41	.79
12. Japan.....	8.66	12.04	10.85	1.62
13. Netherlands.....	5.09	4.40	4.66	.88
14. Norway.....	1.02	.71	.70	.81
15. Portugal.....	.23	.35	.47	.52
16. Spain.....	1.12	1.43	1.51	.76
17. Sweden.....	2.36	1.50	1.52	.67
18. Switzerland.....	1.90	1.55	1.51	1.09
19. United Kingdom.....	5.90	4.61	3.26	1.47
20. United States.....	14.77	11.61	10.14	1.24
21. Greece.....	.33	.44	.51	.62
22. New Zealand.....	.36	.36	.33	.80
23. Turkey.....	.25	.35	.69	.20
24. Non-oil LDC's.....	10.76	13.95	23.01	.34
25. OPEC.....	4.23	6.55	5.90	1.20
26. CPE's.....	4.00	5.35	4.61	1.14

Note: Total shares may not add to 100 due to roundings.

Source: Interfutures' trade model.

Under the fixed exchange rate regime, the largest gainers in world market shares are the fast growing countries; at the top of the list come Japan, OPEC member nations and other LDC's. At the other end, slow growing "mature" OECD countries, such as the United States, Canada, Sweden and the United Kingdom, are losing markets. These changes are due to two types of effects. They can happen through market growth—depending on whether countries are exporting to the fast or slow growing markets—or through the distribution effect. In the model, a country with higher growth of capacity output, relative to that of its competitors, means that the country in question is capturing markets.<sup>27</sup>

<sup>26</sup> A trade weighted exchange rate (foreign currency over domestic currency) index divided by a trade weighted index of relative prices: a country's trading partner's prices over its own price level. It should be noted here that the trade model shows only the inflationary effects coming from import price increases (both oil and other goods) and does not take into account inflationary pressures arising from domestic developments. This link would require formulation of a monetary sector which is beyond the present scope of the model.

<sup>27</sup> This non-price competitiveness effect is found to be significant in history; e.g., in the OECD trade model study by L. Samuelson (1973).

The balance of payments difficulties arising from different growth rates of outputs under fixed exchange-rate regimes imply potential pressures on countries' exchange rates or on external balance in the longer run. The flexible exchange-rate simulation produces one possible scenario of the pressures on OECD-countries' exchange rates under the assumption that each conducts economic policies aimed at full-employment growth. The simulation also shows the consequences of these growths and exchange policies on changes in relative price competitiveness. The projection shows the orders of magnitudes of these changes: in Australia, Germany, Japan, France, the United Kingdom and the United States, real exchange rates appreciate, due to a tendency to run current account surpluses under fixed exchange rates. Surpluses, and thus appreciation, would occur, however, for different reasons. Fast growing Japan is capturing markets but it also exports a remarkable share to fast-growing markets of LDC's. The latter is also true for Germany and France which are among major exporters to developing countries. (See table 10.) The United Kingdom's and United States' surpluses are generated mainly due to slowly growing import demand, but also to fast-growing markets for their exports in LDC's. Next comes a group of OECD countries with small appreciation or depreciation in their real exchange rates (Belgium, Canada, Switzerland). The appreciation is also reflected in market shares: in general, appreciating countries are losing markets due to the weakening of their price competitiveness when compared to the projection under the regime of fixed exchange rates. All other OECD countries and nonoil LDC's are devaluing their currencies in real terms as a consequence of running current account deficits with fixed exchange rates. This increases their shares of world markets from what they would be under the assumption of fixed exchange rates.<sup>28</sup>

Table 10 gives more detailed information about market penetration based on the flexible exchange-rate run of the Interfutures trade model. It shows market shares (in real terms) of 26 countries and regions in the years 1976 and 2000 in eight aggregated import (goods excluding oil) markets. These are: Pacific (Australia, Japan, New Zealand); North America (Canada and the United States); European Economic Community (EEC), European Free Trade Association (EFTA), Other Europe (Spain, Greece and Turkey); nonoil LDC's, OPEC and CPE's. Results indicate that slow growing OECD countries (such as the United States, Canada, Sweden, the United Kingdom and appreciating countries (such as France, Germany, and Switzerland) are losing in all markets. Conversely, Japan, developing countries and CPE's increase their shares in all markets. Some figures are indicative: the nonoil LDC's share more than doubled, to 64 per cent in the year 2000. Japan's penetration in developing countries' markets is also remarkable. Indeed, one of the major changes in the future trade pattern is a fast growing trade between Japan and the LDC's.

It should be noted here that the good export performance of Japan and nonoil LDC's in the model is due to different reasons. Japan's

<sup>28</sup> It must be emphasized that changes in market shares and exchange rates reflect the growth assumptions of Scenario A and the introduction of different exchange rate regimes, as well as historical income and price elasticities in international trade which are, however, tuned where necessary to guarantee plausible long term properties of projections. That is why they are conditional and only show the tendencies and rough orders of magnitude of future developments of trade flows and exchange rates.

TABLE 10.—EVOLUTION OF TRADE FLOWS: REAL EXPORTS OF ORIGIN COUNTRIES AS A PERCENTAGE OF DESTINATION COUNTRIES' REAL IMPORTS

Destination	Pacific		North America		EEC		EFTA		Other Europe		IDC's		OPEC		CPC's		
	1976	2000	1976	2000	1976	2000	1976	2000	1976	2000	1976	2000	1976	2000	1976	2000	
Origin:																	
1. Australia.....	10.2	3.5	1.5	0.6	0.7	0.4	0.4	0.2	0.3	0.1	2.3	1.4	1.2	0.6	1.9	1.3	
2. Austria.....	.2	.1	.2	.3	1.4	1.7	1.8	2.2	1.4	1.7	.4	.5	.7	1.1	3.9	4.1	
3. Belgium.....	.6	.4	1.0	.8	8.5	7.7	3.1	3.0	3.0	3.0	1.8	1.7	2.1	2.0	2.2	2.0	
4. Canada.....	5.8	3.2	17.2	9.8	1.6	1.1	.7	.5	.9	.6	3.2	2.9	1.3	1.0	2.9	2.3	
5. Denmark.....	.4	.2	.3	.4	1.5	1.2	3.6	2.4	.6	.6	.6	.6	.6	.6	1.0	.8	
6. Finland.....	.2	.2	.2	.2	.9	1.0	2.1	1.8	.5	.8	.2	.3	.3	.4	3.5	4.3	
7. France.....	1.2	.6	2.4	1.5	9.9	8.2	8.2	7.7	8.2	6.3	8.0	7.1	7.5	6.2	8.0	6.2	
8. Germany.....	3.9	1.5	5.2	2.7	16.3	10.9	24.6	18.8	19.8	11.4	7.7	6.1	13.1	9.7	19.5	13.6	
9. Iceland.....	0	0	.1	.1	0	0	.1	.1	.4	.3	0	0	0	0	.1	.1	
10. Ireland.....	.1	.2	.2	.3	.9	1.0	.2	.2	.2	.3	.1	.2	.1	.2	.1	.1	
11. Italy.....	1.2	1.0	2.2	2.3	6.2	7.3	5.3	7.6	9.8	12.1	3.1	3.8	6.7	7.8	6.2	6.7	
12. Japan.....	5.4	3.2	13.9	15.0	2.5	3.1	3.6	4.9	8.8	11.3	17.2	21.3	14.7	17.1	11.0	12.0	
13. Netherlands.....	.8	.5	1.0	.9	10.1	10.0	4.2	4.3	3.8	4.2	2.6	2.9	2.7	2.9	2.3	2.2	
14. Norway.....	.2	.1	.4	.3	1.6	1.2	2.1	1.2	1.1	1.0	.6	.6	.3	.3	.7	.6	
15. Portugal.....	.1	.1	.1	.3	.3	.8	.5	1.0	.1	.3	.6	.4	.1	.1	.2	.4	
16. Spain.....	.4	.4	.8	1.0	1.4	2.0	.6	.9	3.0	5.2	1.0	1.4	1.3	1.7	1.3	1.6	
17. Sweden.....	.8	.4	.9	.6	3.0	1.9	5.7	4.3	3.5	2.8	1.2	1.1	1.6	1.4	2.8	2.3	
18. Switzerland.....	1.1	.7	.9	.6	2.3	1.8	2.7	2.3	2.7	2.3	1.5	1.4	1.9	1.7	2.4	2.1	
19. United Kingdom.....	4.6	1.2	4.4	1.8	5.6	3.0	8.7	4.6	7.9	3.6	6.1	4.1	8.4	5.3	3.7	2.2	
20. United States.....	25.9	10.2	19.0	12.2	8.9	4.9	7.4	4.7	10.8	5.9	23.3	17.5	19.5	13.7	8.9	5.9	
21. Greece.....	.1	.1	.1	.2	.4	.7	.3	.5	.1	.2	.2	.3	.6	.8	.7	1.0	
22. New Zealand.....	1.5	.9	.3	.3	.3	.2	0	.1	.5	.4	.4	.4	.2	.2	.4	.4	
23. Turkey.....	.1	.3	.2	.3	.3	1.1	.4	1.4	.3	1.5	.1	.3	.2	.5	.4	.9	
24. Nonoil LDC's.....	28.0	63.8	17.3	35.4	10.4	22.7	7.1	16.5	4.5	14.1	-----	-----	10.7	20.2	14.2	25.2	
25. OPEC.....	2.5	2.9	8.9	10.8	.3	.5	.7	1.0	1.4	2.2	14.1	18.7	-----	-----	1.8	2.1	
26. CPE's.....	7.8	7.3	1.4	1.4	4.8	5.6	6.2	7.8	6.8	7.8	4.4	5.1	4.2	4.5	-----	-----	

Source: Interfutures' trade model.

success comes from a better nonprice competitiveness measured by relative growth of capacity output (i.e., expanding productive capacity is assumed to be linked with rapid introduction of technological innovation, intensified export promotion, etc.), while at the same time Japan is experiencing losses due to the appreciating yen. In the case of nonoil LDC's, both better price and nonprice competitiveness are helping to increase market shares. The channel through increased price competitiveness, due to a large devaluation of LDC's currencies, is much more important—as indicated by comparison between fixed and flexible exchange-rate runs of table 9. Under the fixed-rate assumptions, the nonoil LDC's world market share increases from 10 percent in 1976 to 14 percent in 2000, but the gain is 9 percentage points greater to 23 percent due to the introduction of the flexible exchange rate regime. It is obvious that the flexible exchange-rate run overestimates nonoil LDC's share; the average devaluation of all developing countries currencies' by the projected amount seems to be more or less questionable, and may be inconsistent with internal economic policy targets of developing countries to promote rapid but smooth economic development.

## V. CONCLUSIONS

Rather than summarize the material of sections II-IV, here we will simply state the conclusions from that analysis which seem most important and relevant in thinking about the role of monetary and fiscal policy in the new international economic environment. In each case, we will indicate which of the foregoing sections is most relevant.

1. In the short run of a month to a quarter, exchange rates are determined by financial market equilibrium conditions, and should be expected to behave with the volatility of stock market prices. This is a major result of the new asset-market approach to exchange-rate determination. The volatility of exchange rate movement was seen in the historical review of section II, and explained by the theoretical analysis of section III.

2. Monetary policy can move the exchange rate sharply in the short run. For example, when monetary policy shifts to ease, the exchange rate rises immediately (the home currency depreciates). As we saw in section III, the exchange rate movement feeds back on the domestic price level. Thus, floating exchange rates speed up and magnify the effect of variations in monetary policy on the price level; we see the inflationary effect of monetary expansion immediately through this channel. This is an argument for relatively stable growth in monetary aggregates relative to their demand.

3. A current account imbalance moves the exchange rate through time as the imbalance cumulates or decumulates net foreign assets. We saw this in sections II and III. If we rank major currencies by current account position in the last few years, we see appreciation accompanying current account surplus, and vice versa. The cumulation of current account imbalances moves the exchange rate, relative to relative price levels between countries, toward the value that balances the current account. These are the movements projected in section II. Thus, the U.S. deficit tends to drive the dollar down, gradually reducing the deficit. This is a basic adjustment mechanism in the new view of exchange rate dynamics.

4. Fiscal policy moves the exchange rate mainly by influencing the current account balance. An expansionary fiscal policy would lead to

current account deficit and eventually a rising exchange rate. The movement would be speeded up if it were anticipated by the market.

5. The "real exchange rate  $E$ " in the (nominal) exchange rate adjusted for movements in relative international price levels. Changes in the real exchange rate are the principal mechanism in balancing the current account as countries experience differing growth in productivity, etc. This was described in theory in section III, and it is the main adjustment mechanism in the projections of section IV. Rather than simply offsetting relative price movements, the exchange rate moves relative to them to adjust the current account.

6. Longrun growth projections to 1980 show U.S. growth significantly slower than the rest of the world: Europe, Japan, the LDC's. In section IV, we saw that the slow import growth this implies for the United States tends to offset improvements in competitive position and market penetration by the LDC's. This implies that adjustment of the U.S. real exchange rate can be fairly small to maintain current account balance, and the balance will be achieved.

7. The dynamics of exchange rate adjustment under varying policy regimes can be simulated in an empirical model of longrun growth, and current-account and exchange-rate adjustment, as shown in section IV. This model is being further developed in the Program in International Studies at the National Bureau of Economic Research (NBER), and will be available for dynamic simulation studies.

8. Expansionary demand policy in any one major country will generate a current account deficit, devaluation and inflation in that country, and thus will be unsustainable for long. The United States learned this lesson in 1976-78, with a culmination in the policy package and monetary squeeze of November 1978, and the major slowdown and likely recession in 1979. Active demand policy for recovery must be coordinated across countries to avoid this type of imbalance. Thus, it is clear that the shift to more-or-less floating exchange rates has not "freed" monetary policy from the "balance-of-payments" constraint. It has just changed the name to the "exchange-rate" constraint.

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# STRUCTURAL CHANGE IN INTERNATIONAL BANKING AND ITS IMPLICATIONS FOR THE U.S. ECONOMY

By Robert B. Cohen\*

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## SUMMARY

The international expansion of major domestic banks that has occurred during the past 15 years has led to significant structural changes in international banking. A few banks that were formerly among the most important in several of the largest industrialized nations have come to dominate international banking, accounting for an important share of corporate and public sector lending. At the same time, this emergence of an international oligopoly structure in the banking sector has led to increased competition in national or regional markets where large multinational banks from outside the area have begun to challenge local or regional banks' dominance. The major international banks have also greatly increased competition for the sale of corporate financial services. These transformations have often gone beyond the scope of traditional regulations on bank operations,

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both at home and abroad, giving rise to significant dilemmas for policy makers.

The international growth of banks has been facilitated by the rapid emergence of the Eurocurrency market as a source of international capital. This market has not only been used to finance trade imbalances after the OPEC price rises and to support world industrial growth. It has also provided some of the largest private banks with the opportunity to operate on a worldwide scale, to integrate activities on a global level, and to transcend their role as commercial banks. At the same time, however, this market has become a magnet for banks, both United States and foreign, who aspire to becoming "multi-national." These banks may bear greater risks than they can afford to because they lack the experience and the asset base to contend with any unexpected problems in operating overseas.

This, too, has created a policy dilemma for national regulatory bodies, particularly since it is so easy for smaller banks to operate from "shell branches" in international financial centers. In some places, these branches are unregulated under laws passed by host governments and are also not subject to frequent examination by U.S. authorities, particularly in centers such as Panama, Singapore and Hong Kong. These are centers for some of the most rapid growth of the "Eurocurrency" markets and are where some of the fastest growth of foreign exchange operations and financial services is taking place. The lack of adequate supervision of U.S. regulatory authorities and the lax regulation of local authorities means that banks operated in such places are essentially free from controls. This increases the probability that problems in these centers may have significant ramifications for international financial markets.

Recent changes in the Eurodollar market have increased the risk of crises. The enormous dollar overhang—the growth of the volume of dollars in the Eurodollar market that according to some observers, like Federal Reserve Board Governor Henry C. Wallich, may give rise to speculative flows of funds and impact on exchange rates—the periodic low spreads and long maturities on Eurocurrency loans, and the more sizable problems of Petrodollars recycling all make the environment of international banking more unstable.

Finally, in examining borrowing by the steel industry in both the United States and Japan during the mid-1970s, there is some suggestion that banks are now making credit allocation decisions on a global level. Credit decisions now appear to focus on international outcomes by firm and by industry. This indicates that national industries undergoing severe problems in adjusting to a changed international economy may face a much more difficult time obtaining funds than when credit decisions were focused on a national level. Policy makers will need to explore how to assure that the international expansion of banks and other financial institutions does not exacerbate the readjustment problems firms and industries may face and does not increase the economic dislocations that may occur in the economy, as industry and financial institutions adjust to operating in a more global economy.

#### INTRODUCTION

Over the past 15 years, banks have expanded their international activities quite dramatically. By the end of the 1970s, the importance

of the share of international profits in overall earnings was evident in the annual reports of most large U.S. banks and many of their foreign competitors. Indeed, the movement to become international led to a number of significant changes in the structure of international banking—banks became multinational firms, became major participants in the Eurodollar market, were increasingly interlinked to each other, expanded into significant new areas of international activity and became more competitive and aggressive.

These structural changes not only led the largest banks to challenge each other on international markets—providing these markets with an oligopolistic character similar to that which had existed in domestic markets—but also resulted in far greater competition in domestic markets due to the influx of sizable foreign banks into major country markets. In addition, these changes meant that competition among banks spread into areas that, unlike lending, had not been the traditional focus of bank operations, i.e. financial services. This resulted in the rapid growth of a myriad of bank services that could be offered to corporate clients by major international banks. While the development of these services certainly enhanced the usefulness of such banks to their clients, it also led to greater international competition for the business of large corporations. In a number of cases, this placed increased pressure on medium-sized banks to become multinational or to face the loss of some of their most important clients. This pressure sometimes led medium-sized banks to take far greater risks in international markets than was probably prudent, which contributed to the problems faced in the case of the Franklin National Bank presented below.

As an ever-greater part of bank operations became international, public attention was drawn to the sizable Eurodollar markets. These markets were the focus of a major part of bank activities. As a result, questions were raised about the impact of these markets on the world economy.

This paper attempts to answer some of these questions. Its main conclusion is that the growth of these markets has transformed international banking by adding to the volume of assets throughout the world that can potentially give rise to destabilizing capital flows and to impacts on exchange rates. Such instability and impacts on exchange rates may place additional strains on banks because they can respond to these pressures by going multinational. By doing so, they can obtain less costly short-term funds and use them to finance long-term loans in the Eurodollar market at home or abroad (a strategy that may lead to significant losses when the cost of short-term funds unexpectedly rises, as it did in 1979). Going multinational makes it more difficult for bank regulators to obtain comprehensive knowledge about all the aspects of an international bank's operations. This latter point is particularly true where an important part of a bank's booking of loans occurs in "tax havens" where little or no information about banks' activities are disclosed by local regulatory authorities and where U.S. regulators may have inadequate means to keep close supervision over the branch activities.

The new global financial system is now the source for much of the capital raised by the world's multinational corporations. What is of greater concern is the evidence that suggests that this global system

may be unstable, inflationary or difficult to control. Thus, policy needs to be reformulated to lessen the risks that the international financial system may pose for the U.S. economy and that of other nations.

The evidence presented here on the structural changes in international banking and on the impact of the rise of the Eurodollar market on the operations of international banks suggests several policy alternatives that ought to be considered in order to lessen these risks. These include the need for regulators: (1) to be able to exert some control over the potential inflationary impacts in domestic markets of funds in the Eurodollar market; (2) to have better information about the lending and fee-generating activities of oversea operations of U.S. banks; and (3) to evaluate the potential for risks that may arise through the recycling of Petrodollars, the financing of long-term lending with short-term funds raised on the Eurodollar market and lending funds to developing nations. In addition, major international banks are increasingly making credit decisions by considering all possible international borrowers. Thus, regulators will have to contend with the fact that the new pattern of global credit allocation may have important consequences for the access to funds by certain U.S. firms.

This essay has three parts. The first examines the structural changes that have occurred in international banking. The second reviews how international banking has transformed the Eurodollar market. The third analyzes how the emergence of an international banking system impacts on world industrial growth.

The first part of the essay examines the international expansion of national banks and reviews how banks adapted to the transformed world of international banking. The main issue addressed here is how the increasing dominance of international banks on a global scale has affected: (1) bank links to multinational corporations; (2) the concentration and competition among banks for corporate clients; and (3) the competition among international banks and national banks for domestic markets. This part finds that during the past 15 years, significant structural changes have occurred in international banking. A few banks that were formerly among the most important in several of the largest industrialized nations have come to dominate international banking, accounting for an important share of corporate and public-sector lending. At the same time, this emergence of an international oligopoly structure in the banking sector has led to increased competition in national or regional markets where large multinational banks from outside the area have begun to challenge the dominance of regional and local banks. The major international banks have also greatly increased competition for the sale of corporate financial services. These transformations have often gone beyond the scope of traditional regulations on bank operations, both at home and abroad, giving rise to important dilemmas for policy makers.

Part two analyzes whether the transformation of international banking in the last 10 years has been linked to the concomitant growth and development of the Eurodollar market. It finds that developments in the Eurodollar market have contributed to structural changes in the conduct of international banking. The rapid emergence of the Eurocurrency market as a source of international capital has provided some of the largest private banks with the opportunity to operate on

a worldwide scale, to integrate activities on a global level, and to transcend their role as commercial banks.

At the same time, however, this market has become a magnet for banks, both United States and foreign, who aspire to becoming "multinational." These banks may bear greater risks than they can afford to because they lack the experience and the asset base to contend with any unexpected problems in operating overseas. This, too, has created a policy dilemma for national regulatory bodies, particularly since it is so easy for smaller banks to operate from "shell branches" in international financial centers. In some places, these branches are unregulated under laws passed by host governments and are also not subject to frequent examination by U.S. authorities, particularly in centers such as Panama, Singapore and Hong Kong. These are centers for some of the most rapid growth of the "Eurocurrency" markets and where some of the fastest growth of foreign exchange operations and financial services is taking place.

The lack of adequate supervision of U.S. regulatory authorities and the lax regulation of local authorities means that banks operated in such places are essentially free from controls. This increases the probability that problems in these centers may have significant ramifications for international financial markets.

Part two also concludes that recent changes in the Eurodollar market have increased the risk of crises. The enormous dollar overhang—the growth of the volume of dollars in the Eurodollar market that according to some observers, like Federal Reserve Board Governor Henry C. Wallich, may give rise to speculative flows of funds and impact on exchange rates—the periodic low spreads and long maturities on Eurocurrency loans, and the more sizable problems of Petrodollar recycling all make the environment of international banking more unstable.

The third part of the essay examines the issue of how the international banking system affects industrial access to funds. It does this by analyzing borrowing by the steel industry in both the United States and Japan during the mid 1970s. This investigation suggests that banks are now making credit allocation decisions on a global level. Credit decisions now appear to focus on international outcomes by firm and by industry. This indicates that national industries undergoing severe problems in adjusting to a changed international economy may face a much more difficult time obtaining funds than when credit decisions were focused on a national level. This section concludes that policymakers will need to explore how to assure that the international expansion of banks and other financial institutions does not exacerbate the readjustment problems firms and industries may face and that the global allocation of credit does not increase the economic dislocations that may occur in the United States and other industrialized economies, as industry and financial institutions adjust to operating in a more global economy.

## STRUCTURAL CHANGES IN INTERNATIONAL BANKING

### *The International Expansion of National Banks*

By the early 1970s, major banks had changed in a number of ways in order to adapt to the new world of international business. First;

they became multinational corporations. Second, they became major participants in the Eurocurrency market. Third, they became increasingly interlinked to each other through the growth of the international interbank market. Fourth, they expanded certain important areas of international activity, such as foreign exchange trading.<sup>1</sup> Fifth, many banks changed their character:

Pressed by market forces and supported by regulatory policy, banks . . . became more competitive and aggressive, more eager to seek growth and profits, and more willing to assume risks. They adopted more liberal lending policies and moved into new and often riskier activities. The sources of their financing also became riskier. They increasingly funded their lending with short-term uninsured liabilities, which led to a decline in capital asset ratios and left them sensitive to interest rate changes and to deposit runoffs.<sup>2</sup>

The drive to become multinational was especially strong. U.S. banks moved abroad rapidly, with the assets of their overseas branches increasing from \$9.1 billion in 1965 to \$80.0 billion in 1972, \$145.3 billion in 1975 and \$306.8 billion by year end 1978. In 1965, 13 American banks had 211 overseas branches; by 1975, there were 762 branches of 126 U.S. banks; by 1978, 761 branches.<sup>3</sup> Offshore financial centers were important foci for foreign branches. In 1964, only 2 banks had offices in the Bahamas. By 1974, 84 banks had 90 branches there, a greater concentration of branches than the 52 located in London.<sup>4</sup> By 1978, the number of U.S. bank branches in the Bahamas and the Cayman Islands alone (142) were nearly equal in number to those in Europe (175) since these tax havens made it especially easy for smaller U.S. banks to set up "shell" subsidiaries that acted primarily as offices through which loans that were booked elsewhere could be extended to clients.

The overseas expansion of banks from other nations followed a somewhat similar pattern, with banks from Britain among the last to expand their international operations beyond the networks established during the years of colonial rule. By 1976, the "Big Four" British banks alone had 2,257 offices overseas (1,295 of these in Africa). One bank, Barclay's, derived more than half of its earnings from overseas and another, National Westminster, had 40 percent of its assets in its international group; the latter's international group did not exist in 1968.<sup>5</sup> In 1965, Swiss banks had 18.6 billion Swiss francs (Sfr) in foreign assets. This grew to 96.7 billion Sfr in 1972, 112.5 billion Sfr in 1975 and 122.1 billion Sfr in 1976, or nearly one-half the size of U.S. assets abroad at current exchange rates. In 1965, Swiss banks had 11 foreign branches; by 1976, there were 45.<sup>6</sup> By 1977, French banks had 504 overseas branches, with nearly one-half in Africa, Asia and Latin America.<sup>7</sup>

Some of the latecomers to international banking have been among the most active banks in recent years. From 1977 to 1979, the volume

<sup>1</sup> Joan E. Spero, "The Failure of the Franklin National Bank" (New York: Columbia University Press, 1979), pp. 15-24.

<sup>2</sup> *Ibid.*, p. 172.

<sup>3</sup> D'Arista, Jane, "U.S. Banks Abroad," in U.S. Congress, House, Committee on Banking, Finance and Housing, "FINE: Financial Institutions in the Nation's Economy. Compendium of Papers Prepared for the FINE Study." Book II (Washington: US GPO, 1976), pp. 809-813, and "International Letter" (Federal Reserve Bank of Chicago) No. 405, September 28, 1979, p. 3. Brimmer and Dahl, *op. cit.*, p. 347.

<sup>4</sup> "International Letter" (Federal Reserve Bank of Chicago), No. 405, September 1979, p. 3.

<sup>5</sup> Derek Channon, "British Transnational Bank Strategy," p. 81, and Robin Pringle, "The British big four stake their claim," *The Banker* (London) vol. 127, August 1977, pp. 113, 115.

<sup>6</sup> Hans J. Mast, "Das Schweizerische Bankwesen im Jahre 1976," (Zurich: Credit Suisse, 1977), p. 36.

<sup>7</sup> See the article in *Banque*, No. 364, July-August 1977.

of foreign business of German banks doubled, with nearly all of their foreign bank lending going through Luxembourg subsidiaries.<sup>8</sup> Between 1970 and 1977, the number of branches of Japanese banks overseas grew from 54 to 121.<sup>9</sup>

Although small and medium-sized banks have participated in the international growth of banks from various nations, the most farflung and sizable international networks still belong to but a few of the largest banks from several nations. These banks are also dominant in the Eurobond and Eurocurrency markets. They have provided the most sophisticated services to their clients, and, as will be discussed in the next section, dominate lending to corporate clients.

Why did banks move overseas so rapidly during this period? First, they went abroad to follow their corporate clients. These corporations had invested abroad since the late 19th century, but the 1950s and 1960s were periods of sizable expansion in nearly all industries.<sup>10</sup> By the 1960s, many of these corporations required more substantial financing and financial services for their foreign operations. It became clear to most major banks that if they did not have a presence in nations where a corporate client had or planned to have substantial foreign investments, they might lose such a client's business at home to a competitor with widespread foreign facilities. In addition, bankers recognized that foreign branches might enable them to improve their competitive position with corporate clients.

These advantages were readily apparent to American banks. Walter Page, the vice president in charge of the international division at Morgan Guaranty noted in 1967 that "You have a wider, more imaginative possibility of doing something for a company in the foreign field than in the domestic. This is the area that can get you a closer, more exclusive relationship with your American client."<sup>11</sup> Several cases seem to indicate that this was true. Samsonite, the Denver luggage manufacturer, switched its overseas business to Citibank when it established its first four foreign subsidiaries in Europe in 1964. It was impressed by the services Citibank could provide for it, such as same-day service on money transfers throughout Europe, credit-rating information, news of government regulations and help on collection problems. Walter Page also noted that Morgan Guaranty probably moved from number two bank to number one bank for a major U.S. chemical company because of the services it could perform for it in Canada, Venezuela and Germany. In his view, a major factor in this shift was Morgan's ability to provide the firm with inexpensive medium-term credits at better terms than foreign banks could provide.<sup>12</sup>

Controls imposed by the U.S. Government on the outflow of credit from home banks to their foreign offices also reinforced the movement of U.S. banks abroad. The Voluntary Foreign Credit Restraint Program administered by the Federal Reserve Board from February 1965 to January 1974 came at a time when the overseas expansion of U.S. corporations was at a peak. The foreign subsidiaries of these firms had

<sup>8</sup> Jonathan Carr, "Coming to terms with the Euromarkets," *Financial Times*, August 9, 1979, p. 2.

<sup>9</sup> R. H., "Aggressive drive overseas," *Financial Times*, Survey of Japanese Banking, December 20, 1978.

<sup>10</sup> See Myra Wilkins, "The Maturing of Multinational Enterprises" (Cambridge, Mass.: Harvard University Press, 1974), pp. 327-408 for a discussion of U.S. investments during this period.

<sup>11</sup> These arguments are developed in Jeremy Main, "The First Real International Bankers," *Fortune* December 1967, p. 144.

<sup>12</sup> These cases are discussed in Main, p. 144.

to obtain short- and medium-term funds locally, providing overseas branches of U.S. banks with additional roles. At the same time, however, these constraints also made it impossible for overseas bank branches to raise additional funds from their home offices. Since these overseas branches had few stable local deposits and could not expect that subsidiaries of U.S. firms would have much money to deposit, they had to buy the funds they needed in the money market. Their primary source of funds became the Eurodollar market, or the pool of dollars that had stayed in European banks or foreign branches of U.S. banks as a result of the U.S. balance of payments deficits in the late 1950s and early 1960s.

Some historians have argued that U.S. banks moved abroad in the 1960s because they realized that foreign banks that were close to major competitors of their business customers would not be willing to finance their foreign expansion. Carl Parrini argues that the push behind Citibank's development of overseas branches in the 1950s and 1960s came from Standard Oil of New Jersey (now Exxon), which recognized that the British banks connected with Shell would never finance its expansion into Latin America and markets in the former British colonies.<sup>13</sup> This argument may have had more widespread influence in motivating U.S. banks to move abroad, particularly since major corporations on the continent were especially close to corporate clients that were key rivals to their American counterparts. Here, one might cite the fact that Swiss Bank Corporation acts as the "house bank" for CIBA-Geigy, the leading Swiss multinational chemical firm and that the three largest banks from the Federal Republic of Germany all hold sizable shares of stock in major German firms, exercising influence on policy due to holdings of stock and their representation on corporate boards.<sup>14</sup>

Foreign banks, by comparison with their U.S. competitors, were much slower to set up international networks of operations. To some extent, this was due to the fact that the foreign expansion of firms from Europe did not become as explosive as that of U.S. companies until after 1965.<sup>15</sup> It may also be due to the fact that prior to 1955, two-thirds of all foreign manufacturing by European firms was concentrated in the chemical and electrical industries, largely composed of German and Swiss firms with close ties to large banks. Finally, the delay in the foreign expansion of European banks may have been related to the fact that European firms were primarily exporters rather than direct investors with the average European enterprise exporting 26 percent of its sales volume in 1970, as compared to roughly 7 percent for the Fortune 500.<sup>16</sup>

Other factors also weighed against the setting up of branch networks by European banks during the late 1960s. These included the fact that doing foreign business in other parts of the European Economic Community (EEC) did not necessarily call for the establishment of branches in EEC member states. This view was related to the fact that most individual national markets were already "over-banked" and that the alternative of cooperation with foreign banks permitted avoiding direct competition with other European banks.

<sup>13</sup> Carl Parrini, "Heir to Empire" (Pittsburgh: Pittsburgh University Press, 1969). I wish to thank Professor Warren Dean of New York University for bringing this argument to my attention.

<sup>14</sup> United Nations, Centre on Transnational Corporations, *Transnational Banks: Operations, Strategies and Their Effects in Developing Countries* (N. Y., 1980), p. 65. This is also true of Japanese banks. See Charles Smith, "Threat to Mitsui Sorority," *Financial Times*, September 28, 1979, p. 21. Mitsui Bank has extremely close ties to Mitsui, Mitsubishi, C. Itoh, Toyo Menka and Nippon Steel.

<sup>15</sup> The same appears to be true for firms from Japan. See Lawrence G. Franko, "The European Multinationals" (London: Harper and Row, Publishers, 1976), Table 1.2, on page 10.

<sup>16</sup> *Ibid.*, pp. 19 and 79-80.

For the German banks, there were two additional considerations. First that banks from the Federal Republic had long been unwilling to cooperate closely with foreign banks, something that would have been necessary to establish branch networks quickly. Thus, if German banks had followed their own pace, their corporate clients may have had to wait decades to obtain services overseas that were comparable to the ones they obtained at home. Second, the German banks lacked the qualified staff to manage a large number of new foreign branches.<sup>17</sup>

Nevertheless, major foreign banks did begin to organize international networks in the late 1960s and early 1970s. The major Swiss banks only began to expand abroad after 1966, but by 1978, 60 percent of Swiss Bank Corporation's assets and 54 percent of Union Bank of Switzerland's assets were placed abroad.

The rapid increase in foreign direct investment by West German companies after 1965 was the prime factor in the overseas expansion of the big FRG banks. These companies often needed a wide range of financial services to establish and service their overseas subsidiaries, and this prompted West German banks to establish a presence in those nations where their major domestic customers had investments. After 1965, FRG banks became increasingly important as suppliers of capital for the foreign investments of West German companies.

The delayed expansion of West European banks left them open to an important challenge from U.S. banks. By the late 1960s, the major U.S. banks had become the most aggressive bankers in Europe by virtue of their use of the Eurodollar pool. They used such funds in a number of ways, from call money lent for a few days to one-year time deposits. In addition, U.S. banks were quite innovative in raising additional funds. In 1966, Citibank introduced Eurodollar certificates of deposit in London which paid at interest rates just slightly lower than ordinary time deposits.<sup>18 19 20</sup>

U.S. banks also helped to transform the way in which European firms used credit. In the mid-1960s, when European corporations found they could not fulfill their sizable demand for capital to finance large-scale expansion through traditional bank credits, they turned to U.S. banks and lost their prejudice against making medium-term loans. These loans became the most profitable part of U.S. banks' activities.<sup>21</sup>

As U.S. corporations' subsidiaries in Europe expanded, American banks often had to join forces with other U.S. or foreign banks to meet the demands of major corporate clients. This led to the syndication, or sharing, of medium-term loans by a number of different banks.

Another dimension of the overseas expansion of banks grew out of the shift of the international bond market, or Eurobond market, to Europe, in the mid-1960s. This occurred because of the imposition of the interest equalization tax by the U.S. Government, which discouraged U.S. investors from buying foreign bonds. On the other hand, it provided a significant new business opportunity for the overseas branches of U.S. banks, that were not prohibited from

<sup>17</sup> United Nations, *op. cit.*, pp. 56-66.

<sup>18 19 20</sup> Main, p. 145.

<sup>21</sup> Main, p. 146.



underwriting activities by the provisions of the Glass-Steagall Act which forbid U.S. banks to act as investment banks. This became a sizable market because traditional borrowers from overseas were joined by U.S. subsidiaries in Europe and by "capital-hungry European companies."<sup>22</sup> While U.S. banks initially dominated this market, by 1967, they managed only 36 percent of all underwritings. Eurobonds became especially attractive to borrowing corporations since they could be used to evade withholding taxes. Borrowers set up holding companies in tax-havens (Luxemburg, the Cayman Islands, the Netherlands Antilles) and the bonds were issued as unregistered bearer certificates so that there was no record of the owner. This made Eurobonds an especially enticing investment.<sup>23</sup>

As the Eurocurrency market, the medium-term market for syndicated loans and the Eurobond market, became more important in the late 1960s and early 1970s, its presence became a motive for the foreign expansion of banks. Not only could banks ill afford to forego participating in such profitable markets, but they also might lose the business of longstanding clients if they did. In addition, banks realized that the Eurocurrency markets could be the only way in which they could obtain funds for their main corporate clients when credit restraints were placed on lending in their own nations. This was true in the United States during the 1966 credit squeeze, when overseas branches transferred funds to their U.S. offices and in Germany during attempts to impose monetary constraints in the late 1960s.<sup>24</sup>

As more banks participated in these markets, interbank lending, the lending of funds from one bank to another, became an increasingly important source of funds. Andrew Brimmer and Frederick Dahl pointed to the dramatic changes in the interbank markets' role, noting that "foreign branches as a group had about two-fifths of their assets in the interbank market at the end of September 1974, in contrast to only one quarter in 1969," and that this sharp change was "particularly evident in both the United Kingdom and the Bahamas." They concluded that once "foreign branches had been established, they were open to a continued sizable flow of funds—although the demand for funds by their own internal systems had declined appreciably. To employ such resources, the foreign branches began to engage progressively in what was essentially a brokerage rather than a banking business. The competition to place funds in the inter-bank market led periodically to a significant narrowing in lending margins, and this had a significant adverse impact on the profitability of the foreign branches—particularly in London."<sup>25</sup>

### *The Strength of International Banks*

As the world's largest banks began expanding their international activities rapidly, international markets gained the oligopolistic traits that prevailed in domestic markets. This not only lent international capital markets a more oligopolistic character, but also disrupted the traditional structure of domestic markets by infusing them

<sup>22</sup> Main, p. 147.

<sup>23</sup> Main, p. 147.

<sup>24</sup> George Budzeika, "Lending to Business by New York City Banks," *The Bulletin*, (New York University, Graduate School of Business, Institute of Finance), Nos. 76-77, September 1971, pp. 41, 42 and 80 and Michael G. Porter, "Capital Flows as an Offset to Monetary Policy: The German Experience," *IMF Staff Papers*, July 1972.

<sup>25</sup> Andrew F. Brimmer and Frederick R. Dahl, "Growth of American International Banking: Implications for Public Policy," *Journal of Finance*, May 1975, vol. 30, no. 2.

with greater competition. This section will examine the dual nature of this process.<sup>26</sup>

#### BANK LINKS TO MULTINATIONAL CORPORATIONS

A hierarchy of relationships is defined by the role banks play in underwriting Eurobonds or in making Eurocurrency loans. The bank or banks that serve as lead manager(s) on a loan or as lead underwriter(s) on a Eurobond have the most important lending relationship to the corporation. The importance of other banks participating in a syndicated loan or bond underwriting is indicated by their position in the syndicate.

By calculating the number of times each bank acted as lead manager for syndicated loans and as a lead underwriter for Eurobonds for a specific corporation, banks were characterized as "primary lender" (the most important lender) or as "other important lenders" (2nd, 3rd or 4th most important). Tables 1 and 2 show the number of corporations for which each major bank acted as a "primary" or "important" lender. Only a few banks were frequent "primary" lenders: Chase, Citibank, and Morgan Guaranty from the United States; Swiss Bank Corporation and Union Bank of Switzerland; and Deutsche Bank from Germany. These banks plus Bank of America, Dresdner Bank, and BNP, Credit Lyonnaise, Paribas, and Societe Generale from France, and Algemene Bank from Holland were "other important lenders."

These results seem to indicate that international lending to many of the largest corporations in the world is managed by a very small group of banks that have sizable networks of overseas branches and a major presence in the Eurodollar market. The strength of specific banks, particularly those among the group of "primary" lenders noted here, is further illustrated by their ability to obtain a sizable group of foreign corporations as clients. This was especially true of Bank of America, Chase Manhattan, Citibank and Morgan Guaranty. Among foreign banks, Bank of America was "primary" lender to Pemex, Fujitsu, Kawasaki Heavy Industries, and Sanyo Electric during the period studied. Citicorp was "primary" lender to Montedison, Asahi Chemical, Nissan Motor, Hitachi Electric, Kobe Steel, and 15 other large Japanese companies. Citicorp is an "important" lender to such firms as Fiat, Pemex, and Renault. In addition, it appears to be more important as a lender to at least two large U.S. firms, Memorex and Xerox, in the international capital markets than it is at home. This latter phenomenon deserves further analysis.

While U.S. banks have obtained an international group of corporate clients on the Eurocurrency markets, so have a number of the largest European banks. Union Bank of Switzerland and its subsidiary UBS-Securities were "primary" lenders to such non-Swiss firms as Royal Dutch/Shell, American Motors, Distillers, Mobil, DuPont, Litton, U.S. Steel and Dow Chemical. Swiss Bank Corporation was "primary" lender to BMW, Massey-Ferguson, American Cyanamid, Beatrice Foods, Caterpillar Tractor, and FMC. Among the firms for which it was an "important" lender were Chrysler, Exxon, Unilever,

<sup>26</sup> The data presented here is drawn from Robert Cohen, "Report to the UNCTC on TNC-TNB Relationships," Unpublished Consultant's Study for the United Nations Centre on Transnational Corporations March 1977.

TABLE 1.—NUMBER OF CORPORATIONS FOR WHICH SELECTED INTERNATIONAL BANKS ACT AS "PRIMARY" LENDERS ON THE EUROCURRENCY MARKETS, WITH FIRMS GROUPED BY INDUSTRY

Nationality: Bank or lender	Aerospace	Apparel	Beverages	Broad-casting	Building materials	Chemicals	Electronics	Food	Industrial and farm equipment	Metal products	Metal refining	Mining	Motion picture	Motor vehicles
<b>United States:</b>														
Bank of America							2							1
Chase						5	1				2			1
Citibank						3	2	1	1	1	3			2
First Bank of Boston														
First Chicago														
Morgan Guaranty	1					1	1	3	1					2
Goldman Sachs				1			3	1						
Kuhn Loeb Lehman Bros							1	1				1	1	
Morgan Stanley International						1						2		1
<b>Swiss:</b>														
Swiss Bank Corp						1	1		3		1			1
Union Bank of Switzerland			2			2	1				1			1
<b>German:</b>														
Deutsche						5	2	1	1		1			3
Dresdener											1		1	2
<b>French:</b>														
BNP				1			1	1						
Credit Lyonnais										1				
Paribas														1
Societe Generale						1								
Morgan and Cie International								2		2	1			
<b>Canadian:</b>														
Bank of Montreal					1									
Bank of Nova Scotia						1								
<b>British:</b>														
Barclays														
Lloyds														
National Westminster														
N. M. Rothchild														
S. G. Warburg								1	1		2	1		
<b>Dutch: Algemene Bank</b>														

	Non-electrical	Office equipment	Paper	Petroleum	Pharmaceuticals	Publishing and printing	Rubber and plastics	Scientific instruments	Shipbuilding and transportation	Soaps and cosmetics	Textiles	Tobacco	Others
United States:													
Bank of America				2					2				
Chase			1										
Citibank		1	1	3									2
First Bank of Boston									2		2		
First Chicago				1	1								
Morgan Guaranty				4			1	1					1
Goldman Sachs													
Kuhn Loeb Lehman Bros				2							1		
Morgan Stanley International				1									
Swiss:													
Swiss Bank Corp							1				1		
Union Bank of Switzerland		1		2				1					
German:													
Deutsche				2			1				1		
Dresdener				1									
French:													
BNP				1									
Credit Lyonnais													
Paribas				2									
Societe Generale				1									
Morgan and Cie International				3	1					1		1	
Canadian:													
Bank of Montreal													
Bank of Nova Scotia													
British:													
Barclays					1							1	
Lloyds													
National Westminster													
N. M. Rothschild													
S. G. Warburg			1		1								
Dutch: Algemene Bank													
											1	1	

TABLE 2.—NUMBER OF CORPORATIONS FOR WHICH SELECTED INTERNATIONAL BANKS ACT AS "OTHER IMPORTANT LENDERS" ON THE EUROCURRENCY MARKETS, WITH FIRMS GROUPED BY INDUSTRY

Nationality: Bank or lender	Aerospace	Apparel	Beverages	Broad-casting	Building materials	Chemicals	Electronics	Food	Industrial and farm equipment	Metal products	Metal refining	Mining	Motion picture	Motor vehicles
<b>United States:</b>														
Bank of America.....						3	2			2	2		1	2
Chase.....						2	3			2	3			2
Citibank.....						2			1	1	2	1		2
First Bank of Boston.....														
First Chicago.....						1								
Morgan Guaranty.....					1	1	1	2	1	1	1	1		1
Goldman Sachs.....			1		1			1	1					1
Kuhn Loeb Lehman Bros.....	1					1		1						1
Morgan Stanley International.....						2	1							
<b>Swiss:</b>														
Swiss Bank Corp.....	1				1	2	4	4	1		6	3		4
Union Bank of Switzerland.....						3	3	1			3	2		4
<b>German:</b>														
Deutsche.....						4		1	2	1		2		4
Dresdener.....			1			4	2	1			3			3
<b>French:</b>														
BNP.....	1				1				2		1			3
Credit Lyonnais.....							1	2	1		1			1
Paribas.....						1	1	2	1		1	3	1	2
Societe Generale.....					2		1		1			2		2
Morgan and Cie International.....						3	2	1			1			1
<b>Canadian:</b>														
Bank of Montreal.....												1		
Bank of Nova Scotia.....														
<b>British:</b>														
Barclays.....							1	1						
Lloyds.....			1				1	1						
National Westminster.....						1								1
N. M. Rothschild.....								3		1		2		1
S. G. Warburg.....						2	1				2			1
<b>Dutch:</b>														
Algemene Bank.....						2		2	1		3			1

	Non-electrical	Office equipment	Paper	Petroleum	Pharmaceuticals	Publishing and printing	Rubber and plastics	Scientific instruments	Shipbuilding and transportation	Soaps and cosmetics	Textiles	Tobacco	Others
United States:													
Bank of America.....				2					1		2		2
Chase.....				3					2		1		
Citibank.....				4				1			1		2
First Bank of Boston.....				1									
First Chicago.....		1											
Morgan Guaranty.....				3					1				
Goldman Sachs.....					1								
Kuhn Loeb Lehman Bros.....				1			1			1		1	
Morgan Stanley International.....				1	1								
Swiss:													
Swiss Bank Corp.....				4	1								1
Union Bank of Switzerland.....		3		1	1				1	1	1		
German:													
Deutsche.....			2	3	1								
Dresdener.....			1	2			1		1			1	1
French:													
BNP.....				1			1	1					
Credit Lyonnais.....				2	1								
Paribas.....		1		1			1						1
Societe Generale.....				1	1								
Morgan and Cie International.....													
Canadian:													
Bank of Montreal.....				1									
Bank of Nova Scotia.....		2		1					1				
British:													
Barclays.....													
Lloyds.....													
National Westminster.....				1									
N. M. Rothschild.....				2									
S. G. Warburg.....				2									
S. G. Warburg.....				1									
Dutch: Algemene Bank.....													
				2			1	1					1

Alean Aluminum, Siemens, British Leyland and Thyssen Huette, Deutsche Bank acts as "primary" lender on Eurocurrency markets to Elf-Aquitaine, Henkel, Saab and Unilever, and as an "important lender" to DuPont, Deere, Kraft, Texaco, Ford, Rhone Poulenc, Imperial Chemical Industries and Royal Dutch/Shell.

Thus, there appears to be not only a small group of banks that acts as "primary" and even "other important lenders" to many of the world's largest corporations, but also considerable competition among banks for corporate clients on the international currency markets. Some of the reasons for this concentration and competition are considered in the next section.

#### SOME REASONS FOR THE CONCENTRATION AND COMPETITION AMONG BANKS FOR CORPORATE CLIENTS

This section examines the pattern of lending by U.S. banks to domestic corporations and by the world's largest banks to the world's top corporations. It describes the concentration of lending to both domestic and international corporations and offers several explanations for the occurrence of such an oligopolistic pattern in lending behavior. These include the preexisting ties of banks to corporations, the early entry of some banks into international markets, the need to have a sizeable branch network or adequate corporate banking services, and the great size of the international market for corporate debt relative to the size of domestic markets for corporate debt.

It then explores the recent competition by banks for international corporate clients and the expansion of international financial services. The emphasis on services has shifted bank operations more heavily into non-traditional banking areas, some of which may be riskier than lending or may have detrimental impacts on the national economy.

##### *1. The concentration of corporate clients among a few banks*

The main reason that a few banks are "primary lenders" to some of the largest corporations is that they have had extremely close and longstanding ties to them in domestic markets. While there is little data on such bank-corporate ties, from a review of SEC documents filed by U.S. corporations it was possible to identify without difficulty the lead banks, or most important lenders, for 232 of the 500 largest U.S. corporations in domestic markets. As may be seen in Table 3, three banks stand out as lead banks for U.S. companies, Chase, Citibank, and Morgan Guaranty. Bank of America, First Chicago, Manufacturers Hanover and Mellon also had more than 10 firms in this group for which they were lead bankers. Most notably, the three most important lead banks were lead bankers for nearly one-third of the companies, while the five most important lead banks were lead bankers for nearly half of these companies. Similar close ties have already been noted among a number of German and Swiss banks and their corporate clients. The argument that industries with a rather high rate of concentration have a high rate of foreign direct investments was originally made for manufacturing industries by Professor Stephen Hymer. It would appear to be applicable in the case of banks, both United States and foreign.

TABLE 3.—SELECTED CORPORATIONS IN THE FORTUNE 500 FOR WHICH U.S. BANKS SERVE AS LEAD BANKS IN DOMESTIC MARKETS

Bank or lender	Domestic Markets													
	Aerospace	Apparel	Beverages	Broad-casting	Building materials	Chemicals	Electronics	Food	Industrial and farm equipment	Metal products	Metal refining	Mining	Motion picture	Motor vehicles
Bank of America			2		1		1						1	
Chase	2				3	7	2	1	1		3			
Citibank	3				2	2				1	1			
First Bank of Boston					1		1	4	3	1	1	2		1
First Chicago												1	3	1
Morgan Guaranty	1	1				1	3	3	2		3			1
Bankers Trust	2								3	2		1		1
Manufacturers Hanovers		2		1						1				
Mellon	1					1			1	1	2			
Others	1		3		1	2	1	12	2	1	2			8

Bank or lender	Domestic Markets											Others	
	Non-electrical	Office equipment	Paper	Petroleum	Pharmaceuticals	Publishing and printing	Rubber and plastics	Scientific instruments	Shipbuilding and transportation	Soaps and cosmetics	Textiles		Tobacco
Bank of America	1	2	1	2									
Chase	1	1	1	6	1				1	1			
Citibank		2		2	2			1				1	
First Bank of Boston				1				1					1
First Chicago			3	1									
Morgan Guaranty		1	2	7	1	1			1				2
Bankers Trust													
Manufacturers Hanover					1			1			2		1
Mellon				1				1					1
Others		2	7	5	2		3	2			2	1	3



Second, a number of banks were early entrants into the international currency markets and among the first to lend funds to a sizable number of corporate clients. This early experience may have provided such banks with expertise and knowledge of markets that acted as a barrier to the entry of competitors, particularly because they had special technological or organizational capabilities that were acquired at home. Thus, their rivals may have felt that it was prudent to match their rivals' moves in order to minimize their risk of being left out of important new markets. This argument is quite similar to the one advanced by Frederick Knickerbocker in explaining why U.S. manufacturing firms were prompted to move overseas.<sup>27</sup>

Third, there is the risk of losing clients that was present not only for U.S. banks but also for foreign ones. The lack of an adequate branch network or of desired corporate banking services may have eroded some traditional bank-corporate relationships. In addition, certain national regulations may have made it more difficult for some banks to compete with their national rivals for corporate clients in key nations and they may have had to compensate for such limitations by developing offsetting services or organizational skills in other areas. In the case of France, lending ceilings imposed in the mid-1960s assure that most U.S. corporations with subsidiaries in France borrow the largest part of their local funds from Morgan Guaranty.

Fourth, the size of the market for corporate debt (and later for country lending) may have become so large relative to other markets that it was difficult for banks to avoid entering it. G. Richard Thoman of McKinsey and Company has estimated that the world's largest multinational corporations (MNCs)<sup>28</sup> had \$285 billion in short and medium term debt in 1976. Total MNC debt was found to be more than 1½ times as large as bank debt to all private sector borrowers in the United States (see chart 1). Nearly 40 percent of corporate debt came from Eurocurrency loans or Eurobonds. By far the largest share of this debt was held by U.S. companies (see chart 2). Thoman also emphasized that since the 500 largest MNCs in the U.S. had more than 10 times the sales of the next 500 companies, the market was relatively highly concentrated in the top 500 firms and was at least initially, very attractive in terms of profit opportunities, as the performance of Morgan Guaranty, a bank oriented to dealing with large MNC's illustrated during the late 1960s and early 1970s. Later, as competition in international banking became more intense, and profits on loans and underwritings were squeezed, the picture changed significantly. As Thoman has argued, corporate treasures were less bound to traditional "lead banks" of their own nationality and more willing to use major European banks for very competitive and skilled services, such as Eurobond financing, since these banks also have worldwide banking networks.<sup>29</sup>

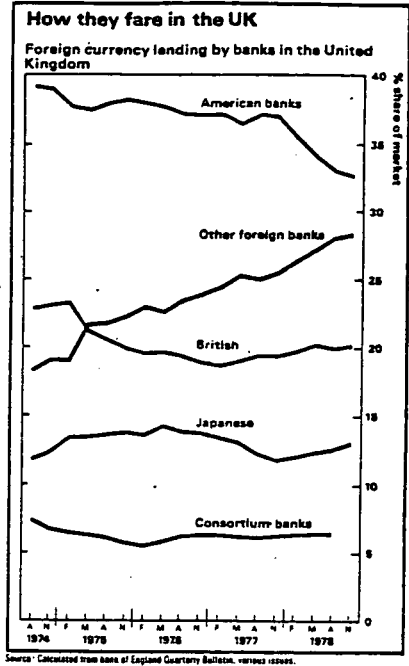
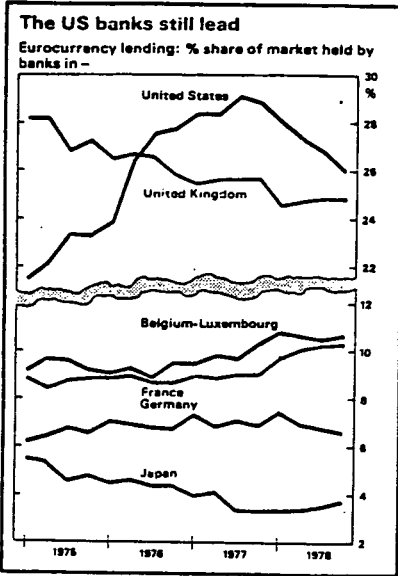
The experience of the late 1970s provides useful insight into the strength of the largest banks. Although they had found lending to corporations to be a lucrative area because of high fees, most banks faced

<sup>27</sup> Frederick T. Knickerbocker, *Oligopolistic Reaction and Multinational Enterprise* (Boston: Division of Research, Graduate School of Business Administration, Harvard University, 1973) pp. 20, 26-31.

<sup>28</sup> In this study, MNCs include the 800 largest U.S. companies and 500 largest non-U.S. companies.

<sup>29</sup> G. Richard Thoman, "How to Service the MNC Market," *The Banker* (London), vol. 127, August 1977, pp. 90-91.

CHARTS 1 and 2.—The declining share of U.S. banks in lending in the Euro-currency markets and in the United Kingdom.



Source: Bruce F. DeVine, "U.S. banks continue to dominate the market," *Euromoney*, June 1979, pp. 160-162.

an era of intense competition for managing loans,<sup>30</sup> when the Japanese, German and Swiss banks cut their rates and threatened to undercut long-standing financial relationships with key clients. U.S. multinational banks have responded in two ways. First, they placed even greater emphasis on fighting to retain key clients and to extend their relationships with others.<sup>31</sup> Second, they moved with "off balance-sheet" areas to offer services that command high fees and entered riskier areas of business lending that are often not supported by guarantees.<sup>32</sup>

Their main competitors have responded in kind. Japanese banks have dramatically increased their branches abroad and their cutting of interest rate spreads.<sup>33</sup> Swiss banks have increased their offering of non-guaranteed export loans.<sup>34</sup> German banks have doubled the number of their foreign branches and trebled their overseas business volume over the past five years.<sup>35</sup> The result has been a decline in the absolute position of U.S. banks in Eurocurrency lending and in certain Key foreign markets, such as Britain. (See charts 1 and 2.) On the

<sup>30</sup> Bruce Nussbaum, "Tokyo undercuts its rivals," *Far Eastern Economic Review*, September 22, 1978, pp. 97-98.

<sup>31</sup> John Evans, "U.S. banks seek to expand foreign lending," *Financial Times*, August 16, 1979, p. 22.

<sup>32</sup> Deborah Rankin, "Doubt on Banks' Standby Loans," *New York Times*, January 25, 1979, pp. D1, D9.

<sup>33</sup> Nussbaum, *op. cit.*, p. 97 and "Euromoney," September 1979.

<sup>34</sup> John Wicks, "Swiss banks warned on expansion," *Financial Times*, July 7, 1979, p. 2.

<sup>35</sup> William Hall, "German Banking: Strong Link in the Economy," *Financial Times*, Survey of German Banking, March 27, 1979, Section 3, p. 1.

other hand, if one allocates most of the rise in lending by banks in Luxembourg to the German banks, these banks probably have significantly increased their share of lending in both the Eurocurrency markets and the British market. This result also holds true for the Swiss banks.

One way of gauging the results of this tremendous competitive thrust by huge foreign multinational banks is to examine the recent major shifts in lead managers for Eurocurrency lending. In 1976, 8 of the top 10 positions among lead managers of medium-term syndicated Eurocurrency credits were held by U.S. banks, 1 by a German bank, and only 1 Japanese bank was among the top 20 managers. By the third quarter of 1978, 5 U.S. banks remained among the top 10 lead managers and German and Japanese banks held 3 positions in the top 10 and 5 places among the top 20 banks.<sup>36</sup>

The result of this competition has been two-fold. First, banks have emphasized expanding international lending, have driven loan margins to their lowest levels in years and extended maturities on loans much longer than ever before. In 1970, only 2 percent of all Eurocurrency credits had weighted spreads of 1 percent or less; by 1979, 73 percent did. In 1976, only 20 percent of such loans had original maturities over seven years, but by 1979, 57 percent did.<sup>37</sup> Second, large international banks have placed a great amount of emphasis on fee-generating activities, some of which are not supported by guarantees. Their new exposure in this area would leave them in a particularly precarious position if there is any sort of crisis in the Eurocurrency markets.

The shift in bank behavior described above bears the potential for considerable impacts on the U.S. economy. First, as conditions on the Eurocurrency markets become more competitive and more attractive to borrowers, there is the chance that many corporations will seek to fund their operations via these markets and will cause inflows of funds into certain nations attempting to restrain the growth of their money supply (as a means of reducing inflationary pressures). Greater demand for borrowing on international markets may also lead to a shifting of funds to these markets, making it relatively more difficult for smaller, non-multinational firms to gain access to funds. Second, the move into riskier areas of lending and "off-balance sheet" earnings bears the risk of placing banks in an REIT-like situation,<sup>37a</sup> if there is a tightening on credit of international markets and an ensuing failure of important firms that have borrowed non-guaranteed funds, obtained standby letters of credit, etc. If such a situation occurs, it might lead to a repetition of the Franklin National Bank scenario, but on a somewhat different level. Regulators might have greater difficulty rescuing a bank that is imperiled because of a default on loans, as opposed to mismanagement of foreign exchange activities that could undermine confidence in the dollar.

<sup>36</sup> Bruce F. DeVine, "U.S. banks continue to dominate the market," *Euromoney*, June 1979, pp. 165.

<sup>37</sup> World Bank, "Borrowing in International Capital Markets," First Quarter, 1979, July 1979, pp. 143 and 149.

<sup>37a</sup> A situation similar to that which resulted from banks' overinvestment in real estate investment trusts that were expected to be highly profitable but which had significant losses once the real estate market collapsed in the mid-1970's.

## 2. *The expansion of international financial services*

There has been a substantial growth in the corporate demand for banking services in recent years.<sup>38</sup> Indeed, lending has changed so that fee-generating services that provide banks with greater "front-end" earnings are being emphasized. Such loans have grown dramatically since World War II.<sup>39</sup>

Thus, the shift away from more conservative banking practices also needs to be emphasized in the discussion of banks' expansion into international financial services. Whether it be the facility fees earned on loans, the increased foreign exchange operations, or other "off balance-sheet" activities, all these are changes that offer new opportunities for profits but also contain perils for banks because they are riskier, tend to overstate the profitability of banks during times when they are not performing so well, and lessen the ability of both managers and regulators to gauge the true performance of financial institutions.

In addition, bank entry into financial services and foreign exchange activities places great pressure on banks to develop more sophisticated ways of serving a highly dispersed network of clients and reducing transactions times and costs. Thus, besides international communications links, banks have developed their own funds transfer and communications systems that dramatically reduce the time to link transactions in one part of the world with those in another. Citibank, Bank of America and the major Swiss banks have been in the forefront of the development of such systems.<sup>40</sup>

In addition, U.S. and Swiss banks have been among the leaders in developing services for non-U.S. nationals that permit investors to deposit funds in "personal investment corporations", or PICs, in tax havens around the world. These funds are "administered" by banks—put into real estate, invested in gold, shifted into currencies that are likely to appreciate—but need not be recorded on balance sheets since they represent funds in private corporations that are not technically part of any bank and, therefore, are not subject to regulation by national monetary authorities. Based on my own conservative estimates, each of three or four of the banks engaged in this type of activity probably "administer" approximately \$100 billion in such funds or more. For each bank, the amount of funds in PICs is roughly equal to the bank's total assets.

Such funds represent a potential problem area because in certain cases, banks have guaranteed a minimal rate of return to investors who place their funds in PICs. If this rate of return is not attained, it is unclear where the necessary funds will come from. In addition, if funds in PICs are used to purchase U.S. real estate or U.S. stocks on margin and these investments need to be liquidated immediately, they may have a depressing effect on certain parts of the domestic economy.

In addition, the development of PICs represents another area where banks have managed to avoid regulatory constraints. This raises the question of whether PICs may be used to increase specula-

<sup>38</sup> For an analysis of 20 of the most widely used services see: F. Gregory Morton and Daniel L. Logace, "Corporate Use of Commercial Banking Services," *The Bankers Magazine*, May-June 1978.

<sup>39</sup> Randall C. Merris, "Loan Commitments and Facility Fees," *Federal Reserve Bank of Chicago Economic Perspectives*, March/April 1978.

<sup>40</sup> Interview with a foreign banker based in New York City.

tion, especially foreign currency speculation that may have detrimental effects on the U.S. economy. In addition, it poses another dilemma for national regulatory authorities, who currently have little control over "off balance sheet" operations.

### 3. *Competition between international banks and national banks for domestic markets*

*a. The challenge posed by international banks.*—Another significant structural change in international banking has been the ability of major international banks to disrupt and challenge the positions of banks that formerly dominated national markets, particularly those in Europe and the United States.

Foreign banks in Britain are a case in point. Most foreign banks have come to London to participate in the Eurocurrency market and they held 81.8 percent of all the foreign currency deposits at banks in the United Kingdom in mid February 1978. But they have also been building their sterling deposits, and by August 1977, they accounted for 19.0 percent of total sterling deposits at all U.K. banks. The American banks were the most aggressive competitors with the British banks for domestic-based business. They became major lenders to British industry and had the largest share of advances of U.K. residents for currency loans. They also developed almost a 10 percent share of sterling advances.<sup>41</sup>

In part, U.S. banks "were always assured of an *entrée* to sterling business by way of the significant number of British companies which are the subsidiaries of American corporations: More than 10 percent of the sales of firms in Britain's private sector comes from U.S.-owned companies.<sup>42</sup> The financing of the North Sea oil development also involved U.S. corporations and U.S. banks, and accounted for 9 percent of Britain's annual capital expenditures on fixed assets by 1976. In addition, as British firms became more active as purchasers of U.S. companies, they financed most of these purchases through local or Eurodollar borrowings, both of which tended to bring them into closer contact with one or more U.S. banks.<sup>43</sup>

But during several periods, the reason the American banking challenge has been so visible is that U.S. banks can lend more cheaply than the large British clearing banks which must rely on funds raised through their branches because the U.S. banks raise their money in the inter-bank market. On this market, the interest rate is the going rate for funds which the clearing banks cannot use. During periods of ample liquidity and low, but rising, loan demand, such as from mid-1976 to mid-1977, U.S. banks were able to capture a part of lending to British firms, particularly those that are multinational. In doing so, U.S. banks were aided considerably by their ability to offer a wide range of corporate banking services.<sup>44</sup> In this respect, U.S. banks may be attempting to follow the example of the performance of the West German branch of Morgan Guaranty Trust Company, which, after 15 years in Germany, earns 75 percent of its income in Germany from

<sup>41</sup> Derek F. Channon, "British Transnational Bank Strategy," Center for Business Research, Manchester Business School, University of Manchester, Manchester, England, p. 29.

<sup>42</sup> Nicholas Colchester, "American banks' challenge in Britain," *Financial Times*, October 4, 1977, p. 16.

<sup>43</sup> *Ibid.*

<sup>44</sup> *Ibid.*

German multinationals, which have traditionally looked to U.S. banks to provide them with a complete range of international services.<sup>45</sup>

Competition from American banks also helped to transform the structure of British bank lending. Until the late 1960s, bank lending had been conducted by overdrafts. But after the new system of competition and credit control was adopted in 1971, bank lending shifted to medium term lending, with such lending accounting for an even larger share of U.S. bank loans to British residents than that of the U.K. clearing banks themselves.<sup>46</sup>

Foreign banks in Britain were also pioneers in introducing new financial services for business clients. These included leasing and factoring, as well as broadening the range of financial instruments available in both the domestic and Eurocurrency markets by introducing certificates of deposit, floating rate loans, and multicurrency loans. As Channon has noted:

"The aggressive nature of the foreign banks competition has also forced change in the British banks in their methods of acquisition, models of customer appraisal, customer servicing and the like, with a tendency amongst both the clearing banks and accepting houses to use account executives or corporate business specialists who actively seek to develop business with corporate clients. This contrasts with the more passive tradition in British banks of waiting for the customer to come to them."

British banks have also expended their other capabilities to service the needs of their corporate clients at home and abroad. They have all substantially enlarged their merchant banking services and are now capable of providing corporate financial advice, capital issue facilities, investment management, loan syndication and acceptance credits. They have greatly improved their leasing, factoring and credit finance services to industry. While remaining relatively weak in providing specialist fee earning services, British banks are expected to be adding such services as international cash management systems, foreign exchange forecasting services, corporate external fund transfers and special tax and financial consulting services.<sup>47</sup>

*b. The challenge of foreign banks in the United States.*—A similar competitive situation has become more conspicuous in the United States over the past few years. Foreign banks have spread into U.S. markets for a number of reasons. For one thing, they are motivated in part by a desire to match dollar lending and to "replace volatile wholesale inter-bank funds with more stable retail deposits."<sup>48</sup> On the other hand, most foreign banks see the United States as a critical market that they need to enter in order to make their services global. A number of the largest foreign banks have developed underwriting arms in the United States to demonstrate that their ability to underwrite securities and place paper is global.<sup>49</sup> Other foreign banks may be attempting to establish themselves as important banks for certain financial services that are particularly key to U.S. companies. One example of such a service is the issuance of Eurobonds to raise quick cash for takeover attempts.<sup>50</sup>

<sup>45</sup> Michael Lafferty, "Foreign banks find the going tough," *Financial Times*, April 1, 1980, p. 29.

<sup>46</sup> Channon, *op. cit.*, p. 31.

<sup>47</sup> *Ibid.*, pp. 67-68.

<sup>48</sup> "Supervising the Euromarket dinosaur," *Banker* (London), August 1978, p. 81 and "Lender of last resort to Topsy," *op. cit.* p. 88.

<sup>49</sup> "Stateless Money," *Business Week*, August 21, 1978, p. 77.

<sup>50</sup> "The Eurobond market," *Economist*, November 18, 1978, p. 114.

The key new target of the big German banks has been the U.S. market. The big three German banks, having established themselves as major competitors with the big three Swiss banks for control of the Eurobond market and as chief rivals of Citibank, Morgan Guaranty and other major U.S. banks for the medium-term Eurodollar lending business, aggressively sought the business of U.S. corporate customers in the late 1970s. They had several advantages aiding them in their efforts. First, they could not only offer cut-rate prices for loans, but also were willing to do away with the requirement that borrowers keep compensating balances (specified sums of funds) on deposit with them. Second, like other foreign banks, they could offer corporate clients both commercial and investment banking services since they were not federally regulated.<sup>51</sup> But the great advantage of the German banks has often been their ability to price their loans lower than their U.S. competitors. The German banks get the funds that are lent through their U.S. subsidiaries from the Eurodollar market at rates that are often below the prime interest rate in the U.S. Since they are not required to follow the Federal Reserve's Regulation M, which makes it necessary for U.S. banks to establish a 4 percent reserve against Eurodollar borrowings, they can pass the savings along to their customers. In addition, they have often cut the costs of a loan by one-fourth to one-half of a percent just to obtain new business, and have also usually added just a straight fee on top of their loans, rather than requiring compensating balances. This has enabled them to introduce "Euro-pricing" to corporate loans, offering rates that are the most favorable, next to commercial paper.<sup>52</sup>

While foreign banks will have certain salutary effects on the U.S. banking system, their negative impacts pose a great dilemma for policymakers.<sup>53</sup> The increased acquisitions of U.S. banks by foreign banks and the increased role of foreign banks in the U.S. economy will probably have at least five important economic consequences, namely:

- (1) To increase competition among banks, but to lessen the ability of smaller banks to act as important lenders to local and regional corporations;
- (2) To make it more difficult for the government to control the U.S. money supply;
- (3) To accelerate the pace of foreign investment in the U.S.;
- (4) To increase the likelihood that important long term loans are backed by short term borrowings by banks on the Eurodollar market and thus lessen the safety and soundness of the U.S. banking system; and
- (5) To underscore the inequity of treating foreign banks with one set of regulations and domestic banks with another, leading to a reassessment of our traditional system of bank regulations.

<sup>51</sup> "Germany's drive to be the No. 2 banker," *Business Week*, December 5, 1977, p. 53.

<sup>52</sup> The emergence of the commercial paper market, where corporations borrow from each other or from financial institutions such as insurance companies and pension funds more cheaply than they can from commercial banks has considerably changed the structure of corporate borrowing in the United States. By 1978, borrowing via the commercial paper market equaled 60 percent of the total of commercial and industrial bank loans at large weekly reporting banks, compared to 42 percent in 1970. See Stewart Fleming, "U.S. companies ignore banks and turn to each other for funds," *Financial Times*, October 31, 1978, p. 15.

<sup>53</sup> This section is drawn from my study, "The Impact of Foreign Direct Investment on U.S. Cities and Regions" (Washington: U.S. Department of Housing and Urban Development, 1979), pp. 7-1 to 7-20 and my testimony in U.S. Congress, Senate, Committee on Banking, Housing and Urban Affairs, "Edge Corporation Branching; Foreign Bank Takeovers; and International Banking Facilities," 96th Congress, First Session, pp. 443-451.

Foreign banks have already created greater competition in domestic banking by introducing loan rates based on Eurodollar market rates which undercut the traditional prime rates offered by their U.S. counterparts. Big U.S. banks, including Morgan and Wells Fargo, quickly introduced a similar system of pricing rather than lose clients to their foreign competitors.<sup>54</sup> This pricing can erode the corporate clientele of smaller U.S. banks without access to the Eurodollar markets and may lead to lowering the traditional profit margins earned by banks in lending to businesses, possibly decreasing the stability of the banking system. On the other hand, foreign banks have made numerous new services available to local firms and have been innovators in certain areas of lending, offering longer term auto loans and lower cost consumer loans in California.<sup>55</sup>

As foreign banks continue to seek clients from among the more dynamic, large, U.S. companies having international operations or about to venture abroad, the major social impact of foreign acquisitions of U.S. banks will be the relatively more difficult access to funds by smaller, domestic-oriented, or troubled, U.S. firms. This is suggested by the findings that bank mergers in rural areas tend to lessen the amount of loans issued to independent farmers and that a larger bank with a greater resource base and "drive" than a smaller bank can enter a specialized market more easily because it can subsidize its efforts in one market area with earnings from another.<sup>56a</sup> If foreign banks manage to obtain an important share of the more profitable larger corporate loans, the traditional small- and medium-sized firms that borrow from regional and local banks may find that they have far more trouble obtaining loans and more difficulty surviving a prolonged period of economic stagnation. Thus, as Wayne Hayenga has suggested, new regulations may be needed to insure that banks serve citizens' needs.<sup>56b</sup>

Since recent research indicates that these smaller U.S. firms probably have greater rates of employment growth than their larger counterparts,<sup>57</sup> the inability of such firms to obtain capital may have a significant impact on employment generation. These consequences may be even more troublesome for marginally profitable companies in declining areas or problem industries. Since foreign banks will see these firms as poor risks and since competition with foreign banks, especially in periods of recession or credit stringency, may lead large U.S. banks to be more reluctant to lend to such borrowers, such firms may face far greater problems. With funds to restructure such industries unavailable from private sources, the Government may be faced with the need to act as a lender of last resort to prevent the occurrence of numerous Youngstown-type failures. If such aid is not forthcoming, whole industries may move abroad, leaving the economy even more dependent upon foreign sources of goods.

Because of the access foreign banks have to funds available from international capital markets, they can inject funds into the United

<sup>54</sup> "Here Come Foreign Banks Again," *Business Week*, June 26, 1978, p. 80-81.

<sup>55</sup> *Ibid.*, pp. 82, 86.

<sup>56a</sup> Wayne Allen Hayenga, *The Effects of Bank Mergers on Financial Services Available to Rural Michigan Residents*, Ph. D. Dissertation in Economics, Michigan State University, 1973.

<sup>56b</sup> *Ibid.*

<sup>57</sup> David Birch, "The Job Generation Process," MIT Program on Neighborhood and Regional Change, 1979.



States, at times subverting monetary policy goals. This may be done by lending directly to U.S. firms from offices in the United States or by lending to foreign subsidiaries of U.S. corporations, indirectly increasing the total funds available to parent corporations.

The advice foreign banks provide to their foreign corporate clients will swell the investment by these firms in the United States. The offices of foreign banks located here often gather crucial information about possible acquisitions and new markets and pinpoint the most opportune locations for foreign investments. For foreign corporations that are sometimes reluctant to invest in the United States, foreign banks "hold hands" and often finance new facilities. As such banks increase in number, foreign investment in the United States will multiply.

Foreign banks in the United States have obtained an important proportion of their loanable funds by borrowing them on the Euro-dollar market, where such funds are available for up to six months. When they commit these funds to backing up long-term loans of three or five years or more, they may put themselves in a bind if the cost of short term funds rises substantially. Such an occurrence would undermine the soundness of certain U.S. offices of foreign banks and might threaten the safety of the banking system.

Since foreign banks in the United States are still permitted to have offices in more than one state and to have investment banking affiliates, two things their U.S. counterparts cannot do, they will force us to reevaluate the Nation's banking regulations. By already achieving integrated banking on a national scale, they push the rest of the U.S. banking system in the same direction.

Thus, foreign bank activities while providing certain benefits to some consumers and corporate clients appear to pose an important threat to the traditional role played by smaller, non-money center banks in our banking system. They also create additional problems for monetary policy, for bank regulators and for the safety and soundness of the U.S. banking system.

## THE EURODOLLAR MARKET AND THE TRANSFORMATION OF INTERNATIONAL BANKING

### *The Role of the Eurodollar Market in International Banking*

#### IMPORTANT FUNCTIONS PERFORMED BY THE EURODOLLAR MARKETS

The Eurodollar market, which is the dominant part of the Euro-currency market,<sup>57a</sup> performs two major functions. It serves as: (1) "a market dealing in the placements of short-term funds by the original owners with commercial banks and the re-lending of these funds by the banks to final users; and (2) a market involving interbank transactions in which commercial banks borrow and lend Euro-currency deposits among themselves."<sup>58</sup> Thus, besides being distinguished from a national money market by involving institutions from two or more

<sup>57a</sup> The Eurocurrency market consists of funds held in banking offices outside the country of the currency in which the deposits are denominated. Nearly three-fourths of these funds are dollars. While the Eurocurrency markets are primarily based in Europe, they include capital markets in the Bahamas, Bahrain-Singapore, Panama and other non-European financial centers.

<sup>58</sup> E. Wayne Clendenning, "The Eurodollar Market" (Oxford: Clarendon Press, 1970), p. 2.

nations, the Eurodollar market combines both interbank lending and financial intermediaries in a single market whose operations are not part of national money markets. An additional difference with national money markets is that central banks, which in national markets act as lenders of last resort and can influence domestic money market rates to react to changing economic conditions, play a much less important role in Eurodollar markets and cannot exert direct control over the market.

Banks can perform several different functions in the Eurodollar market. They may act as bankers to other banks, lending them needed funds. They may seek funds in the Eurodollar market for their own commercial operations and use them to finance international trade or to finance domestic activity in their own or another country, often on the part of multinational corporations. Since the Eurodollar market provides banks with a flexible and convenient high-yield outlet for their liquid assets, banks may enter the market to borrow or lend funds in order to adjust their liquidity positions. In addition, relatively large amounts of Eurodollars are used in arbitrage and speculative operations, with commercial banks moving funds to take advantage of significant differentials in interest rates and exchange rates or to take speculative positions in particular currencies.<sup>59</sup>

The intermediation of funds has been a particularly important activity of the Eurodollar market in light of the OPEC surpluses. According to one source, "the Euromarket was the 'turn-table' for over 40 percent of the recycling potential."<sup>60</sup> With the OPEC surplus currently running at an annual rate of \$70 billion and estimated to reach \$45 billion in 1979, and to rise to \$100 billion to \$120 billion in 1980 compared to \$10 billion or less in 1978,<sup>61</sup> the role of the Eurodollar market in recycling has been very significant. Thus, the Euromarkets represent a higher form of financial technique that permits banks to gather large amounts of funds, to diversify their assets, and to engage in maturity transformation—borrowing short and lending long—and that raises the level of investment opportunities.<sup>62</sup> In addition, by being closely linked to individual national markets, the Eurodollar market acts as an intermediary between and among them, resulting in the further integration of financial markets and a more efficient international allocation of resources.<sup>63</sup>

Yet, while the Eurodollar market has facilitated the recycling of OPEC surpluses by major banks, this recycling has not been without problems. With the second great oil price rise increase that occurred in 1978, the problems facing developing nations, particularly those already heavily indebted and aid-starved middle-income nations, brought them to "the brink of another major liquidity crisis."<sup>64</sup> This was due not only to the fact that the sums needed to pay for the deficits were higher but also to the new concern on the part of the IMF and World Bank that the explosion of developing country debt may have a

<sup>59</sup> *Ibid.*, pp. 12-15.

<sup>60</sup> Wilfred Lütkenhorst and Horst Minte, "The Petrodollars and the World Economy," *Intereconomics*, vol. 14, no. 2, March/April, p. 85.

<sup>61</sup> "A new OPEC cash mountain," *Financial Times*, June 29, 1979, p. 20. David Buchanan, "Solomon Forecasts \$120 billion total Surplus for OPEC members," *Financial Times*, February 28, 1980, p. 4.

<sup>62</sup> "The Euromarket debate . . .," *op. cit.*, p. 27.

<sup>63</sup> "Euro-currency market controls," *World Financial Markets*, March 1979, p. 5.

<sup>64</sup> Ho Kwon Ping, "Caught in the oil-debt trap," *Far Eastern Economic Review*, vol. 106, no. 42, October 19, 1979, p. 56.

detrimental impact on international credit markets and that banks may already have extended too much credit to these nations. On the other hand, however, is the fact that given the new U.S. dollar support package, as interest rates on the Euromarkets go higher and become more volatile, credit may begin to dry up, particularly since new U.S. policy has focused on controlling the supply of credit rather than interest rates.<sup>65</sup>

The result may be that:

... the shortening maturity structure of debts, the bunching of repayments entailing increased reliance on refinancing and debt roll-overs and a host of other trends make the external debt positions of many non-oil developing countries vulnerable to sudden changes that could plunge them into liquidity crises.<sup>66</sup>

For the 1980s, both the World Bank and Morgan Guaranty Trust have predicted that new borrowing will become more difficult because of rising debt servicing. Even before the current oil price increase, it was apparent that substantial borrowings would be necessary in the early and mid-1980s merely to refinance existing indebtedness. It was also apparent that while the OPEC and OECD surplus nations accumulated almost \$259 billion over the 1974-1978 period, that the aggregate current account deficits of non-oil exporting nations and others amounted to \$408 billion, with the \$149 billion discrepancy being made up largely by international lending via private agencies, rather than international institutions.<sup>67</sup>

Certainly some developing nations have taken advantage of the favorable conditions on the Eurocurrency markets since 1976 to build up reserves against any future cutbacks in lending. However, the magnitude of future debt problems, particularly for middle income countries, appears to be even greater than in 1973 (see table 4) largely because of the sizable interest and principal payments that must be made and this concentration of debt in nations less able to bear it.<sup>68</sup> In addition, since development finance has become commercialized and banks are playing a far greater role in determining the credit-worthiness of countries and in framing government economic policy,<sup>69</sup> it may be even harder for borrowers to obtain new funds. External borrowing by non-oil developing nations fell to \$7 billion in the first half of 1980, compared to \$12 billion in the same period last year.<sup>69a</sup>

Although some analysts believe that "it is unthinkable in this export-dependent and interdependent world . . . that Western economies fearing recession and unemployment will not make funds available to their most obvious customers,"<sup>70</sup> it is possible that private concerns will win out over international welfare. If this does happen and purchases by developing nations decline, it could have a much greater impact on unemployment and growth in the United States

<sup>65</sup> Bruce Nussbaum, "Squeezing the borrowers," *Far Eastern Economic Review*, vol. 106, no. 42, October 19, 1979, p. 73.

<sup>66</sup> Ho Kwon Ping, op. cit., p. 56.

<sup>67</sup> "The International Monetary Fund and Euro-liquidity," *International Currency Review*, vol. 10, no. 5, 1978, p. 26.

<sup>68</sup> "View from Basle," *The Banker*, Supplement, July 1978, pp. iv-vii and the special issue of *World Development*, February 1979 on LDC debt.

<sup>69</sup> On this phenomenon in Latin America see Robert Devlin, "External finance and commercial banks," *CEPAL Review*, first half of 1978, pp. 63-97. On the problem of debt, see the essays in Jonathan D. Aronson "Debt and the Less Developed Countries" (Boulder, Colorado: Westview Press, 1979).

<sup>69a</sup> Peter Montagnon, "Morgan Guaranty report sees Third World debt problems," *Financial Times*, July 3, 1980, p. 18.

<sup>70</sup> Nicholas Colchester and John Evans, "Finance for the Second Wave of the World Oil Crisis," *Financial Times*, May 30, 1979, p. 18.

TABLE 4.—EXTERNAL FINANCING REQUIREMENTS OF DEVELOPING COUNTRIES, 1976-90

[In billions of current U.S. dollars]

	Low income countries			Middle income countries			All developing countries		
	1976	1985	1990	1976	1985	1990	1976	1985	1990
Net imports.....	3	19	29	24	75	91	26	94	119
Interest on medium- and long-term loans.....	1	4	6	9	40	73	10	44	79
Repayment of principal.....	2	8	11	18	115	214	20	122	225
Increase in reserves.....	3	2	4	5	21	42	8	23	46
Total to be financed.....	8	32	50	56	251	419	64	283	469
Net factor income excluding interest on medium- and long-term loans.....		1	2	5	21	32	5	21	33
Official grants and concessional loans (gross).....	5	19	32	9	23	33	15	42	65
Medium- and long-term loans at market terms (gross).....	4	9	12	45	179	309	49	188	321
Direct investment and other capital (net).....	-1	2	3	-5	23	38	-6	25	41
Private transfers (net).....		1	1	2	5	8	3	7	9
Total financing.....	8	32	50	56	251	419	64	283	469
At 1975 prices.....	8	15	17	54	118	147	62	133	165

Note: Totals may not add due to rounding. The assumed average annual rate of inflation between 1975 and 1990 is 7.2 percent.

Source: Ho Kwon Ping, "Caught in the oil-debt trap," *Far Eastern Economic Review*, vol., 106, No. 42, Oct. 19, 1979, p. 57. Original source: IMF Annual Report 1979 and IBRD, World Development Report 1979.

than most policymakers realize. In addition, major defaults on loans held by U.S. banks might have disastrous consequences for the soundness of the U.S. banking system.<sup>71</sup>

The Eurodollar market is also important in the international financing of loans to corporations, as discussed above. As corporate treasurers, both in the United States and elsewhere, have become more sophisticated, they have begun to borrow dollars on a global basis, heeding the opportunities to tap as many sources of funds as possible and to take advantage of cheaper funds, wherever they may be obtained. The ability to serve U.S. multinational corporations is a prerequisite for obtaining a strong position in international banking and a number of banks have made significant efforts to do financing for these companies, both through extending their international networks and through expanding their operations in the United States.<sup>72</sup>

Commercial banks operating abroad also play a significant role in foreign exchange operations. By 1974, the 12 largest U.S. multinational banks were executing at least \$40 billion buys and \$40 billion sales a year through their foreign branches alone, nearly three times the size of such operations three years earlier.<sup>73</sup> Later studies have indicated that this function may have increased markedly. Ian Giddy has found that total world foreign exchange trading in 1977 was about \$100 billion per day or about \$25 trillion a year. This amount exceeds the volume of world trade by a factor of 20, a finding that is consistent

<sup>71</sup> For an analysis of some of these consequences, see Stephen H. Goodman, ed., "Financing and Risk in Developing Countries" (New York: Praeger Publishers), and Aronson, "Debt and the Less Developed Countries," *op. cit.*

<sup>72</sup> G. Richard Thoman, "How to serve the MNC market," *The Banker* (London) vol. 127, August 1977, pp. 90-96.

<sup>73</sup> Jane D'Arista, "U.S. Banks Abroad," in U.S. Congress, House, Committee on Banking, Currency and Housing, "FINE: Financial Institutions in the Nation's Economy. Compendium of Papers Prepared for the FINE Study." Book II (Washington: US GPO, 1976), p. 897.

with Giddy's contention that 95 percent of foreign exchange trading is among banks themselves. Giddy also notes that the "volume of interbank trading, most of which occurs in Europe, is quite volatile, and can easily rise to a multiple or fall to a fraction of the average daily volume."<sup>74</sup>

In 1980, a study by the New York Federal Reserve found that 90 banks were trading a total of \$18 billion to \$23 billion a day, rather than the expected \$15 billion. This represented an "impressive growth" in currency trading by banks in the U.S., a "three to fivefold rise since the previous survey in 1977." While some observers, like Albert M. Wojnilower of First Boston Corporation find the disproportionate size of currency trading when compared to underlying export and capital investment transactions to be disquieting, the view of the New York Fed is that the competitiveness in the market has been applied in "helpful ways."<sup>74a</sup>

#### THE STRUCTURE AND SIZE OF THE EURODOLLAR MARKET

There are three main parts of the Eurodollar market: (1) The short-term Eurodollar market; (2) the medium-term Eurocurrency bank credit market; and (3) the international bond market. The latter part consists of two markets, the Eurobond sector for bonds issued in international markets and the foreign bond market for bonds issued in certain domestic markets by foreign entities; i.e., Canadian, Japanese or European firms that issue bonds in the United States.

The true size of the Eurodollar market is usually understated. For example, data on both bond issues and bank (Eurocurrency) loans that are not made public is not included in the estimates of activity in the Eurodollar markets, and neither are foreign loans made by banks in their own currency. According to one source, the major international banks from the United States, Germany, and Japan may have made as much as \$15 billion in net new loans of this type in 1978 alone.<sup>75</sup> In addition, data for a number of financial centers is quite inadequate or may not be reported at all. The figures from offshore centers usually exclude Eurodollar transactions with residents of the country in which banks operate.

The measurement of the size of the Eurocurrency market also differs depending upon which source is used. Both the Bank for International Settlements (B.I.S.), the World Bank and Morgan Guaranty Trust Company compile data on activity in the Euromarkets. The data collected by these sources differ according to the number of European countries and offshore centers included in the reporting and whether completed or announced loans are counted in lending estimates. World Bank estimates usually include both announced and completed transactions, while estimates from Morgan Guaranty exclude transactions that have not been completed; thus, estimates from the latter source tend to be somewhat lower than those from others. In addition, the redemptions and repurchases of Eurobond and foreign bond issues subtracted from the new issues

<sup>74</sup> Ian Giddy, "Measuring the World Foreign Exchange Market," Manuscript, 1978.

<sup>74a</sup> Richard F. Janssen, "Fed expected little but learned a lot from survey of U.S. currency trading," *Wall Street Journal*, June 25, 1980, p. 27.

<sup>75</sup> "International Credit Markets," *World Financial Markets*, January 1979, p. 6.

to obtain the amount of net new international bond financing are very rough guesses.<sup>75a</sup>

Tables 5 and 6 present estimates of the size of the Eurocurrency markets. Table 5 from the B.I.S. presents estimates of the main parts of the Eurodollar market discussed above, while table 6 estimates the size of the market based on gross and net liabilities to banks and non-banks. Table 5 presents some more recent trends while table 6 provides a longer view of the growth of the Eurocurrency markets.

TABLE 5.—ESTIMATED LENDING IN INTERNATIONAL MARKETS, CHANGES IN EXTERNAL CLAIMS OF BANKS IN DOMESTIC AND FOREIGN CURRENCIES AND INTERNATIONAL BOND ISSUES

[In billions of dollars]

Lenders	Changes						Amounts out-standing	
	1973	1974	1975	1976	1977	1978	1977	1978
Banks in European group of 10 countries <sup>1</sup> .....	-62.2	+35.0	+50.5	+55.7	+80.6	+145.2	433.6	611.4
Of which in foreign currency (Euro-currency market).....	(+56.8)	(+26.8)	(+42.9)	(+47.2)	(+68.5)	(+117.2)	(373.8)	(502.0)
Banks in Canada and Japan.....	+5.4	+5.1	- .3	+4.8	+ .8	+16.3	39.8	56.1
Banks in the United States.....	+6.0	+19.5	+13.6	+21.3	+11.5	+36.4	92.6	129.0
Branches of U.S. banks in offshore centers <sup>2</sup> .....	+14.1	+12.6	+15.0	+23.8	+16.4	+15.4	91.3	106.5
Total (all reporting banks).....	+87.7	+72.2	+78.8	+105.6	+109.3	+213.3	657.3	903.0
Minus: double counting due to redepositing among the reporting banks.....	NA	NA	38.8	35.6	34.3	103.3	252.3	363.0
A=net new international bank lending <sup>3</sup> .....	NA	NA	40.0	70.0	75.0	110.0	405.0	540.0
Eurobond and foreign bond issues.....	9.9	12.3	22.8	34.3	35.0	36.7	-----	-----
Minus: redemption payments and repurchases.....	NA	NA	+3.3	+4.3	+5.5	+8.2	-----	-----
B=net new international bond financing.....	NA	NA	19.5	30.0	29.5	28.5	-----	-----
A+B=total new bank and bond financing.....	NA	NA	59.5	100.0	104.5	138.5	-----	-----
Minus: double counting <sup>4</sup> .....	NA	NA	2.5	3.5	4.5	6.5	-----	-----
Total net new bank and bond financing.....	NA	NA	57.0	96.5	100.0	132.0	-----	-----

<sup>1</sup> Austria, Belgium, Luxembourg, Denmark, France, Germany, Ireland, Italy, Netherlands, Sweden, Switzerland, and the United Kingdom.

<sup>2</sup> Bahamas, Cayman Islands, Panama, Hong Kong, and Singapore.

<sup>3</sup> In addition to direct claims on end-users, these estimates include certain interbank positions: 1st, claims on banks outside the reporting area, i.e., outside the financial and offshore centers, the assumption being that these "peripheral" banks will not, in most cases, borrow the funds from banks in the financial centers simply for the purpose of redepositing them with other banks in these centers; 2d, claims on banks within the reporting area to the extent that these banks switch the funds into domestic currency and/or use them for direct foreign currency lending to domestic customers; 3d, a large portion of the foreign currency claims on banks in the country of issue of the currency in question, e.g., dollar claims of banks in London on banks in the United States; here again the assumption is that the borrowing banks obtain the funds mainly for domestic purposes and not for re-lending to other banks in the reporting area; a deduction is made, however, in respect of working balances and similar items. While the persistence of some element of double counting in these estimates cannot be ruled out, it should be noted on the other hand that there are gaps in the statistics and the figures available at present do not cover all international bank lending.

<sup>4</sup> These figures are based on very rough guesses and are inserted here mainly for purposes of illustration. But although the margins of error are large in relation to the size of the figures, they are unlikely to alter significantly the figure for total net new international financing.

<sup>5</sup> Bonds taken up by the reporting banks, to the extent that they are included in the banking statistics as claims on nonresidents; bonds issued by the reporting banks mainly for the purpose of underpinning their international lending activities.

Note: Lending by European banks before 1978 does not include banks in Austria and Denmark.

Source: Bank for International Settlements, Forty-Ninth Annual Report, Basle, Switzerland, June 11, 1979, p. 104.

<sup>75a</sup> In reviewing the size of the Eurodollar market here, I have chosen to use data mainly from the B.I.S. and Morgan Guaranty, including the latter because it provides a better picture of the overall growth of the Eurocurrency markets. Where the World Bank statistics provide a better view of certain aspects of the market, such as the variable interest rate spreads and original maturities of new loans, they will be utilized.

TABLE 6.—EUROCURRENCY MARKET SIZE

[Eurocurrency market size based on foreign-currency liabilities and claims of banks in major European countries, the Bahamas, Bahrain, Cayman Islands, Panama, Canada, Japan, Hong Kong, and Singapore; billions of dollars (rounded to nearest \$5 billion), at end of period]

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	
										March <sup>1</sup>	June
Estimated size:											
Gross.....	110	145	200	305	375	460	565	695	890	910	965
Liabilities to nonbanks.....	30	30	35	55	75	80	100	125	165	NA	NA
Liabilities to central banks.....	15	15	25	40	60	70	85	110	120	NA	NA
Liabilities to other banks <sup>3</sup> .....	65	100	140	210	240	310	380	460	605	NA	NA
Net.....	65	85	110	160	215	250	310	380	475	485	520
Claims on nonbanks.....	25	35	45	65	100	115	145	190	235	NA	NA
Claims on central banks and on banks outside market area <sup>4</sup> .....	30	35	45	75	95	115	140	160	195	NA	NA
Conversions of Eurofunds into domestic currencies by banks in market areas <sup>5</sup> .....	10	15	20	20	20	20	25	30	45	NA	NA
Euro-dollars as percent of gross li- abilities in all Eurocurrencies.....	81	76	79	73	77	78	79	76	74	NA	NA

<sup>1</sup> Revised.

<sup>2</sup> Preliminary.

<sup>3</sup> Includes unallocated liabilities.

<sup>4</sup> Includes unallocated claims.

<sup>5</sup> In European market area only.

Source: "World Financial Markets" (Morgan Guaranty Trust Co.), September 1979, p. 17.

As Table 5 shows, the growth of international bank lending has been more sizable than the growth of the international bond markets over the last few years. This is particularly important in light of the suggestion by some that a process of disintermediation that shifted risks from banks to investors had begun during the 1974-76 period when new bond issues accounted for over 50 percent of international financing.<sup>76</sup> Table 5 also illustrates the significant growth in the loans by European banks (primarily in the Eurodollar markets), by banks in the U.S., and by banks in Canada and Japan (largely due to a \$12 billion increase in the external assets of banks in Japan)<sup>77</sup> over the last few years.

Table 6 indicates that the gross size of the Eurocurrency market has more than doubled since 1975, quadrupled since 1972, and grown nearly ninefold since 1970. It also points out the dominant contribution of banks to the gross size of the Eurodollar market and the importance of claims on non-banks in the net size of the market.

Table 7 compares the size of the Eurocurrency market to various measures of the U.S. money supply. It illustrates the rapid growth of Eurodollars as compared to the narrowly and broadly defined measures of the domestic U.S. money supply. By late 1978, the value of Eurodollars in the gross Eurocurrency market was greater than the value of dollars in domestic time deposits.

These tables provide a brief overview of the dimensions of the Eurocurrency market. They indicate the size of the parts of the market and the importance of the role played by some of the participants in the market. In the next section, I shall explore some of the reasons for the growth of the Eurodollar market and the transformation of international banking.

<sup>76</sup> George Ugeux, "The rise of disintermediation," *Euro money*, June 1977, pp. 68-71.

<sup>77</sup> Bank for International Settlements (B.I.S.), "Forty-Ninth Annual Report," Basle, Switzerland, June 11, 1979, p. 104.

TABLE 7.—EUROCURRENCY MARKET AND UNITED STATES MONEY SUPPLY

Period	Gross euro-market (1)	Net euro-market (2)	Euro-dollars as percent of 1 (3)	Euro-dollar content of 1 (4)	Narrow domestic money (5)	Domestic time deposits (6)	Broad domestic money (5+6) (7)	4 as percent of 7 (8)	4 as percent of 5 (9)	4 as percent of 6 (10)
1970.....	110	65	81	89.1	225.5	225.8	451.3	19.7	39.5	39.5
1971.....	145	85	76	110.2	240.1	266.9	507.0	21.7	45.9	41.3
1972.....	200	110	78	156.0	262.5	307.1	569.6	27.4	59.4	50.8
1973.....	305	160	73	222.7	277.4	355.8	633.2	35.1	80.1	62.6
1974.....	375	215	77	284.9	286.7	406.7	693.4	41.1	99.3	70.1
1975.....	460	250	78	358.8	301.6	436.5	738.1	48.6	119.0	82.2
1976.....	565	310	79	446.4	318.7	477.4	796.1	56.1	140.1	93.5
1977.....	695	380	76	528.2	342.5	529.8	872.3	60.6	170.0	99.7
March 1978.....	710	395	75	532.5	322.1	549.0	871.1	61.1	165.3	97.0
June.....	735	415	75	551.3	339.5	563.9	903.4	61.0	162.4	97.8
September.....	795	450	73	580.4	334.6	573.8	908.4	64.5	175.5	102.0
December.....	860	480	NA	NA	360.1	590.5	950.6	NA	NA	NA
March.....	885	495	NA	NA	NA	NA	NA	NA	NA	NA

Note: The Eurocurrency market and the United States money supply: a comparison (revised data). Column key: (1)=estimated gross Eurocurrency market, in billions of United States dollars; (2)=estimated net Eurocurrency market, in billions of United States dollars; (3)=estimated proportion of Eurodollars in gross Eurocurrency market (percent); (4)=estimated actual value of Eurodollars in gross Eurocurrency market, in billions of United States dollars; (5)=narrowly-defined domestic United States money supply (=demand deposits and currency outside United States commercial banks), in billions of United States dollars; (6)=quasi-money (=domestic time deposits), in billions of United States dollars; (7)=broadly-defined domestic United States money supply (=demand deposits+currency outside banks+time deposits), in billions of United States dollars; (8)=Eurodollar content of the gross Eurocurrency market as a proportion of the broadly defined domestic United States money supply, in billions of United States dollars; (9)=Eurodollar content of the gross Eurocurrency market as a proportion of the narrowly defined domestic United States money supply, in billions of United States dollars (percent); (10)=Eurodollar content of the gross Eurocurrency market as a proportion of United States domestic time deposits (percent).

Source: "The Euromarket debate: no longer behind closed doors," *International Currency Review*, vol. II, No. 3, June 1979, p. 16.

### *Has International Banking Transformed the Role of the Eurocurrency Market?*

Since the early 1970s, there has been considerable worry over whether Eurobanks create additional money or other assets for the nonbank public. Among many of those who have studied the behavior of banks in the Eurocurrency markets, there appears to be a consensus that they do not create significant new money or assets, and that the Eurocurrency multiplier is close to one. For these observers, interest has now focused on whether Eurobanks—those accepting and relending Eurocurrency deposits—exert an expansionary impact by making the "economically active public more liquid according to maturity criteria." This might be done by "providing non-banks with short-term assets and, on balance, relatively longer term debts."<sup>78</sup> On the other hand, a number of monetarists have argued that the banks in the Eurocurrency markets can act as engines of inflation because they can create money or other financial assets beyond what would otherwise be available to the spending public.<sup>79</sup>

Alternatively, there is the view proposed by Helmut Meyer that while the non-bank deposits in the Eurocurrency market may not have added to global liquidity, the monetary impact of the Eurocurrency

<sup>78</sup> Jane Sneddon Little, "Liquidity Creation by Euro-banks: 1973-1978," *New England Economic Review*, January/February 1979, p. 62.

<sup>79</sup> On this controversy, see the following articles: Milton Friedman, "The Euro-dollar Market: Some First Principles," *The Morgan Guaranty Survey*, October 1969, pp. 4-14; Fritz Machlup, "The Magicians and Their Rabbits," *The Morgan Guaranty Survey*, May 1971, pp. 3-13; Fritz Machlup, "Euro-dollars Once Again," *Banca Nazionale del Lavoro Quarterly Review*, June 1972, pp. 119-137; and Fred H. Klopstock, "Money Creation in the Euro-dollar Market—A Note on Professor Friedman's Views," *Federal Reserve Bank of New York, Monthly Review* (January 1970), pp. 12-15.



market depends chiefly on its impact on money and credit creation in national markets to which it is closely linked. These impacts may occur through the Eurocurrency market's impact on the "volume, composition and geographical pattern of international capital flows."<sup>80</sup> Thus, it may have a "strong expansionary influence on global reserves and private liquidity when, at times of U.S. balance-of-payments deficit, the financial channels which it provides tend to magnify capital out flows from the United States." Conversely, it has contractionary effects when it contributes to capital flows from the rest of the world to the United States.<sup>81</sup>

While this section will not dwell on this controversy at length, it will examine some of the representative views on this controversy in the section on the transformation of the environment for international financing found below. This section follows an introductory part on the reasons for the growth of the Eurodollar market and is itself followed by a section on the new strains on international banking.

#### THE GROWTH OF THE EURODOLLAR MARKET

Large banks have been prompted to look abroad as the result of a number of structural factors, partly to make up for the loss of traditional wholesale banking business they had difficulty retaining or increasing at home, partly because their domestic competitiveness was constrained by the requirement to keep high levels of non-interest bearing reserves, partly because of increasing competition from other groups of banks and from domestic short-term security markets (commercial paper markets), and partly because credit demand from many of their largest customers was rather weak. A second broad set of influences for the growth of the Eurocurrency market arises from the changing pattern and scale of international payments imbalances. Since the Eurocurrency market serves as a channel for international capital flows, its growth rate is tied to the size of current-account imbalances, and the resulting demands for financing.

Other studies of the Eurocurrency market explain its recent rapid growth by examining the major supply and demand factors affecting the market. The Morgan Guaranty Trust Company's analysis<sup>82</sup> of factors leading to the growth of the Eurocurrency market is characteristic of such approaches. On the demand side, this analysis cites the substantial increase in balance-of-payments financing since the 1973 oil crisis. On the supply side, the Morgan Guaranty study notes the continued rise in central bank deposits on the Eurocurrency market that has accounted for between 25 percent and 33 percent of the increase in official deposits and the growth of OPEC deposits that has accounted for much of the rest of the increase in these deposits.

Additional factors on the supply side noted by this analysis include the desire by central banks to diversify their holdings of currencies via the Eurocurrency market, flows of funds to the Euromarkets from U.S. residents, and the increasing volume of credit transactions now being handled through Euromarkets that had previously been ex-

<sup>80</sup> Helmut Mayer, "Credit and Liquidity Creation in the International Banking Sector," Basle, Bank for International Settlements, Monetary and Economic Department; BIS Economic Papers No. 1, November 1979, p. 27.

<sup>81</sup> *Ibid.*, p. 38.

<sup>82</sup> "The Euro-currency market," *World Financial Markets*, January 1979, pp. 13-15.

tended by domestic banks in local currencies. One example of the latter type of transaction is credit extended to German businesses by Luxembourg subsidiaries of German banks. The Morgan Guaranty study also notes that attempts by banks headquartered in one country to penetrate the local banking markets of another country have often been financed in part by Eurocurrency funds and that such financing requirements have contributed to the Euromarket's expansion. Offices of foreign banks in the United States had nearly \$30 billion in liabilities to their parent banks and branches at the end of November 1978.

The willingness and ability of banks to increase the volume of funds they intermediate also determines the growth of the Eurocurrency market, according to the Morgan Guaranty analysis. In international capital markets, banks' capacities for deposit taking and lending is limited by their capital and governed by prudent, and at times regulatory, limits between assets or liabilities and bank capital. A bank's role in intermediation is also constrained by the opportunities for profits and the bank's evaluation of the risks involved.

Foreign exchange intervention by central banks and other central banks steps to control domestic money supplies also may influence the growth of Eurocurrency markets. According to Morgan Guaranty, recent foreign exchange market interventions by central banks in Switzerland, Germany and Japan resulted in significant domestic increases in liquidity and more aggressive lending practices by banks from these nations.

Alternative explanations for the rapid growth of the Eurocurrency markets cited by Robert Aliber include "the combination of interest rate ceilings on domestic deposits and the absence of such ceilings on external or offshore deposits . . . , the desire of foreign banks to participate in the seigniorage U.S. banks supposedly earn from producing dollar deposits . . . , U.S. exchange controls . . . , the absence of reserve requirements on external deposits, the preference for the dollar as numeraire, and the use of dollar denominated assets as store-of-value."<sup>82a</sup> In addition, high domestic taxation relative to taxation (or its lack) in offshore centers may have contributed to the growth of the Eurocurrency markets, particularly since certain centers allow a bank's customers to escape taxation or foreign exchange controls.

Still another explanation is put forth by Robert Triffin. It focuses upon the rapid expansion of international liquidity. Triffin points to the 6 percent annual inflation in world import and export prices from 1970 to 1973 that was followed by a rise of as much as 30 percent in these prices in the 12 months before the oil crisis in the fall of 1973. He argues that this inflation was due largely to the "mounting U.S. deficits abroad which flooded the world monetary system, doubling world reserves from the end of 1969 to the end of 1972 . . . , i.e., increasing them by as much in this short span of 3 years as in all previous centuries in recorded history."<sup>82b</sup>

Gunther Dufey and Ian Giddy present a critique of Triffin's more monetarist point of view, arguing that the Eurodollar market is a

<sup>82a</sup> Robert Z. Aliber, "The Stability of the International Banking System." Paper funded by the Departments of State, Treasury, and Labor and the Council of International Economic Policy under Contract No. 1722-520100, June 1977, p. 18.

<sup>82b</sup> Robert Triffin, "The International Role and Fate of the Dollar," *Foreign Affairs*, vol. 57, no. 2, Winter 1978/79, p. 271.

substitute for domestic credit intermediation and that it attracts depositors and borrowers away from purely domestic financial intermediaries. Therefore, there is not multiple credit creation in the Eurodollar market. Growth in this market is due to the expansion of total dollar credit and the shift of intermediation from domestic to external financial markets.<sup>83</sup>

On the whole, most observers would agree that the role of the Eurocurrency markets in recycling the OPEC surpluses and financing international payments imbalances associated with the oil price increases was a positive one. However, there has also been concern over the fact that not only were deficit countries able to finance payments imbalances, but they were also able to build up their gross reserve position. In addition, concern has been expressed over the fact that the Eurocurrency market continued to grow rapidly even at times when the OPEC surplus diminished and there was a massive U.S. current-account deficit, both of which should have reduced the financing requirements of the rest of the world. But these forces may have been offset by the fierce competition among Eurobanks for new borrowers and by the credit conditions that existed on international capital markets during several lengthy periods over the past few years.<sup>84</sup>

#### THE TRANSFORMATION OF THE ENVIRONMENT FOR INTERNATIONAL FINANCING

While there is a general recognition that there have been substantial changes in international capital markets in the 1970's, there has not generally been any agreement on how these changes have come about, as was noted in the previous section. Some of the key features of the environment for international financing in recent years have been: The rise in international liquidity and world inflation; the increase in the use of the dollar as an international reserve; and the enormous overhang of dollars piling upon world markets.<sup>84a</sup>

There are several analysts who have studied the growth of liquidity and world inflation. H. Robert Heller, writing in the "IMF Staff Papers," noted that there was a systematic relationship between changes in the worldwide aggregate of international reserves and the rate of worldwide inflation with a lag time of one year and a similar link between changes in the world's money stock and change in world prices with a somewhat longer lag time. He concluded that the sharp growth of international reserves did contribute to worldwide inflation in the early 1970s and has represented an intensifying inflationary influence.<sup>85</sup>

In his early critique of the world monetary system of the postwar years, Robert Triffin had pointed to the roots of the problems analyzed by Heller. Triffin had been concerned about the dollar's role as a universally accepted "parallel" currency, as the major component in the

<sup>83</sup> Gunther Dufey and Ian H. Giddy, "The International Money Market" (Englewood Cliffs, NJ: Prentice-Hall, 1978), pp. 109, 128.

<sup>84</sup> Mayer, *op. cit.*, pp. 56-57.

<sup>84a</sup> Since some of the points emphasized here are viewed rather critically by other observers, citations in this section will mention articles with opposing points of view whenever possible.

<sup>85</sup> H. Robert Heller, "International Reserves and Worldwide Inflation," *IMF Staff Papers*, March 1976, pp. 61-87.

"international reserves" of national monetary authorities, and as a key element in the "working balances" held by banks, corporation and individuals. It was his belief that: "(a) If the United States corrected its persistent payments deficits, the growth of world reserves could not be fed adequately by gold production at \$35 an ounce; but that (b) if our deficits continued, our foreign liabilities would far exceed our ability to convert them into gold upon demand, and bring about a gold and dollar crisis."<sup>86</sup>

Triffin more recently has argued that the end of dollar convertibility in August 1971 "did not arrest the inflationary proclivity of the dollar-exchange standard for America as well as for the rest of the world."<sup>87</sup> Rather, U.S. Government and bank liabilities to foreigners continued to grow; and, according to Triffin, although the "huge overflow of dollars into foreign countries' reserves slowed down inflationary developments at home . . . [by] transmitting them in part to the rest of the world,"<sup>88</sup> this massive increase in international liquidity began well before the suspension of the convertibility of the dollar and the OPEC price increases. Triffin is alarmed at the "fantastic increase in private banks' foreign lending and liabilities over the 1969 to June 1978 period (an increase in liabilities from \$120 billion to \$700 billion, three-quarters of which were in dollars and Eurodollars)."<sup>89</sup> (See table 8.)

TABLE 8.—INFLATIONARY EXPLOSION OR INTERNATIONAL LIQUIDITY

[In billions of U.S. dollars]

	End-1969	End 1972	End 1977	Mid-1978	Mid-1978, per- cent of 1969
I. Foreign dollar claims.....	78	146	363	373	478
A. On U.S. Government and banks.....	49	85	210	221	451
B. On foreign branches of U.S. banks.....	29	61	153	152	524
II. International monetary reserves.....	79	159	319	330	418
A. Foreign exchange.....	33	104	244	256	776
1. Dollars and Eurodollars.....	20	81	197	-----	985
2. Other currencies.....	7	15	27	-----	386
3. Other.....	7	8	22	-----	314
B. Other: World monetary gold, SDR allocations and IMF loans and investments....	46	55	75	75	163
III. Commercial banks.....	121	217	658	700	579
Foreign liabilities in:					
A. Dollars and Eurodollars.....	94	157	481	-----	512
B. Other currencies.....	27	60	177	-----	656

Note: These rough estimates are derived from various tables published by the International Monetary Fund in its International Financial Statistic and Annual Reports by the Federal Reserve Bulletin and by the Bank for International Settlements in its Annual Reports and quarterly releases on Eurocurrency and other international banking developments. They are not fully comparable owing particularly to the different definition of "foreign" liabilities in United States and European reporting. Following usual practice detailed figures are shown in rounded-off billions of dollars.

Source: Robert Triffin, "The International Role and Fate of the Dollar," *Foreign Affairs*, vol. 57, No. 2, winter 1978/79' p. 270.

The rise in the use of the dollar as an international reserve currency and for working balances mentioned above also affected the environment for international financing. Since nearly all of the deficits of the

<sup>86</sup> Triffin, "The International Role and Fate of the Dollar," op. cit., p. 272. The original argument is presented in Triffin's book, "Gold and the Dollar Crisis" (New Haven: Yale University Press, 1961), pp. 3-14. Triffin's viewpoint is also summarized in Oscar L. Altman, "Professor Triffin's Diagnosis of International Liquidity and Proposals for Expanding the Role of the IMF," *IMF Staff Papers*, April 1961.

<sup>87</sup> Triffin, op. cit., p. 272.

<sup>88</sup> *Ibid.*, p. 273. For a view contrary to Triffin's see "Euro-currency market controls," op. cit., pp. 8-11, 12-13; and John Hewson and Eisuke Sakakibara, "The Eurocurrency Markets and Their Implications," (Lexington, Mass.: D.C. Heath and Co., 1975), pp. 117-139.

<sup>89</sup> *Ibid.*

world's nations were financed in dollars, this outflow, according to Harold Lever, a former member of the British Labor government, "created a monetary effect almost as if the world's deficits were those of the United States itself . . . The dollars thus created could be retained as working capital or investment money, recycled to the banking system or converted into dollar claims on the U.S. Government by private or public sector recipients."<sup>90</sup> Lever also noted that these developments have created the following weaknesses in the system: (1) No appropriate accommodation has been arranged for dollar conversions; (2) the currency matching problems arose since most of the debtors to the international banking system were nations in persistent deficit; and (3) the private sector in the industrial surplus nations also receives dollars.<sup>91</sup>

One response to these problems has been the setting up of the European Monetary System whose goal is to combat inflation, improve balance of payments equilibria, and reduce exchange-rate instability. The arrangement may also help reduce the size of excessive dollar indebtedness or the dollar overhang that has been accumulated abroad.

The enormous overhang of dollars that has been piling up abroad represents another significant change in the environment for international financing. Governor Henry C. Wallich of the Federal Reserve Board has noted that not only the volume of money in the Euro-market, but also "the degree to which the market adds to the volume of assets all over the world that can give rise to speculative flows and to impacts on exchange rates" is a subject of concern, especially when total dollar assets held inside the U.S. and "potentially capable of being switched into other currencies . . . has been estimated, very tentatively, as approaching an order of \$6 trillion. Wallich has also noted that "foreign exchange positions can be taken by forward operations, without any movement of spot assets. Thus, an examination of exchange rate volatility should by no means focus exclusively or even primarily on Eurodollar balances."<sup>92</sup> Triffin links the growth of the dollar overhang to the increase in account deficits and to the "recycling" of surpluses by international banks.<sup>93</sup>

Thus, important changes in the environment for international finance have influenced the operation of the Eurodollar market. In the next section, I shall examine some of the strains placed on major institutions that operate in the Eurocurrency market, the multinational banks.

#### THE NEW STRAINS ON INTERNATIONAL BANKING

The pressure to operate in the Eurodollar market has placed new strains on banks and created additional problems for bank regulators.

<sup>90</sup> Harold Lever at a meeting of the Fielding, Newson-Smith and Company Investment Trust, December 29, 1978, as quoted in "The Euromarkets inflation and instability," *International Currency Review*, vol. 11 pro. 2, May 1979, p. 20. This view is similar to that taken by Herr Poehl of the German Bundesbank. For a contrasting opinion, see "Euro-currency market controls," *op. cit.*, pp. 7-8 and Hewson and Sakaki, *op. cit.*, pp. 13-28. The latter argue on p. 27 that "U.S. monetary authorities . . . enjoy the privilege of having their monetary policy virtually unconstrained by external factors" and on p. 26 that "holdings of Eurodollar deposits by European central banks" does not impair the reflow of dollars back to the U.S. (which is largely mediated through the purchase of U.S. dollar assets by such central banks). This appears to overlook some of the institutional changes to be discussed here.

<sup>91</sup> Lever in "The Euromarkets, inflation and instability," *op. cit.*, p. 21.

<sup>92</sup> Henry C. Wallich, "Further reflections on the Euromarket," a speech at the Association of Foreign Banks in Switzerland, June 15, 1979, reprinted in *International Currency Review*, vol. 11, No. 3, July 1979, p. 24.

<sup>93</sup> Triffin, "The International Role and Fate of the Dollar," *op. cit.*, pp. 274-275.

The lure of less-costly funds and the opportunity of obtaining them through lending have led many banks to "go international." In this section, some of the perils of this behavior, as illustrated by the case of the Franklin National Bank, are explored.

A major strain has been placed on international banking because of the ability of banks to use short-term money obtained on the Euro-dollar market and from the sale of certificates of deposit to finance relatively long-term loans. Joan Spero documents the importance of this transformation problem in the case of the demise of the Franklin National Bank, particularly the fears of a Eurodollar runoff that eventually left Franklin without access to the Eurodollar market and forced it to rely upon the U.S. domestic market, where funds were not available. Spero finds that once this runoff materialized, the "hemorrhage of Eurodollar deposits was a major cause of the insolvency."<sup>94</sup>

Is this same strain being placed on banks today? Bernd Heinevetter has argued that rather than improving liquidity distribution, the most significant impact of the Euromarkets is in liquidity creation and that this creation has increased substantially since 1973, resulting in a situation where liquidity creation in the Euromarkets is approaching levels obtained in domestic banking systems.<sup>95</sup>

In Spero's words, "the Franklin crisis demonstrated that the interdependence of the international banking system and its independence from management makes the system a fragile one."<sup>96</sup> It is clear from this case that since banks were so closely tied to each other, a problem in one could directly affect others and would also result in exclusionary behavior (as when Franklin lost its access to Eurocurrency and foreign exchange markets) that could create a chain reaction that would spread to other banks. This risk was particularly evident when the Franklin National Bank was unable to fulfill its foreign exchange contracts of almost \$2 billion. The possibility that it would fail to do so led the Federal Reserve to intervene because of the threat such a failure held for the Eurocurrency markets.<sup>97</sup> Spero cites George Blunden, the chief banking supervisor of the Bank of England at the time, who noted that the growth of the Eurocurrency markets:

. . . allowed many institutions, including the new banks, to obtain funds for onward lending on a scale previously quite impossible for them and . . . meant that sickness in one bank could rapidly develop into an epidemic affecting a whole range of banks, even banks which did not have direct contact with the bank where the infection had first broken out.<sup>98</sup>

Sarah Bartlett has argued that many observers now agree that the integration possible in international money markets "has heightened sensitivity to differentials between interest rates and exchange rates, mainly because TNBs [transnational or multinational banks] are

<sup>94</sup> Spero, *Op. cit.*, p. 94.

<sup>95</sup> Bernd Heinevetter, "Liquidity Creation in the Euromarkets," *Journal of Money, Credit, and Banking*, vol. 11, no. 2 (May 1979), pp. 231, 234. This is a comment on Jurg Niehaus and John Hewson, "The Euro-dollar Market and Monetary Theory," *Journal of Money, Credit, and Banking*, vol. 8 (February 1976), pp. 1-27. The subject of liquidity creation remains one of the more controversial areas in the analysis of the Eurocurrency markets. For additional viewpoints in the debate on this subject the reader should see the following: John Hewson, "Liquidity Creation and Distribution in the Eurocurrency Markets" (Lexington, Mass: Lexington Books, 1975); Jane Sneddon Little, *op. cit.*

<sup>96</sup> Spero, *op. cit.*, p. 101.

<sup>97</sup> *Ibid.*, pp. 112-114.

<sup>98</sup> George Blunden, "The Supervision of the UK Banking System," *Bank of England Quarterly Bulletin*, vol. 15, No. 2, (June 1975), p. 190, as cited in Spero, *op. cit.*, p. 114.

able to turn credit in one currency into credit in another, and to turn currency expectations into interest rate levels with extreme rapidity,"<sup>99</sup> resulting in a situation where the potential for speculation is increased.<sup>100</sup> Her analysis suggests that with the transformation of the environment for international banking, competitive pressures have grown far stronger than they previously had been, especially among the more powerful banks that, according to the traditional theory of oligopolitic behavior, would normally prefer to avoid competitive behavior.

Derek Channon, in writing of the potential growth of linkages between banks, has been concerned that future advances in technology, such as international electronic funds transfer systems operated cooperatively by the major banks, "will substantially enhance the speed of money movements" and bear serious implications for the control of international and domestic financial systems. He cites the capacity of the SWIFT system of 300,000 messages per day, as compared to its utilization for only 40,000 daily messages in 1977, and its forthcoming extension in geographic coverage to the Far East and Latin America as examples of the potential for an increasing integration of the world's financial markets.<sup>101</sup>

The integration of the international financial market thus poses a number of dilemmas for government regulators. Not only is there the potential for risk and speculation in the Eurocurrency markets, but also numerous regulators have contended that they have insufficient insight into the overseas activities of banks domiciled in their nations.<sup>102</sup> In addition, there is still some disagreement over who acts as the lender of last resort in certain situations, particularly when some nations, such as Britain, have banks with foreign loan assets that are approaching the size of their official reserves.<sup>103</sup> Finally, there are the greater political risks banks have exposed themselves to in becoming major lenders to developing nations.<sup>104</sup>

#### AREAS WHERE PROBLEMS AND RISKS HAVE BECOME MORE ACUTE

There are a number of areas where the problems and risks posed by the rise of the Eurodollar market have become more acute. These include the minimal government regulation of international banks, the question of national banks acting as lenders of last resort, the control of multinational bank systems by management, the growth of country lending, and the granting of bank credits in high-risk areas.

Bank regulators from both West Germany and Switzerland have recently become concerned that their control over their national mone-

<sup>99</sup> Bartlett, Sarah, "Who Governs? The Implications of Transnational Banking in an Offshore Financial Centre." M. Phil. Thesis, Institute for Development Studies, University of Sussex, October 1979, p. 62.

<sup>100</sup> *Ibid.*, pp. 63-64.

<sup>101</sup> Channon, *op. cit.*, pp. 151-152.

<sup>102</sup> This point was made this spring by Hans Matthofer, the West German Finance Minister. He emphasized that the danger of harmful chain reactions was growing, largely because of the increased interlacing of the world's financial markets and ever-growing competitive pressure. See Jonathan Carr, "West German warning on international banking," *Financial Times*, March 27, 1979, p. 1.

<sup>103</sup> "Lender of last resort to Topsy," *The Economist*, June 10, 1978, pp. 87-88.

<sup>104</sup> For a discussion of this issue see: Stephen I. Davis, "How risky is international lending?" *Harvard Business Review*, January-February 1977, pp. 135-143; U.S. Senate, Committee on Foreign Relations, Subcommittee on Foreign Economic Policy, "International Debt, the Banks, and U.S. Foreign Policy" (Washington, D.C.: U.S. Government Printing Office, 1977), prepared by Karin Lissagers; and Howard Wachtel, "The New Gnomes" (Washington, D.C.: Transnational Institute of the Institute for Policy Studies, 1977).

tary systems and over bank activities in the Eurodollar market has been weakened. The 1978 Bundesbank Report warns that:

1. The huge volume and flexibility of the Euromarkets means that national control of the money supply can be undermined; and
2. In times of uncertainty on the currency markets, the Eurocurrency markets can mean greatly increased movements of speculative funds.<sup>105</sup>

German regulators have become particularly concerned about the countermanding of domestic monetary policy because of great inflows of funds from subsidiaries of German banks in Luxembourg which they do not monitor, because they are legally independent and beyond the formal scrutiny of West German banking supervisory authorities. The Bundesbank's experience has been that once the domestic monetary stock has been increased by inflows from abroad, "no fully corrective decrease occurs later."<sup>106</sup> In addition, German regulators have had several experiences with foreign inflows countermanding domestic monetary constraints.<sup>107</sup>

Foreign regulators have also been concerned about the growing risks banks may face because of increased Euromarket lending risks that a bank "could never entertain under domestic supervision."<sup>108</sup> German regulators believe that these risks have become more acute not only because of the expansion of Euromarkets to recycle OPEC surpluses and because of the U.S. current account deficit, but also because intense competition in these markets permits only small profit margins and tempts "banks to increase earning through a constant increase in credit volume."<sup>109</sup> One reaction to the loss of control over Euromarket lending has been the adoption of improved reporting requirements by the Swiss National Bank, that apply capital ratios to the consolidated balance sheets of Swiss Banks extending credit in the Euromarkets in order to allow for restrictions on the rapid growth of credits and provide for better bank supervision.<sup>110</sup> However, the President of the Swiss Federal Banking Commission, the government body that monitors the activities of Swiss commercial banks, has only recently expressed his concern that the increasing number of Swiss banks trying to win foreign-based business, particularly the smaller ones, might not be equipped to handle overseas business. The Commission is especially concerned that some banks may not have the assets needed to cover large foreign exchange risks, and it is pressing the

<sup>105</sup> "Report of the Deutsche Bundesbank for the Year 1978" reviewed in *Financial Times*, April 24, 1979, as cited in Bartlett, op. cit., p. 63.

<sup>106</sup> Carr, "Coming to terms with the Euromarkets," op. cit.

<sup>107</sup> In the late 1960s, higher interest rates in Germany "attracted the short-term liquid assets of global corporations and banks, and dollars began to flow into Germany in great numbers. Under the fixed exchange rate system that existed at the time, the Central Bank had to take in more dollars than before to maintain the par value of the mark. Forced to buy up dollars in exchange for marks, the Central Bank was actually adding to its domestic money supply, thereby further feeding inflation. Thus the globalization of the money market in effect meant that the German government could no longer control its own money supply." Richard J. Barnet and Ronald E. Muller, "Global Reach" (New York: Simon and Schuster, 1974), p. 285. Also see the discussion on pp. 283-290 and John Hewson and Eisuke Sakakibara, "The Effectiveness of German Controls on Capital Inflow," *Weltwirtschaftliches Archiv*, Bank 113, Heft 4, 1977, pp. 645-666. Barnet and Muller draw upon P. B. Clarke and H. G. Grubel, "National Monetary Sovereignty Under Different Exchange Rate Regimes," *The Bulletin*, New York University Graduate School of Business, Institute of Finance, Nos. 78-79, January 1972, pp. 39-40; Michel G. Porter, "Capital Flows as an Offset to Monetary Policy: The German Experience," IMF Staff Papers, July 1972; Samuel I. Katz, "Imported Inflation and the Balance of Payments," *The Bulletin*, New York University Graduate School of Business Administration, Institute of Finance, Nos. 91-92, October 1973, pp. 18-32.

<sup>108</sup> Carr, "Coming to terms . . ." op. cit.

<sup>109</sup> *Ibid.*

<sup>110</sup> Marsh, "Swiss move to tighten control of Euromarket," op. cit. and David Marsh, "Official regulatory powers put to the test," *Financial Times*, November 20, 1979, p. 34. Swiss Capital Markets Survey.



government to widen its disclosure requirements for Swiss banks to include their foreign operations.<sup>111</sup>

In addition, three of the four Swiss banks that were judged by regulators to have had a serious shortfall in the amount of capital needed to cover the requirements on their consolidated balance sheet in 1977 were among the five largest Swiss banks. The Euromarket subsidiaries of these banks in Luxembourg and the Caribbean, which have minimal regulations on capital adequacy, were largely responsible for the dilution of the consolidated capital base.<sup>112</sup>

The impacts on domestic monetary policy become particularly acute when multinational firms take advantage of the fact that they can obtain funds more cheaply abroad than at home, or that they can gain access to funds through the foreign branches of domestic banks while most less-desirable borrowers cannot. For the United States, the latter situation has been well documented by George Budzeika, who demonstrated that multinational firms have access to funds even during periods of extreme monetary stringency since the money center banks they deal with can obtain funds through their foreign subsidiaries.<sup>113</sup> Indeed, as Budzeika has pointed out, for medium and small-sized banks the "lack of information and skills prevents them from adjusting quickly to changing levels of monetary restriction."<sup>114</sup>

The enormous growth in the magnitude of lending via the Euro-markets has led to some concern about a second area where risks appear to have increased, the question of how well national banks can act as lenders of last resort. The Governor of the Bank of Greece, Xenophon Zolotas, has voiced his worries about the fact that the over-extension of loans by banks may be far beyond the ability of the central bank of the creditor country to act as a lender of the last resort. Thus, the:

. . . insolvency of a heavily indebted country or a lack of liquidity on the part of a major private financial institution could result in chain reactions which might seriously damage the delicately balanced structure of international finance (strains and even defaults for an increasing number of financial institutions, disruption of the capital markets, etc.)<sup>115</sup>

Other bankers, such as Guido Carli, former Governor of the Bank of Italy, have also been concerned about whether the Eurocurrency markets are out of the control of national monetary authorities. Carli had remarked as early as 1971 that:

There is no system of restraints set up by monetary authorities on the operating of this market, which is thus theoretically capable to expanding itself without any limits except discretionary fractional reserves . . .<sup>116</sup>

<sup>111</sup> Brij Khindaria, "Swiss banks warned on foreign risks," *Financial Times*, June 27, 1980, p. 2.

<sup>112</sup> Marsh, "Official regulatory powers . . ." *op. cit.*

<sup>113</sup> George Budzeika, "Lending to Business by New York City Banks," *The Bulletin*, New York University Graduate School of Business, Institute of Finance, Nos. 76-77, September 1971, pp. 59-60. Also note the discussion in Frank Mastrapaqua, "U.S. Bank Expansion via Foreign Branching," *The Bulletin*, New York University Graduate School of Business, Institute of Finance, Nos. 87-88, January 1973, pp. 27-38, 65-66; Barnet and Müller, *op. cit.*, pp. 284-286. On the other hand, Robert D. Hollinger has found that: "the Federal Reserve System recognized the effects of Eurodollar borrowing, implemented security transactions to offset the Effects of Eurodollar borrowing when the volume and level became significant, and effectively controlled the money supply relative to Eurodollar borrowing." (See Robert D. Hollinger, "Borrowing of Eurodollars by United States Commercial Banks from Their Foreign Branch Banks and United States Monetary Control, 1964-1972." Ph. D. Dissertation in Economics, Kansas State University, 1973.)

<sup>114</sup> Budzeika, *op. cit.*, p. 60.

<sup>115</sup> Interview with Xenophon Zolotas, Governor of the Bank of Greece," *The Banker* (London), December 1978, p. 92.

<sup>116</sup> Guido Carli, "Eurodollars: A Paper Pyramid?," *Banca Nazionale del Lavoro Quarterly Review*, June 1971.

A third area where the question of risk has been raised more frequently is the control of multinational bank systems by management. This problem has been brought to the fore by the recent recrudescence of competition in the Eurodollar market, which has narrowed profit margins and made the assessment of the soundness of banks especially critical. It is apparent from some cases in the recent past, such as the Herstatt Bank collapse, that management was able to mislead people about the bank's actual creditworthiness, although it was well aware of the bank's sizable debt and the heavy risks the bank faced because of foreign exchange speculation.<sup>117</sup> In other cases, such as the collapse of the Israel-British Bank in 1974, the chairman systematically milked the bank of \$64 million, even though the bank was an "authorized" bank, operating under Bank of England rules.<sup>118</sup> Indeed, there is some concern about whether banks have been allocating inadequate funds to cover losses they may incur if there is a banking crisis.

The growth of country lending is a fourth area that has made bank risk appear more acute. Certainly it is difficult to evaluate bank risk in such lending, particularly since the borrower's debt structure may be quite complex.<sup>119</sup> In the present "borrower's market," however, banks are exposed to situations where a nation, like Turkey, has no visible way of servicing its \$12 billion debt since it needs all of its export earnings to pay its oil bill, where Poland's debt alone uses up half its export earnings, and where the debt of Chile, Morocco and Pakistan is equal to nearly half of their GNP. Thus, the element of risk appears far greater than the overall figures which show that only 14 percent of all banks' credits have been extended to less developed countries (LDCs).<sup>120</sup>

Projections of the future debt capacity of individual nations do need to be improved, especially since private banks now account for 50 percent of all lending to LDCs, as compared to 36 percent five years ago. But there is also the need for banks, central banks, and, indeed, the entire international community to come to grips with the dangers posed by the continuing need to roll over the debt of sovereign borrowers. If any lenders refuse to continue this process in an important individual case, the denial could lead to "a self-fulfilling prophecy of a chain of defaults by deficit countries in the future . . . [that] may result in greater loss of principal or income to all banks involved."<sup>121</sup> The recent Brookings Institution report on debt problems of the Comecom nations and their impact on East-West trade notes that the problem of rescheduling can certainly have broad economic and political ramifications.<sup>122</sup> Indeed, the domestic political consequences of the buildup of this debt in the middle income LDCs will continue to be felt for many years to come.<sup>123</sup>

<sup>117</sup> Andrew Fisher, "Defining the bounds of acceptable risk," *Financial Times*, March 23, 1979, p. 3.

<sup>118</sup> Christine Moir, "Former bank chairman jailed," *Financial Times*, July 26, 1979, p. 16. While the government of Israel insured depositors of the present bank, there was a dispute over the extent of the British Central banks' responsibility for the London-based subsidiary.

<sup>119</sup> S. I. Davis, "How risky . . .," *op. cit.*, pp. 138-139.

<sup>120</sup> Nicholas Colchester and John Evans, "Finance for the second wave of the world oil crisis," *Financial Times*, May 30, 1979, p. 18. Euromarket trends in *Eurofile*, *The Banker* (London) No. 7, November 1978, p. 4, calculates the net liquidity ratios for a number of LDCs and points to the extremely low ratios for several of these nations. For a recent review of such borrowing see "International credit market developments," *World Financial Markets*, June 1978, pp. 5-10.

<sup>121</sup> Davis, "How risky is . . .," *op. cit.*, p. 143.

<sup>122</sup> "Euromarket Trends," *Eurofile*, *The Banker* (London), No. 7, November 1978, p. 3.

<sup>123</sup> Philip Bowring, "Philippines deficit at new peak," *Financial Times*, July 25, 1979, p. 3.

The granting of bank credits in high-risk areas is a fifth area where problems have become more acute. In 1978, a Swiss Credit Bank report noted that Swiss banks faced a difficult year marked by high risks in 1979. There was concern over the fact that in 1978, Swiss banks had granted more export finance credits and other high-risk facilities to supplement their traditional export credits that are backed by risk guarantees, leading to "an overall increase in risks."<sup>124</sup> In the United States, similar concern has been voiced about bank expansion into the new area of standby letters of credit that insure the performance of contractors in numerous development projects overseas.<sup>125</sup> New constraints on banks in such areas as syndicated loans to finance balance of payments deficits has led to a greater emphasis on project finance,<sup>126</sup> an area that is sometimes used by banks as a way to get around the 10 percent limit on loans to individual borrowers.

*The Risk of Herstatt-Like Failures: A Key Problem Associated With the Rise of the Eurodollar Market*

The risk of Herstatt-like failures—the rapid, unexpected demise of important banks—is one problem that has been associated with the rise of the Eurodollar market. The pressures in the market and the difficulties regulators have in obtaining adequate information about the overall soundness of the foreign operations of banks have only served to heighten the worry about bank failures that might have international repercussions.

Three areas bear the greatest potential for triggering off such failures. They include the huge dollar overhang on the Euromarkets, low spreads on loans in the Eurodollar market and the shift from U.S. banks to other banks, largely Japanese and West German, in order to recycle petro dollars. This section will examine some of the forces that have exacerbated these risks over the past decade.

THE CONTROVERSY OVER THE DOLLAR OVERHANG IN THE EURODOLLAR MARKET

James H. Hugon has raised four threats that are posed by the enormous dollar overhang that exists outside the United States in the Eurodollar interbank market: (1) One or more banks may delay payment on their interbank credits, straining the cash flow of all banks in the chain; (2) one or more banks may default, breaking the chain; (3) the original non-bank depositor of Eurodollars may decide to exchange them for U.S. dollars; and (4) the ultimate borrower of the U.S. dollars may delay or default on payment of the loan, straining or breaking the chain. Hugon notes that these strains indicate that "it may be prudent to set limits on interbank transactions and on the amount of Eurodollar loans made by a bank relative to its liquid assets."<sup>127</sup>

A second problem that has been mentioned earlier is the fact that bank reserves may no longer be adequate to handle a real liquidity

<sup>124</sup> Brij Khindaria and John Wicks, "The high risk of credit," *Financial Times*, February 1, 1979, p. 19.

<sup>125</sup> Deborah Rankin, "Doubt on Banks' Standby Loans," *New York Times*, January 25, 1979, pp. D1, D9.

<sup>126</sup> Colchester and Evans, *op. cit.*

<sup>127</sup> James H. Hugon, "Coming Risks in Activities of U.S. Banks Abroad," Issue Paper 77-106, Office of the Comptroller of the Currency, 1977, p. 3.

crisis on the Eurodollar market because of the size of the debt overhang. This problem is linked to the maturity transformation that is occurring in lending on the Eurodollar market. If short term deposits backing up longer-term loans are called, new sources of funds may not always be available, especially if there is a crisis in the Eurodollar market.

#### LOW SPREADS ON LOANS IN THE EURODOLLAR MARKET

While low loan spreads on the Eurodollar market have eroded banks' traditional cushion of reserve against bad debts and driven them to become more dependent on fee-generating activities, the heightened competition on the Eurodollar markets appears to have exerted considerable pressure on banks to continue to participate in loans or to lose important customers. In addition, there is greater pressure on banks to increase their foreign lending in order to enhance their overall performance.

These forces have resulted in even closer shaving of spreads on loans and a lengthening of loan maturities. They have also created a situation where banks that are subordinate members of loans syndicates may tend to suspend their own supervision of risks when the syndicate leader is to assume these functions. The same is true in the case of purchased loans and participation loans.<sup>128</sup> Where syndicate managers tend to be less skilled in assessing risks, and where the pressure to extend loans is great, these practices may create a situation where small banks are exposed to sizable risks.

Particularly as competitive pressures increase, maturity transformation in the Eurodollar markets may become far greater than in the past. This may lead banks to open themselves to a more dangerous dependency on very short-term funds to back up longer and longer maturity loans. If a liquidity crisis of any duration occurs, such banks might be unable to find new sources of funds to back up their loans, and might face considerable problems if they needed funds to pay debts or to fulfill foreign exchange transactions. Such an outcome would prove especially perilous if it affected interbank lending.

Competitive pressures and low margins have already led a number of large banks to place much more emphasis on fee-generating operations, such as foreign exchange. As competition becomes fiercer, such pressures will probably increase. This situation poses problems, because it is in these fee-generating areas that banks place themselves in especially open positions, since there is often no guaranty backing up such activities as foreign exchange. A single large bank with sizable problems in fee-generating areas might involve the entire international financial system in a crisis similar to the one that led to the demise of the Franklin National Bank.

#### THE SHIFT FROM U.S. BANKS TO JAPANESE AND WEST GERMAN BANKS TO RECYCLE PETRODOLLARS

The current recycling problems in the international financial markets may prove more troublesome than was the case in 1973 and

<sup>128</sup> *Ibid.*, p. 4. A participation loan is where two or more banks jointly finance a loan. A purchased loan is one which one bank sells its loans to another. These contrast with syndicated loans where many banks extend a loan under the direction of a syndicate leader.

1974. Now, banks from Japan and West Germany are playing a far larger role in the recycling of OPEC surpluses. However, the domestic monetary authorities in these nations may prove to be far more concerned about an explosive growth of debt and about bank exposure to LDC loans than their U.S. counterparts were earlier.

Thus, one question raised in the new recycling process is whether national authorities may place constraints on the recycling abilities of banks, making it extremely difficult for some LDC's to gain access to funds, or whether they will permit a new acceleration of growth in the Eurodollar markets and try to control the impact of such growth on their domestic economies. A second question is how much the debt burden of LDCs can grow before significant structural changes occur in these economies—i.e. exports dry up because financing is unavailable, etc.

Given the fact that there is no mechanism for ameliorating these problems on an international level, one probably should look for an increased role of individual banks in setting limits on lending to developing nations. This may give rise to further competition for lending to more creditworthy nations, with the result that banks may become quite overextended in loans to certain nations. This in itself might give rise to considerable problems for banks, were there to be a liquidity crisis on the Eurocurrency markets.

### *Policy Alternatives To Lessen Instability in the Eurodollar Market*

#### THE ROLE OF THE FEDERAL RESERVE BANK

A number of important policy questions arise based upon the discussion in the previous sections. Many of these concern the role of the Federal Reserve Bank. Among them are several problems that need to be resolved in order to lessen instability in the Eurodollar market. These problems include how to set prudent limits on the involvement of national banks in the Eurodollar market, how to devise useful assessments of the soundness of the activities of overseas branches of banks, how to increase the surveillance of foreign banks, how to establish complementary systems of collecting information by all national bank supervisors and how to evaluate the consequences of the move toward fee-generating activities.

There were a number of changes made in Federal Reserve policies after the demise of the Franklin National Bank,<sup>129</sup> including improvements in the international supervision of banks. However, much of the emphasis of the changes has been on achieving a common reporting form to measure overall international exposure for each bank and to assess country risk. Thus, two significant problems remain. The first is that there is no supervision of specific bank subsidiaries in most in offshore tax havens with the exception of London. Thus, the overall condition of a bank's foreign operations remains the key concern of regulators. The second is that as banks have moved to increase their fee-generating and "off balance-sheet" activities, the Federal Reserve has not devised any known means of tracking or evaluating their exposure and risk in these areas. Thus, some of the areas having the

<sup>129</sup> See Spero, op. cit., p. 168 and "Supervising the Euromarket dinosaur," op. cit. for a review of these changes.

greatest potential for disrupting the international financial system remain unregulated.

In addition, there are still a number of important forces at work to undermine the further development of international cooperation in managing the world's financial markets.<sup>130</sup> Different methods of supervision and different concepts of the role of the public management of banking, along with the fact that "the control of banking remains a central element in national economic management in which states are not yet ready to relinquish or adapt to international as opposed to national needs,"<sup>131</sup> pose obstacles for international coordination. Cooperation is also undermined by the fact that most regulatory authorities want to make it easier for their banks to compete effectively in international banking rather than to place impediments in their way. Since some authorities impose few regulations on this type of banking, seeking to encourage its growth in their nation, other authorities are reluctant to impose constraints that would lessen the competitiveness of banks from their country.

As a result, international management remains limited to consultations among national regulatory authorities.

#### THE ROLE OF THE COMPTROLLER OF THE CURRENCY

While the Office of the Comptroller of the Currency has become more concerned about the activities of U.S. multinational banks and the activities of specific foreign branches of U.S. banks, its efforts have been limited by a dominant concern over loan exposure. The Comptroller has participated in consultative groups with his foreign counterparts, but since there is no formal mechanism for regulating certain facets of bank operations, the power of the Comptroller's Office remains circumscribed.

The Comptroller's role in regulating foreign operations of U.S. banks is subordinate to the general oversight powers of the Federal Reserve Board. The Comptroller is authorized to examine foreign branches of U.S. national banks<sup>131a</sup> and to make recommendations to the Board about applications by national banks to establish foreign branches. The Comptroller cannot veto approval given for new branches by the Federal Reserve. However, since the Federal Reserve Board has limited its concerns to the relationship, between branches and home offices, the Comptroller does have some latitude for raising other concerns. The Comptroller's Office was the regulatory body that recommended uniform requirements for foreign exchange accounting. It was also the first to centralize examination of international activities in its Washington office to better coordinate home office and foreign branch examinations.<sup>132</sup>

The division of regulatory powers between the Comptroller's office and the Federal Reserve does tend to result in different standards for regulating foreign bank operations. It has also meant that there is a certain amount of ambiguity in the rules and that certain impor-

<sup>130</sup> This discussion is drawn from Spero, *op. cit.*, pp. 188-191.

<sup>131</sup> *Ibid.*, p. 190.

<sup>131a</sup> National banks are those banks that do not operate under a state charter. Most U.S. banks are national banks, with some notable exceptions, such as Manufacturer's Hanover Trust.

<sup>132</sup> D'Arista, *op. cit.*, pp. 868-871.

tant areas that may require supervision do not receive adequate attention.

#### THE EMERGENCE OF AN INTERNATIONAL BANKING SYSTEM AND ITS IMPACT ON WORLD INDUSTRIAL GROWTH

The growth of Eurocurrency markets and the network of financial centers throughout the world make it possible for credit decisions to be made on a global, rather than a national, level. Whether such decisions will actually be made at this level is unclear and is difficult to evaluate, given the scarcity of data on lending to specific corporations by major banks.

The fact that banks now operate on a world level does raise new questions about the allocation of capital. If banks do not merely provide funds for the wheels of industry, but influence which firms have access to credit and which do not, has the growth of Euro-dollar market changed the way such influence is exerted? Do banks decide what firms will receive credit based upon profitability criteria or other measures? Can bank credit decisions result in funds being focused on firms in one nation rather than in others?

#### *Differences in Industrial Growth Between U.S. and Foreign Firms and Bank Lending: The Steel Industry, a Case Study*

Because data are so difficult to obtain, few international comparisons of borrowings by firms of different nationalities have been made. However, such data are available in the case of firms in the steel industry from both Japan and the United States and they will be used to present an analysis of borrowing and differences in industrial growth during the 1970s.

#### LENDING BY U.S. AND NON-U.S. BANKS TO U.S. AND NON-U.S. STEEL COMPANIES IN THE 1970'S

As table 9 shows, Japanese steel companies were financing more of their growth during the late 1960's and 1970's from internally-generated funds than earlier. In the seventies, one-third of their financing was obtained through borrowing from nongovernmental sources. In that same decade, however, there was a substantial increase in borrowings by Japan's six largest steel makers. Such borrowings grew from \$116.7 million in 1971 to \$524.2 million in 1975, with borrowings increasing 5-fold between 1973 and 1975 (see table 10).

A more limited report of bank loans outstanding to Japanese firms in 1975 and 1977 (see table 11) indicates that there has been a substantial increase in U.S. bank lending to the seven largest steel producers since 1977. The figures presented in this review are significantly less than those mentioned above because they include only loans from U.S. banks and do not include bonds. If figures were available on total foreign borrowings for 1978 and 1979, they would probably show a significant increase over the foreign borrowing outstanding in 1975 because Japanese corporations have issued record levels of overseas bonds and stock over the last three years.<sup>133</sup>

<sup>133</sup> Yoshio Terasawa, "Another overseas record in 1979," *Euromoney*, March 1979, Japan survey, pp. xix-xxix.

TABLE 9.—JAPANESE STEEL INDUSTRY'S FINANCING (NET INCREASE)

(In percent)

	Stocks	Deben- tures	Borrowing		Own capital	Total
			Govern- mental	Others		
1946 to 1950.....	15	18	31.0	(36)		100
1951 to 1955.....	8	13	12.0	45.0	22	100
1956 to 1960.....	16	14	.1	37.9	32	100
1961 to 1965.....	27	8	.5	31.5	33	100
1966 to 1970.....	4	6	1.0	41.0	48	100
1971 to 1975.....	6	10	3.0	34.0	47	100

Source: "United States-Japan Steel Trade: Basic Views on Current Issues," Tokyo, Japan Iron and Steel Exporters' Association, July 18, 1977. (With corrections from JISEA).

TABLE 10.—Borrowings from abroad by Japan's six major steelmakers

	Millions
1971.....	\$116.7
1972.....	98.3
1973.....	107.5
1974.....	276.3
1975.....	524.2

Source: See table 9.

Thus, foreign banks have provided greatly increased funds to Japanese steel companies during the mid and late 1970s. This has been done directly, through significant increases in bank loans, and indirectly, through bond underwritings. Several of the largest U.S. banks played a key role in lending to Japanese steel companies, increasing their outstanding loans more than three-fold over a two-year period (see Table 11). Overall, the Japanese iron and steel industry increased its borrowings from foreign banks from \$538 million in 1974 to \$2.0 billion in 1976.<sup>134</sup>

TABLE 11.—UNITED STATES BANK LOANS OUTSTANDING TO THE LARGEST JAPANESE STEEL CORPORATION  
APRIL 1975 AND MARCH 31, 1977

(Dollar amounts in millions)

U.S. bank	Loans outstanding		Percent increase
	April 1975	March 31, 1977	
Citibank.....	\$58.94	\$230.44	391
Chase.....	59.19	204.53	346
Chemical.....	15.10	82.55	547
Bankers Trust.....	30.57	51.02	167
Security Pacific National.....	15.85	34.15	216
Marine Midland.....	1.93	7.83	406
Total, 6 banks.....	181.58	610.52	

Sources: "Internationalization of Money," *The Oriental Economist*, December 1977, p. 16 and "To What Extent Do Japanese Firms Depend on Foreign Loans?," *The Oriental Economist*, March 1976, p. 8.

Over the same period of time, 8 of the largest U.S. steel companies (U.S. Steel, Bethlehem, Republic, National, Inland, Armco, Wheeling, and Lykes) raised \$686 million in new bank loans (medium and long term loans) according to information published in reports filed with

<sup>134</sup> "Internationalization of Money," *The Oriental Economist*, December 1977, p. 11.



the Securities and Exchange Commission. Another \$317 million was borrowed from insurance companies and \$655 million was raised by issuing bonds. Although these figures may understate the true borrowings by these firms, since they exclude short term borrowing and outstanding borrowing, they do provide some indication of the magnitude of new borrowing over a period similar to that used to evaluate borrowing by Japanese steel companies.

#### CHANGES IN PATTERNS OF LENDING TO STEEL FIRMS IN THE 1970'S

The pattern described above appears to indicate that there may have been a curtailing of the access to credit by certain large U.S. steel companies during the 1970s based on their creditworthiness and much easier access to credit by their Japanese counterparts. In the latter case, much of the new funds was raised on the Eurodollar market.

In the case of Lykes and Youngstown Sheet and Tube, which closed their Campbell steel works in Youngstown, Ohio, the case has been made that the inability of the corporation "to carry out its modernization plans . . . [was] clearly related to the withdrawal of credit"<sup>135</sup> by a number of large banks that had supplied funds for the merger of the two firms in 1968. Many of these banks had either greatly reduced their credit to Lykes or had virtually ended their relationship with the firm.<sup>136</sup>

While this discussion cites only one firm that was in great financial difficulty during the late seventies, other steel companies do not seem to have fared much better. Indeed, some industry analysts have argued that since the early 1960s, it has been especially difficult for U.S. steel firms to get bank loans, because banks found lending to other sectors much more profitable. Now, however, it appears that while U.S. firms were not receiving extensive credit during the 1970s, their Japanese competitors significantly increased their access to funds by obtaining credits and issuing bonds in the Eurocurrency markets.

#### LENDING AND THE STRATEGIES OF U.S. AND NON-U.S. STEEL FIRMS

Why do Japanese firms appear to have had better access to funds than their U.S. competitors? The Japanese companies had already coped with pollution controls and regulations, and with the need to source raw materials from new locations in developing and developed nations. They had relocated certain plants to new centers of steel production around the globe and had modernized others. They also did not have to face the higher labor costs and costs of production that limited the choices of their U.S. counterparts.<sup>137</sup> Japanese firms also seemed to have a better chance to capture a sizable share of the new China market than did their competitors. Thus, the outlook for the future for Japanese steelmakers appeared far more optimistic than that of the U.S. companies, although the return on assets for Japanese

<sup>135</sup> Edward F. Kelly, "Lykes and Its Bankers," Ohio Public Interest Campaign, Cleveland, Ohio, April 13, 1978, p. 3.

<sup>136</sup> *Ibid.*

<sup>137</sup> Hans Muller, *A Comparison of United States and Foreign Steel Industries*, Conference Paper Series No. 31, Business and Economic Research Center, Middle Tennessee State University, April 1978. I wish to thank Professor Muller for drawing my attention to these points.

companies has remained lower than for U.S. firms ever since the late 1960s.

Although the analysis presented here is far from rigorous, it does suggest that with the rise of the Eurodollar market financial institutions have begun to make credit decisions on a global rather than a national level. In extending credit to the world's steel industry during the 1970s, most large international banks, particularly U.S. multinational banks, appear to have decided to distribute credit based on the past performance and future opportunities steel companies face throughout the world. Since the U.S. companies appear to face a much more difficult future than most others, they seem to have obtained less credit than some of their major competitors.

*The Contribution of Lending to Changes in the International Competitiveness of U.S. and Non-U.S. Steel Corporations*

Given the fact that in recent years, it has been easier for better restructured and more competitive firms (more internationalized, more modernized firms with better opportunities for obtaining important shares of new markets) to borrow funds, changes in the access to capital may have important impacts on international competitiveness. If more competitive firms have better access to borrowed funds, it may be more difficult for their less competitive rivals to obtain the money they need to modernize their outdated operations, to obtain new sources of supply, or to develop new technologies. The result may be to ensure the demise of some of the older, less efficient, steel producers, or to create significant pressures for mergers or for government support.

In certain nations, where steel is seen as key to the health of the economy because of its inputs into other industries that account for significant numbers of jobs, governments may be compelled to act to countermand market forces. However, if there is a chronic problem of obtaining funds, that becomes worse during the 1980s for lagging steel firms, government support may not be enough to save problem companies. Indeed, the access to funds by highly competitive companies may create conditions that hasten the demise of their unlucky counterparts.

Thus, the allocation of credit on an international level by major banks and by forces at work in the international financial markets may accelerate the restructuring of industry on a global scale. It may also create serious dislocations, in employment and growth terms, in a number of industrialized nations.

*The Implications of International Patterns of Bank Lending for U.S. Steel Corporations*

One of the pressures placed upon U.S. steel corporations by the present international patterns of bank lending results from the fact that it is usually far easier to obtain funds for new projects outside the United States than for those within the United States. This has not only led U.S. companies to establish a large number of operations overseas, but also has stimulated them to diversify out of steel production in the United States.

This pressure to move abroad means that companies view the restructuring of their firms on a world level as a more important priority than the reorganization of their domestic operations. As a result, the future prospects for growth of such firms in the United States become more bleak and it becomes far more difficult for firms to do anything dramatic to improve the status of their domestic operations. If these firms are not able to develop an important base of overseas activities—and most, with the exception of U.S. Steel and Armco have not—they may continue to decline. This may place further costs on the government because of plant closings and layoffs.

*The Broader Implications of International Patterns of Bank Lending for Growing and Declining U.S. Corporations*

The steel case represents a new dilemma for U.S. corporations. It suggests that banks are now making credit decisions on a global level, seeking to lend to those firms with the best potential for future profits, i.e., the most innovative, profitable, and internationally minded corporations. It also suggests that during lean years for the international economy, as occurred after the OPEC oil price rise, banks may be particularly worried about lending to all but the most creditworthy clients.

While further research needs to be done to establish clearly that this new pattern of lending is occurring, the case of the steel industry does suggest that the availability of credit has changed for certain declining companies. Since this is apparent in an industry that is undergoing a significant amount of restructuring on an international level, it may also be true in other industries undergoing a similar transformation. If this is the case, bank lending policies may be playing a far more important role in the reshaping of such industries as textiles, auto, electronics, and computers. They may also be having a significant influence on the present and future competitive strength of U.S. companies in these industries.

In the case of declining industries that have already been weakened by strong competition from abroad or from new industries, by the high cost of modernization, or by other factors, the problem of access to credit is even more acute. Given the fact that banks have far more attractive borrowers overseas or in more dynamic industries at home, firms in declining industries may have a very difficult time obtaining loans.

*Policies To Cope With the Potential Conflict Between Bank Lending Practices and National Goals for Industrial Development*

Since the credit decisions of banks may potentially conflict with national goals for industrial development, it is useful to consider whether there are any policies that can cope with this problem.

One policy would be to develop alternative credit sources for firms in industries that are undergoing structural adjustment but cannot obtain adequate bank funds. This might include the development of a national cooperative bank, or a national development bank whose credit disbursements may be decided upon by public referenda. This alternative avoids dealing with a new role for private banks.

A second alternative that has already been used is to provide government loans to firms that face grave problems that may cause significant job losses (the Chrysler case). Such loans would probably stimulate banks to make private credits available, if there were adequate guarantees.

However, neither of these approaches addresses the basic change that has occurred in the allocation of credit. Banks serve an international economy, while many of our policies are concerned with problems at the national level. A situation where highly competitive steel firms in Japan obtain credits far easier than their declining counterparts in the United States may create a real policy dilemma, particularly if U.S. banks lend sizable amounts to the Japanese firms and reduce their support for U.S. firms. What needs to be examined closely is the role and responsibility of financial institutions in the U.S. economy. These institutions have traditionally operated as though the profit motive is central. Perhaps in the age of a more advanced industrial society subject to serious potential economic dislocations, greater attention must be paid to developing policies that require financial institutions to have a greater sensitivity to the problems of the Nation.

#### CONCLUSIONS AND POLICY IMPLICATIONS

The rise of the Eurodollar market and the growth of its importance in financing the world's industrial growth have had an important influence on the U.S. economy. Since this market has provided some of the largest private banks with the opportunity to operate on a worldwide scale, to integrate activities on a global level, and to transcend their role as commercial banks, such as we have known them in the past, its emergence has already brought about significant structural changes in international banking and in U.S. banking. These transformations often go beyond the scope of traditional regulations on bank operations, both at home and abroad, giving rise to significant dilemmas for policymakers. Particularly where banks have entered fee-generating, "off-balance sheet" activities, regulators will need to devise new ways to evaluate the impact of these activities on the safety and soundness of the banking system.

In addition, recent changes in the Eurodollar market have increased the risks of crises. The enormous dollar overhang, the current low rate spreads on long maturities on Eurocurrency loans, and the more sizable problems of Petrodollar recycling all make the environment of international banking more unstable.

Finally, in examining borrowing by the steel industry in both the U.S. and Japan during the mid 1970s, there is some suggestion that banks are now making credit allocation decisions on a global level. This shifting of credit decisions to focus on international outcomes by firm and by industry appears to indicate that national industries undergoing severe problems in adjusting to a changed international economy may face a much more difficult time in obtaining funds than when credit decisions were focused on a national level. Policymakers will need to explore how to assure that the international expansion of banks and other financial institutions does not exacerbate the readjustment problems firms and industries may face, and does not in-

crease the economic dislocation that may occur in the economy, as industry and financial institutions adjust to operating in a more global economy.

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# INTERNATIONAL CAPITAL FLOWS: RECENT EXPERIENCE AND ISSUES FOR THE FUTURE

By Robert L. Sammons\*

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## FOREWORD

This paper was essentially completed in November 1979. Minor revisions have been made to update some, but by no means all, of the

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statistical information, and to take account of certain suggestions by the reviewers. The basic thrust of the analysis remains perhaps more optimistic than many would think warranted concerning the ability of the international economy, especially the private financial markets, to continue to cope with the vast imbalances in international accounts engendered by the OPEC surpluses. Nevertheless, I believe that the major issues are fairly presented in the paper; it was not considered part of the assignment to propose solutions.

My rejoinder—perhaps rejoinder is too strong a term—to the comments by Ms. D'Arista and Mr. Pizer follow their comments, which were thoughtful, incisive, stimulating, and greatly appreciated.

## I. INTRODUCTION

From 1974 onward, the world economy has been characterized by unprecedented imbalances in world payments. These imbalances have in turn led to a great increase in international "debts." The major oil producing countries as a group, and a few industrialized countries as well, have incurred huge surpluses in their international current account balances—an excess of exports of goods and services over imports and (net) transfer payments. Of necessity, these surpluses have been matched by equal and offsetting deficits in the rest of the world. Since gold is no longer used to a significant extent to settle international payments balances, the surplus countries have no choice but to eliminate their surpluses or to acquire financial claims on the rest of the world. The deficit countries either have to surrender claims previously held (usually their official reserves) or have to borrow from abroad to finance their deficits.

The surplus countries, in the main, have not directly provided the financing needed by the deficit countries. Rather, through a process of financial intermediation, the surplus countries have invested their funds mostly in the United States (in the form of dollar reserve holdings) and in the Eurocurrency markets. These financial markets have "recycled" the funds, thus assuming the credit risks involved. Commercial banks and other private financial institutions have played a major role in this process. They have proved to be more resilient to economic turbulence, and more disposed to move their funds across international borders, than most observers a decade ago would have thought possible. Private institutions have increasingly assumed roles in financing payments imbalances that traditionally were considered to be more the domain of governments (including central banks) and official international institutions, notably the International Monetary Fund (IMF).

The paper examines the process of financial intermediation in the seventies. Among the principal issues reviewed are the following: The recycling of "petrodollars," and other international capital flows; the respective contributions of national commercial banking systems, and of the Eurocurrency and international bond markets; official lending by governments and international institutions; the accumulation and use of reserves; and the implications to the United States of the continued use of the dollar as the world's principal reserve asset. Our examination of the seventies will, hopefully, provide important insights into the major international financial policy issues that confront

the world in the eighties. These issues are discussed in some detail in the final chapter, but it may be useful to list them at the outset:

(1) Should some countries, at least, make greater efforts to reduce or eliminate their imbalances instead of relying as extensively as in the past on external credit?

(2) Is there any relationship between large payments imbalances and the inflationary scourge from which so much of the world is suffering?

(3) Should the international institutions bear more of the responsibility for financing deficit countries than in the immediate past?

(4) Related to the preceding question, is it prudent for private commercial banks to continue their major role in financing balance of payments deficits, particularly those of the developing countries (LDC's)?

(5) Does the present financial system promote the optimum use of real economic resources?

(6) Is there any case for increasing official controls over international capital movements?

(7) Finally, and of vital importance to the United States, what should be the future role of the dollar as a reserve currency?

### *International Capital Flows*

For various reasons, gross international capital flows are much larger than the sums of current account deficits and surpluses. In the first place, financial intermediation through the Eurobank and Eurobond markets, as well as through national financial systems, serves to expand the amount of international credits and debts beyond what it would be if primary lenders dealt directly with primary borrowers. The oil countries, especially, have placed their surpluses in international as well as national financial markets; these markets in turn have made loans of various kinds to the deficit countries: the "recycling" phenomenon. The industrialized surplus countries have invested most of the funds resulting from their surpluses in the United States, and American financial institutions in turn have extended credit internationally on a grand scale. Like all financial intermediation this process has shifted the bulk of the credit risk from the suppliers of capital to the intermediaries—private commercial banks, international official lending institutions, purchasers of foreign bonds, and national governments themselves.

But capital moves not only from surplus to deficit countries; it also moves "uphill"—into surplus and out of deficit countries. The strong financial positions of surplus countries engender confidence in their economies, and create expectations of upward changes in their exchange rates, attracting private capital inflows. Private capital also tends to flow out of deficit countries for obverse reasons.

A third factor leading to capital flows in excess of the amounts needed to finance deficits is the policy of some countries of borrowing abroad not only the amount needed to finance their deficits, but enough to build up their official reserves as well. This has been a prominent policy feature of many less developed countries.

It is probably not possible conceptually, and certainly not statistically, to arrive at a single figure to represent the growth of inter-

national debt. Available data tend to be both incomplete and overlapping. It is difficult to reconcile data obtained from debtors, such as those published by the World Bank, with creditor data, such as those published by the Bank for International Settlements. Nevertheless, a few statistics will illustrate what has happened.

Over the 5-year period, 1974-78, according to World Bank data, the public and publicly guaranteed medium and long-term debt of 96 developing countries<sup>1</sup> rose by \$166 billion to \$257 billion, an annual rate of increase of 23 percent. However, debt owed to official institutions, national and international, rose \$68 billion, 17 percent a year, while debt owed to private lenders—mainly commercial banks—rose \$99 billion, 32 percent a year. Official long-term debt owed to private creditors comprised 52 percent of the total at the end of 1978, compared to 37 percent 5 years earlier.

Data from creditor sources show a comparable development. Thus, outstanding Eurocurrency claims on "final" users, that is excluding interbank transactions within the Eurocurrency markets themselves, rose from \$132 billion at the end of 1973 to \$375 billion at the end of 1978, an annual rate of increase of 23 percent. Claims on non-oil developing countries, however, rose at a rate of 30 percent, to reach \$40 billion at the end of 1978.<sup>2</sup>

During the same 5 years, bond issues in foreign and international markets totaled \$140 billion, or perhaps \$120 billion net of retirements. Less than 10 percent of this amount was borrowed directly by developing countries, although an additional 25 percent was taken by international institutions, mostly for relending to developing countries. While estimates of total international bonds outstanding are not readily available, it seems likely that the amount more than doubled over the 5-year period.

### *Highlights of the Decade*

More detail regarding the sources and uses of international credit will be presented in chapter II, where the experience of each of the major country groups will be examined. And full discussion of problems and policy issues for the future is reserved for the last chapter of the paper. However, a few general observations may be useful at the outset.

(1) Officials of countries faced with balance of payments deficits are always confronted by the necessity of adopting policies that will reduce or eliminate the deficits or of finding the wherewithal to finance them. The ability to obtain credit abroad has enabled many countries (not least of all the United States) to avoid, or at least to postpone, the negative effect on their real incomes imposed by the oil price hike. If they had not been able to finance their enlarged payments deficits by borrowing, they would have had to export more of their own goods and services or, more likely, to reduce their demand for imports by cutting back on domestic growth. Selling more abroad would have

<sup>1</sup> The category includes oil producing countries as well as seven countries classified as "more developed" primary producers in table 1. In 1978 these seven countries accounted for 11 percent of the total.

<sup>2</sup> Bank for International Settlements, Annual Reports. Part of these increases may reflect the depreciation of the dollar, to the extent claims were denominated in appreciating currencies.

have been difficult, especially in view of the recession in the industrialized countries. Because as deflationary policies would have reduced the demand for all imports, not petroleum products alone, reducing imports by cutting back growth would have involved not only creating unemployment at home, but abroad as well. Many countries resorted to exchange depreciation, which helped to reduce the demand for imports and, although probably to a much lesser extent, to aid export sales.

(2) In the longer run, the buy-now-pay-later policy involved in financing the deficits by borrowing abroad will effectively reduce the negative terms-of-trade impact of the oil price hike—a specific example of how debtors profit from inflation.

(3) As already stated, surplus countries must accept financial claims on the rest of the world—the financial counterpart of the real savings embodied in their current surpluses. The resulting process of international financial intermediation may not always work smoothly, just as it does not always work smoothly in a national economic system. Since the credit risk is assumed by the financial intermediaries, notably the commercial banks, the stability of national banking systems may be threatened. But so far at least the process has worked reasonably well, in the sense that the deficit countries have been able to acquire, by borrowing, the funds needed to finance their imports.

(4) This financial intermediation, however, has also been greatly facilitated by national monetary and banking policies. The recession in the industrialized world which began in 1974 led to relatively easy monetary policies, resulting in large outflows of capital, especially on the part of commercial banks. More recently, of course, monetary policy has become much more restrictive in the United States and other industrialized countries, as the determination to reduce inflationary pressures has intensified. But the offshore operations of U.S. banks are not generally limited in any significant way by domestic policies; the authorities apparently do not feel that such operations have a direct or major effect on the U.S. economy. In other countries, too, banks are relatively free to pursue “offshore” activities without regard to the domestic policy stance. (See chapter III for more details on the operations of the U.S. banking system during this period.)

(5) As noted, the period has been marked by increased dependence on private as compared to official lenders. This development raises questions about resource allocation, both among and within each of the borrowing countries. Notably, it may be asked whether the collective judgement of private lenders produces a better result than the collective judgement of public officials—the latter being reflected mainly in the activities of international lending institutions, such as the World Bank.

(6) The expansion of “offshore” banking activities, loosely referred to as the Eurodollar or Eurocurrency markets, has received widespread attention. In particular many observers have opined that the Eurocurrency market “creates” credit (and money) in the same manner as a national banking system. This view has been thoroughly discredited by various responsible scholars; nevertheless it seems to have a life of its own. We shall therefore deal with the subject briefly in chapters III and IV.

With this broad introduction, we turn, in chapter II, to an examination of the experience of the period since 1973. In chapter III we discuss specific issues related to the U.S. commercial banking system. The major policy issues confronting the government of the United States, and the governments of other countries, will be dealt with in chapter IV.

## II. ECONOMIC ROLE OF CAPITAL FLOWS

### *Classical and modern view*

Until the advent of official "demand management" (Keynesian) economic policies in the 1930's, "classical" economists tended generally to regard international capital movements as the principal casual or autonomous factor in international payments. According to this view, capital tended to flow from areas where savings were large relative to the demand for investible funds (and interest rates accordingly relatively low) to areas where the opposite conditions prevailed.<sup>3</sup> The capital flows would tend to raise total demand for goods and services (by increasing real incomes and/or prices) in the borrowing countries, leading them to import more (or export less) goods and services; this shift in the balance of payments on current account would serve to convert the financial flows into real flows, that is, to "transfer" the capital from the lending to the borrowing countries. Thus during much of the 19th century, the United States borrowed in Europe and ran a trade deficit; in the 1920's, the United States exported capital and ran a trade (more accurately a current account) surplus. All of this came about as the result of the free play of market forces; there was relatively little direct official intervention designed to influence capital flows, and that little was usually effectuated through market-oriented policy measures, most commonly changes in official discount rates.

In these days of *managed economies*, many policymakers and economic observers take an almost diametrically opposite point of view. Current account balances are not affected by international capital flows, but are regarded as being more or less rigidly determined by general economic conditions, which in turn are determined by macroeconomic (fiscal and monetary) policies at home and abroad. The resulting current account balance then has to be "financed," either by capital flows (official and private) or by the use of accumulation of reserves (a special form of official flows).<sup>4</sup> Of course, official policies are also often designed to affect the current account—tariffs, import controls, orderly marketing agreements, energy conservation measures, export subsidies and promotion, to name only a few. But these kinds of measures usually take effect only slowly; in the more immediate time frame, the actual surplus or deficit has to be "financed" by one means or another.

The advent of flexible exchange rates has led to some modifications in this view, as discussed more fully in other project studies. But exchange rate changes also have only a lagged effect on current transactions, and may even be initially perverse (the familiar J-curve phenomenon). So exchange flexibility, in the short run at least, is also

<sup>3</sup> It must be remembered that large-scale flows of liquid, or short-term, funds were not an important feature of the international scene in the nineteenth and early twentieth centuries.

<sup>4</sup> A country may follow policies that result in a current deficit, knowing in advance that the financing will be available, often on a long-term basis, from abroad. In this indirect sense, then, the capital flow may be thought of as a "cause" of the current deficit, but the connection is not through market processes, as envisaged by the classical economists.

expected to operate primarily on the capital accounts; to ensure that a current account balance already determined by other forces is "financed."

There can be little doubt that the new, or Keynesian, view provides the most illuminating, if not fully complete, insight into the forces governing international transactions in the postwar era, particularly during the last few years. Governments in many if not most countries still try to control, directly or indirectly, private capital flows with a view to ensuring that at a minimum they do not exacerbate whatever financing problems are produced by the current account situation. Moreover, governments are increasingly directly involved both as lenders and borrowers in capital flows designed to ensure that a desired current account balance of their own or some other countries can be achieved or maintained. Direct loans by governments, loans and other credits through official international institutions (World Bank, IMF, etc), borrowing in international credit markets by official or quasi-official institutions—these are all examples of such direct official involvement.

In this section we shall briefly examine capital flows in relation to overall balance of payments developments for several major areas of the world in recent years. We shall try to analyze the economic role of such flows, the sources and uses of funds, the resulting stocks of international assets and liabilities, and the outlook for the near future, with respect both to the continuation of the existing pattern of flows and to the economic implications involved in servicing outstanding debt. Although the problems, if any, are individual country problems and have to be resolved by actions of national governments, it will be necessary to deal with broad groupings of countries, recognizing that this process may tend to submerge important differences among countries in any particular group.

It will be convenient to use the country groupings employed by the International Monetary Fund in its Annual Report, slightly rearranged (see table 1).

*United States.*—To be dealt with separately, because of its unique status as a reserve currency country, and because of the sharp change in its current account balance, beginning in 1976.

TABLE 1.—PAYMENTS BALANCES ON CURRENT ACCOUNT, 1973-78

[In billions of dollars]

	1973	1974	1975	1976	1977	1978	Total 1974-78
Surplus countries, total.....	12	73	39	51	50	34	247
Major oil exporters.....	5	66	32	38	30	4	170
Japan, Germany, Netherlands, Switzerland.....	7	7	7	13	20	30	77
Deficit countries, total.....	-10	-66	-60	-58	-45	-31	-260
Other industrial countries <sup>1</sup> .....	-4	-28	-13	-24	-17	-1	-83
"More developed" primary producers <sup>2</sup> .....	1	-14	-15	-14	-13	-6	-62
Nonoil developing countries.....	-7	-24	-32	-20	-15	-24	-115
Eastern Europe <sup>3</sup> .....	-5	-6	-14	-11	-7	-7	-45
United States.....	7	2	19	5	-14	-14	-2
World total (excluding Eastern Europe).....	9	9	-2	-2	-9	-11	-15
World total (including Eastern Europe).....	4	3	-16	-13	-16	-18	-60

<sup>1</sup> Canada, France, Italy, United Kingdom, Austria, Belgium, Denmark, Norway, and Sweden.

<sup>2</sup> European IMF members not elsewhere included, Australia, New Zealand, and South Africa.

<sup>3</sup> Excluding Yugoslavia and Romania.

Source: International Monetary Fund, "Annual Report," 1978 and 1978, and "International Financial Statistics," various issues. Eastern Europe: Organization for Economic Cooperation and Development, "Economic Outlook, No. 24," p. 55, adjusted.

*Surplus industrial countries.*—Japan, Germany, Switzerland, and the Netherlands. These countries had current account surpluses through most of the period 1973–78.

*Other industrial countries.*—All suffered current account deficits during most of the period. These include the remaining IMF member countries in Europe (including Romania, Yugoslavia, and Turkey) as well as Australia, New Zealand and South Africa.

*Major oil exporters.*—Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Oman, Qatar, Saudi Arabia, the United Arab Emirates and Venezuela. It is recognized that some of these countries (the “high absorbers”) have been encountering current deficits, but the group will be treated as a unit for purposes of this paper.

*Eastern Europe.*—Non-IMF members in Eastern Europe.

*Non-oil developing countries.*—All countries not included in the foregoing categories (except Mainland China, North Korea, North Vietnam, and Cuba).

We shall discuss the deficit countries first, beginning with the last group (hereafter referred to as non-oil producing less-developed countries or LDC's for short), since this is the area that has so far received the most attention, and which is generally perceived as having the more serious debt-servicing problems.

### *Non-Oil-Developing Countries*

#### *The size of the problem*

The external shocks of recent years (rise in oil prices, world-wide inflation, recession in the industrialized countries) have had perhaps their greatest impact on those countries least able to resist them. Because of their small size, relatively lower stage of development, lack of diversification—all factors making for heavy dependence on imports of both raw materials and finished goods—many if not most LDC's were not only especially vulnerable to outside influences, but were also unable to adjust quickly without suffering high economic and social costs.

The current account deficit of these countries as a group, which had averaged about \$7 billion a year from 1967 to 1973, widened substantially thereafter, under the impact of the external shocks just mentioned. However, undoubtedly due at least in part to the relative ease of obtaining borrowed funds from foreign private sources, during the five years 1974–78, these countries were able not only to finance current deficits averaging \$23 billion a year (see table 2), but also to add \$39 billion to their reserves.

As shown in the table, about \$50 billion—1/3 of the cumulative total of \$154 billion—of capital funds received from abroad represented long-term loans from official sources (excluding \$7 billion of “monetary” borrowing, mainly from the IMF). Most of the remainder must have come from commercial banks; the sum of the lines marked A and B in the table, \$67 billion over the period, may be a fair representation of the amount so provided, although line B also includes suppliers short-term credits. Official long-term loans and direct investments, both of which are closely related to specific projects and hence do not reflect changes in current balance of payments conditions, were fairly steady over the period, leaving a varying remainder to be financed by private sources—mainly commercial banks.

During the 5-year period 1974–78, total long-term public and publicly guaranteed debt outstanding rose from \$65 to \$187 billion.<sup>5</sup>

<sup>5</sup> The increase is larger than the sum of the annual changes in Table 2, in part because of statistical revisions, and in part, probably, because of conversions from short-term to long-term debt through refinancing. Based on data supplied by the World Bank.



TABLE 2.—NONOIL-DEVELOPING COUNTRIES: SUPPLY AND USE OF EXTERNAL FUNDS, 1973-78

(In billions of dollars)

	1973	1974	1975	1976	1977	1978	Total 1974-78
Uses of funds, total.....	14.8	27.1	32.5	31.0	26.2	36.8	153.6
Current account deficit.....	7.1	24.2	31.8	19.7	14.5	24.3	114.5
Increase in reserves.....	7.7	2.9	.7	11.3	11.7	12.5	39.1
Sources of funds, total.....	14.8	27.1	32.5	31.0	26.2	36.8	153.6
Public and publicly guaranteed long-term borrowing total.....	8.8	13.1	18.4	21.5	25.8	32.9	111.7
From official sources.....	4.6	6.9	10.7	9.4	11.1	12.4	50.5
From private financial institutions (A).....	3.7	5.9	7.5	10.9	12.1	16.9	53.3
Bond issues.....	.5	.3	.2	1.2	2.6	3.6	7.9
Other long-term borrowing <sup>1</sup> .....	1.7	2.9	3.3	.8	-2.9	-2.7	1.4
Reserve-related credit (mainly IMF).....	.1	1.4	1.7	3.4	.4	-.2	6.7
Short-term borrowing <sup>2</sup> (B).....	.9	4.8	6.9	4.2	-1.5	-1.2	13.2
Direct investment, net.....	4.2	4.7	4.9	4.8	5.2	6.0	25.6
Residual errors and omissions.....	-.9	.2	-2.7	-3.7	-.8	2.0	-5.0
Memorandum: (A) + (B).....	4.6	10.7	14.4	15.1	10.6	15.7	67.4

<sup>1</sup> Includes, inter alia, official long-term supplies credits and private long-term borrowing.<sup>2</sup> Includes all identified short-term credit, to official and private borrowers, except reserve-related credit.

Source: Adapted from International Monetary Fund, "Annual Report," 1979, p. 25. Current account includes net official transfers. Lines (A) and (B) represent mainly credit extended by commercial banks.

Data are not readily available on private long-term and all short-term debt; it would appear, based on data published by the Bank for International Settlements, that total claims of banks in the industrialized countries on non-oil LDC's exceeded World Bank data on long-term public and publicly guaranteed debt due to financial institutions (not all owed to commercial banks) by at least \$40 billion at the end of 1978.

Until 1978, the LDC's as a group seemed to be making significant progress in reducing their combined current account deficit; from the 1975 peak of \$32 billion, it was halved by 1977. This progress, however, was uneven; of the total improvement of \$16 billion, \$13 billion pertained to the 12 countries shown separately in table 3. Moreover, the progress was interrupted in 1978; the combined deficit rose by about \$10 billion, is currently projected to have risen by another \$10-\$15 billion in 1979, and a further deterioration of similar or greater magnitude in 1980 is presently foreseen.<sup>6</sup> According to the IMF,<sup>7</sup> much of this increase in the deficit was brought about by adverse changes in the terms of trade, a result not only of increasing oil prices but also of continuing inflation in the industrialized countries, and by rising interest charges on foreign debt. While recent sharp rises in the prices of many commodities, notably metals, may ameliorate the situation somewhat, at least in the short run, the beneficial effects of such increases will be very unevenly distributed. They may also be short-lived, particularly if inflation in the industrialized countries is not slowed.

But whatever the specific forecasts for the near future, the LDC's as a group are likely to continue incurring large current account deficits, so long as they can find the means to finance them. It is therefore important to examine the implications of this phenomenon for the future, for both the debtor and creditor countries.

<sup>6</sup> Morgan Guaranty Trust Company, for instance, in the December 1979 issue of *World Financial Markets* projects an increase of \$14 billion in 1979 and \$13 billion in 1980, based on an average \$30 per barrel effective market oil price in 1980.<sup>7</sup> Annual Report, 1979, p. 23.

TABLE 3.—CERTAIN NON-OIL-DEVELOPING COUNTRIES: BALANCE OF PAYMENTS, 1974-78

[In millions of dollars]

Country	Current account	Changes in reserves <sup>1</sup>	Net capital inflow <sup>2</sup>
Mexico.....	-14,822	268	15,090
Brazil.....	-33,276	5,771	39,047
Korea.....	-5,304	3,612	8,916
Egypt.....	-7,561	-328	7,233
Israel.....	-6,514	198	6,712
Pakistan.....	-4,055	355	4,410
Argentina.....	2,887	4,085	1,199
Peru.....	-4,571	-440	4,131
Chile.....	-1,864	672	2,536
Philippines.....	-4,820	1,106	5,926
China (Taiwan).....	1,331	246	-1,085
Colombia.....	321	1,756	1,435
Total.....	-78,248	17,302	95,550
Total, all nonoil LDC's.....	-114,500	39,100	153,600

<sup>1</sup> Sum of annual flows.<sup>2</sup> Derived as a residual; includes errors and omissions in current account transactions.

Source: International Monetary Fund, "International Financial Statistics," various issues, country pages. Total all non-oil LDC's, table 2.

*Issues of concern*

The growing external debt of the developing countries has received considerable attention in the last few years, from both public and private observers. A major concern has been the danger of defaults: are these countries, individually or collectively, "overborrowed," in some sense of that ambiguous term? Banks and other lenders have developed elaborate procedures for evaluating a country's "creditworthiness," a term encompassing the debtor's prospective ability as well as willingness to service its external debt. Several underdeveloped countries have been involved in debt reschedulings. In these cases, it usually occurs that official (national) creditors agree to some postponements of amounts due, and private creditors follow. Often the International Monetary Fund is simultaneously involved in helping the debtor country develop a program designed to cure, or at least to mitigate, the economic ills that brought on the danger of defaults. In this section, we shall first examine this issue.

A second, and in many ways more important aspect, especially to the debtor countries themselves, is the use of resources. Loosely put, the question is whether the external resources obtained by incurring debt were used to increase investment or consumption. Put another way, has the increase in external debt enabled the countries to postpone balance of payments adjustments which in their own long run best interest should have been made sooner?

A third major issue is the respective roles of official and private creditors. Although outstanding debt owed to official creditors, national and international, has continued to rise, the share of such creditors in total flows has declined (as measured by their share in public and publicly guaranteed medium and long-term debt reported by the World Bank), from 65 percent in 1973 to 54 percent in 1977. If short-term credit were included, the change would probably have been more marked, since virtually all short-term credit is extended by banks and other private lenders. There are two facets to this issue. The first relates to the actual role of official institutions, national and

international, as suppliers of funds, or guarantors of credits supplied by private lenders. The second relates to the appropriate role of the International Monetary Fund in ensuring that debtor countries follow policies that presumably will, inter alia, enhance their ability to service their external debt.

*Is the LDC debt becoming unmanageable?*

"The literature on debt-financed economic development pictures the process as a race between two variables growing at compound rates: Debt and income."<sup>8</sup> If both grow at the same rate and if prices and interest rates are constant, the proportion of national output needed to "pay" the interest on the accumulated debt will not rise. On the other hand, a continuing increase in outstanding debt involves a continuing rise in the inflow of new loans, since the previously contracted loans will presumably need to be paid off or rolled over. Further, models of this nature implicitly assume constant capital/output ratios; all that is needed to achieve a 5-percent increase in real output is to increase the stock of capital by 5 percent. The models also implicitly assume a constant savings ratio, so that the proportion of fixed investment financed by domestic savings remains constant. If that ratio could be significantly increased, the ratio of external debt to GNP, and the interest thereon, could be correspondingly reduced.

In the real world, of course, things are much less subject to prediction. Capital/output ratio, at the margin, can vary a great deal, and be quite different from average ratios. Savings propensities can be greatly influenced by monetary and exchange rate policies, not to mention political developments. Investment decisions can also be influenced, particularly the decision whether to invest abroad or at home.

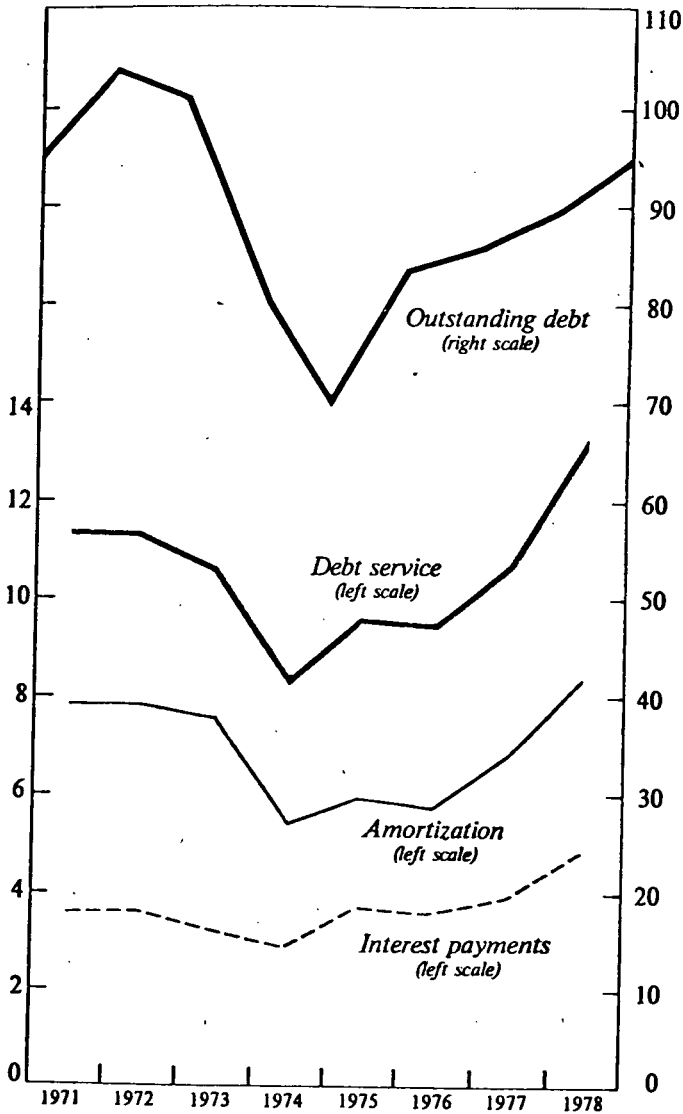
Thus the answer to the question "When is the foreign debt of a country too high?" involves a great deal of subjective judgment, and varies over time. Not long ago, the United Kingdom and Italy were regarded as somewhat doubtful credit risks; subsequently both countries greatly improved their international financial positions. Developing countries are notoriously prone to wide variations in export earnings; when the bottom drops out of the copper market, the creditworthiness of copper exporting countries tends to decline, just when, if they are to maintain their prevailing levels of consumption and investment, their needs for external credit increase.

Nevertheless, debt and debt service ratios have been customarily regarded as being useful, if only partial, indicators of debt-carrying capacity. Among the more common are the ratio of outstanding foreign debt to GNP (or Gross Domestic Product (GDP)), and the ratio of debt service (interest or interest and amortization combined) to exports of goods or goods and services. The latter ratios are shown in the accompanying chart, reproduced from the IMF Annual Report for 1979. Although these data refer only to public and publicly guaranteed medium and long term debt, they are roughly corroborated by overall balance of payments data: Except for the year 1975, when exports actually declined, the ratio of all income paid on foreign investments (other than direct investment) to exports of goods and services fluctuated between 6.1 and 6.8 percent in the years 1970-77; only in 1975 did the ratio rise significantly, to 8.1 percent.

<sup>8</sup> Solomon, Robert: "A Perspective on the Debt of Developing Countries," in *Brookings Papers on Economic Activity*, 2:1977, p. 479ff.

**Chart 12. Non-Oil Developing Countries: Debt and Debt Service, 1970-78<sup>1</sup>**

(As a percentage of exports of goods and services)



Sources: World Bank Debtor Reporting System and Fund staff estimates.

<sup>1</sup> The debt and debt service ratios plotted in this chart relate only to external public, or publicly guaranteed, debt with an original or extended maturity of more than one year.

Another ratio often used to judge whether outstanding debt has exceeded prudent limits is the ratio of outstanding foreign debt to current account earnings; i.e., exports of goods and services. This ratio, for the non-oil LDC's as a group, is shown in the top line in the IMF chart. Although rising slightly in recent years, it remained below its end-1971 peak at the end of 1978. In large part, of course, this is the natural result of inflation; debt, once incurred, is fixed in nominal amounts while the value of sales (exports) continues to rise.

Finally, the chart shows that the ratio of amortization requirements to current earnings has been rising sharply, in part, as the 1978 IMF Annual Report noted, "reflecting the shorter maturities of the bank loans so prominent in the recent financing pattern, together with the expiration of grace periods for amortization of many of the debts incurred in the wave of heaving borrowing after 1973."

However, it appears that the problem of meeting the maturities is of a different degree of difficulty than meeting interest payments. Unless the ultimate ability or willingness of a debtor country is in serious question, private lenders, particularly commercial banks, are not likely to be interested in reducing their positions—particularly if, as seems often to be the case, foreign business is more profitable than domestic (see chapter III). Thus, so long as a debtor remains "credit-worthy," rollovers of existing debt have tended to be the rule rather than the exception.

One particular factor that has made the relatively modest increase in debt service ratios acceptable to lenders has been the considerable increase in reserves. Again taking the LDC's as a group, their reserves grew from \$29.4 billion to \$68.8 billion at the end of 1978. In many individual cases the build-up in reserves constituted a substantial offset to the increase in debt, in the process giving the creditors greater assurance of being paid than they would otherwise have had.

Another favorable factor for a time was that the non-oil LDC's as a group made more progress through 1977 than other major deficit groups in bringing their current account toward balance. As shown in Table 1, their combined deficit in 1977 was at its lowest point since the oil-price crisis, while the other two groups in the deficit category had failed to show any consistent improvement. However, this situation was reversed in 1978, with the already mentioned sharp increase in the combined LDC deficit, accompanied by a marked improvement in the current balances of the other deficit countries—with several important countries in the "industrialized" and "more developed primary producers" groups shifting from deficit to surplus by 1977 or 1978.

#### *Recent developments*

At the present writing (November 1979) the question of financing LDC deficits, and the resulting expansion in their international debts (or reduction in reserves) has taken on new urgency, following a period of comparative lack of uneasiness in 1977-78. Nevertheless, the matter needs to be kept in perspective, particularly in a longer run context. For one thing, the foreseen 1979 deficit is no higher in dollar terms than in 1975; in real terms it is much less. Secondly, the LDC's as a group were, somewhat surprisingly, able to improve their current account position substantially in 1976 and 1977, although the overall

results reflected wide disparities among individual countries. There is no a priori reason why this success cannot be repeated, though it will require sound domestic economic policies, including, as everywhere else in the world, a recognition that the increased cost of energy must be borne in real, not just financial, terms. In the third place, international reserves are much higher than they were three years ago; reducing the net reserve accumulation of the group to zero would free about \$10–12 billion of borrowing capacity annually to finance the current deficit. Of course, the reserves and the borrowing capacity are not necessarily matched with individual country deficits; the situation of any one country might be extremely difficult even if the data for all LDC's taken together appear favorable.

The question of availability of credit, particularly from private banks and other financial institutions, does arise. According to the IMF data, \$17 billion, or 70 percent, of the current account deficit in 1978 was financed by financial institutions, mainly commercial banks. But apparently about \$5 billion, or less than one third, of this total was supplied by U.S. banks; although at the end of 1977 American banks held almost half the total claims on LDC's reported by banks to the Bank for International Settlements (BIS). The claims of the U.S. banks on LDC's rose by about 10 percent in 1978, about the same as all "cross border" claims, and at the same rate as total domestic assets as well. Bank lending to LDC's is affected, on the supply side, by monetary policy in the lending countries, and by the demand for loans in the banks' home countries and in other foreign countries—particularly those that might be considered to involve lower credit risks than the LDC's. Many of the more developed and industrialized countries have shown sharp improvement in their balance of payments positions; as a result they presumably have reduced their taking in international credit markets, and have even become net suppliers of funds as they have repaid debts.

Thus, while the proportion of LDC deficits financed by bank credit may well be lower in the near future than in the past, banks should be able to continue as important suppliers of credit to LDC's, assuming:

(a) That the large international banks will tend to increase their external business at least as fast as their purely domestic business (in recent years the external expansion has been more rapid);

(b) That demands for international credit from non-LDC borrowers will be lower than in the past;

(c) That prospective borrowers follow sound macroeconomic and debt management policies, in order to maintain their "credit-worthiness" in international financial markets; and

(d) As now seems even clearer than a few months ago, that the oil exporters will continue to have large surpluses, and thus be net suppliers of funds to the international financial markets, and of real goods and services to the rest of the world.

We will return to the issues of international bank credit in Chapter III, where the position of the U.S. banks is examined in some detail.

#### *Use of resources: Consumption or development*

The question is frequently raised as to whether the borrowing countries are using the additional resources provided by foreign

lending to add to domestic investment or to finance consumption, and, if the former, whether the investment is productive, i.e., will it enable domestic output to expand so that the debt can be serviced without having to reduce consumption (standard of living).

Like many other economic questions, this one is hard to answer because it involves comparing actual, or realized, investment and consumption with what those magnitudes would have been in the absence of the capital inflow. And that in turn depends largely on how the balance in international payments would have been achieved if the borrowing had not occurred—whether by increasing exports and/or using reserves on the one hand, or much more likely by reducing imports on the other. And, in the latter case, what means would have been used: depressing the economy, use of direct controls, exchange depreciation—or some combination of the three?

Solomon, in his Brookings paper, concludes that, since all but 2 of the 10 countries he studied did not show a decline in the ratio of investment to total use of resources (use of resources = domestic output plus imports minus exports), the borrowing countries had not used external resources to finance consumption. This issue can only be addressed on an individual country basis, and there is no room in this paper to do so. But a country's net foreign assets are part of its capital stock, even though they are not as productive in terms of creating income as domestic investment.<sup>9</sup> Thus is net foreign investment in any given year (which can be measured by the current account balance is negative, it should be deducted from domestic investment to determine what share of the national output has been devoted to investment. On this basis, given the large increase in current account deficits for the group of countries as a whole in recent years, it would be surprising if some countries had not shown an increase in the ratio of consumption to total use of resources. If the ratio of consumption to total (domestic) use of resources (consumption, private and public, plus domestic investment) rises at a time when net foreign borrowing is increasing (current account deficit rising) it would seem appropriate to consider that the increased borrowing is used, directly or indirectly, to finance consumption. The Organization for Economic Cooperation and Development (OECD) staff expressed concern with this problem in a report issued in early 1979 ("External Indebtedness of Developing Countries: Present Situation and Future Prospects") in the following words:

What actually happens, however, is that many developing country borrowers—under economic, social or political pressure to meet basic needs of their populations, as well as possibly due to imprudent economic management overall—use, directly or indirectly, a substantial portion of their net external capital inflow for consumption, i.e. for purposes which have no immediate productive return out of which the future debt service could be paid.

The question can only be intelligently answered on a country-by-country basis. It can hardly be gainsaid that if the foreign financing had not been available, both consumption and investment would have been lower. In this sense therefore the external borrowing did serve in part to finance consumption.

<sup>9</sup> Foreign investment produces only returns on capital to the investing country; domestic investment produces returns both to capital and to the labor associated with its use.

*Private vs. official capital*

As already pointed out, the share of private creditors in the external borrowing of LDC's has been increasing, although many of the extremely poor countries still depend almost exclusively on credit from official sources, at least for their long-term borrowing. Clearly there are many LDC's in this latter category that will continue depending for the foreseeable future on official sources for financing their current account deficits, or else the deficits will have to be eliminated at whatever cost. The latter outcome need not be all bad, at least not in all cases. Export-led growth is a phenomenon of relatively frequent occurrence; it is at least possible that the opposite phenomenon also occurs—that the relatively easy access to foreign capital and aid actually deters countries from adopting policies that would enhance the rates of growth of productivity and output, at least in the long run.

Nevertheless, almost all LDC's, the relatively advanced as well as the poor among them, will continue to depend on external capital sources for the foreseeable future, and in relatively large amounts. But even if, for whatever reason, private lenders are unwilling or unable to continue to expand their credits to the LDC's—individually or in total—at something approaching the rate of recent years, it seems highly likely that official sources will be made available in increasing extent—if only for political and humanitarian reasons. Fortunately, there seem to be ample resources available in the international institutions, particularly in the IMF, to meet this objective. And, as indicated elsewhere in this paper, expanded direct official lending by the Organization of Petroleum Exporting Countries (OPEC) countries themselves would be an appropriate development.<sup>10</sup>

*Major individual debtors*

The foregoing comments deal with the LDC debt "problem" in broad aggregate terms. However, by far the larger part of the external debt of the LDC's is concentrated in a relatively small number of countries; with a few notable exceptions, these are among the more advanced. As a matter of information, certain salient data are presented in tables 3 and 4 for 12 countries—out of the 15 whose public and publicly guaranteed debt exceed \$2.5 billion at the end of 1977.<sup>11</sup>

It is beyond the scope of this paper to discuss balances of payments and external debt positions country by country. However, the data in the two tables demonstrate, if demonstration be needed, the importance of examining each country situation in detail, and not drawing conclusions based on aggregate data. The external debt of Pakistan, for instance, is the highest of any country in the table in proportion to exports of goods and services. Yet its income payments are modest, presumably because a large proportion of its debts is on concessional terms. Mexico also has relatively large debts; the ratio of interest to receipts from exports of goods and services is the highest of the countries listed, 24 percent in 1978. Yet, given recent developments in Mexico's petroleum industry, the external debts of that country may

<sup>10</sup> For a strong endorsement of this view, see *World Financial Markets*, op. cit., p. 9.

<sup>11</sup> Three of the 15—India, Morocco, and Zaire—are omitted because of the absence of up-to-date balance of payments data. The long-term external public debt of these three countries at the end of 1978 was \$15.3, \$4.7 and \$2.6 billion, respectively.



be considered less cause for concern than those of other LDC's not so fortunately endowed. Some countries have large private sector debts (not reflected in the table); others have very little. The maturity structures undoubtedly differ from country to country; also the effective interest rates. The ratios of income paid to public debt outstanding, which can be calculated from the data in table 4, vary greatly from country to country—reflecting not only the difference in effective interest rates on public debt, but also the relative importance of private sector debt and public short-term debt, the interest on which is included in the second column of table 4.

TABLE 4.—CERTAIN NON-OIL-DEVELOPING COUNTRIES: EXTERNAL DEBT, 1978

[In millions of dollars]

Country	Debt outstanding end-1978 <sup>1</sup>	Income paid on investments <sup>2</sup>	Ratio to current account receipts <sup>3</sup>	
			Debt	Income
Mexico.....	24,822	2,558	2.37	0.24
Brazil.....	27,223	3,334	1.88	.23
Korea.....	11,992	908	.70	.05
Egypt.....	9,879	396	1.82	.07
Israel.....	9,209	939	1.39	.14
Pakistan.....	7,568	235	4.12	.13
Argentina.....	6,190	(6)	.79	(6)
Peru.....	5,365	507	2.22	.21
Chile.....	4,371	(6)	1.41	(6)
Philippines.....	4,064	439	.86	.11
China (Taiwan).....	2,903	430	.20	.03
Columbia.....	2,833	269	.69	.07
Total.....	116,419	610,015	1.26	6.12
Total all nonoil LDC's <sup>7</sup> .....	150,219	10,137	1.01	.08

<sup>1</sup> Data as of October 1979, supplied by World Bank. Includes public and publicly guaranteed long-term debt only.

<sup>2</sup> Income paid on all foreign investments except direct investments.

<sup>3</sup> Goods and services only.

<sup>4</sup> Does not include publicly guaranteed private debt.

<sup>5</sup> Not available.

<sup>6</sup> Excluding Argentina and Chile.

<sup>7</sup> 1977 data.

Source: Debt outstanding, World Bank. Income on Investments: Balance of payments data supplied by International Monetary Fund. Current account receipts: IMF "International Financial Statistics," various issues, country pages.

In summary, while the external debt of some LDC's is already "unmanageable," there still seems to be room for increasing the total for the group as a whole, especially if inflation continues at its recent pace. Nevertheless, it is scarcely deniable that the ready availability of external finance, particularly from the private sector, has led some countries to overborrow, and to postpone unduly the balance of payments adjustments which sooner or later will prove to have been essential. A strong case can be made, therefore, for a shift to more conditional forms of lending, such as that offered by the IMF, where the availability of funds is directly related to the adoption of appropriate economic policies by the debtor governments.<sup>12</sup> Such policies would be those that lead to better resource allocation, to more rapid balance of payments adjustments, and perhaps to more rational exchange rate policies than have been followed up to now.

<sup>12</sup> One is tempted to draw a parallel between the activities of commercial banks in the 1970's and American investment bankers in the 1920's. As one study of that period put it: "Enticed by the prospect of commissions much higher than those on domestic (bond) issues (front-end fees?) \* \* \* American investment bankers had their agents 'sitting on the doorsteps' of prospective borrowers \* \* \* offering them money and many times persuading them to borrow more than they actually needed." U.S. Department of Commerce, "The United States in the World Economy," 1943, p. 96.

## Other Deficit Countries

The current account balances of the two other groups of "deficit" countries are shown in country detail in table 5. In many cases the deficits not only continued into 1977 but were larger in terms of current dollars than in 1974, the first year of higher oil prices. On the other hand, several countries, notably the United Kingdom, Italy, France, Finland, and Spain, showed substantial "improvement" in 1977 and 1978. The difference in performance among countries must be attributed mainly to domestic policies, even in the case of the United Kingdom where much of the improvement resulted from the availability of North Sea oil. Even though it is axiomatic that so long as some countries have surpluses others must have deficits, it is also true that the distribution of such deficits is greatly influenced—one might almost say determined—by the policies of the countries concerned.

Data on the outstanding external debt of most of the countries listed in table 5 do not exist, although a few of them are included in the World Bank debtor reporting system. And these countries, especially those in the industrialized category, are much more involved in two-way flows of capital than the LDC's. Nevertheless, the change in their net capital position is impressive—a net deterioration of about \$145 billion over the five years.

TABLE 5.—SELECTED COUNTRIES: CURRENT ACCOUNT BALANCES, 1973-78

(In millions of dollars)

Area and country	1973	1974	1975	1976	1977	1978	1974-78
<b>"Other industrial" countries:</b>							
Canada.....	107	-1,487	-4,696	-3,841	-3,930	-4,624	-18,578
France.....	-691	-5,942	-3	-6,048	-3,314	4,016	-11,291
Italy.....	-2,234	-8,039	-556	-2,855	2,285	6,285	-2,880
United Kingdom.....	-2,298	-8,254	-3,932	-1,833	596	495	-12,928
Austria.....	-322	-450	-333	-1,490	-3,003	-4,526	-9,802
Belgium.....	1,153	911	705	-296	-723	-567	30
Denmark.....	-464	-981	-491	-1,909	-1,680	-1,400	-6,461
Norway.....	-365	-1,116	-2,515	-3,790	-4,941	-2,144	-14,506
Sweden.....	1,215	-933	-1,624	-2,389	-2,790	(1)	<sup>2</sup> -7,736
Total, "other industrial".....	-3,899	-26,291	-13,445	-24,451	-17,500	-2,465	<sup>3</sup> -84,152
<b>More developed primary producers:</b>							
Finland.....	-389	-1,215	-2,183	-1,165	-151	578	-4,136
Greece.....	-1,191	-1,241	-1,050	-1,140	-1,277	-1,255	-5,963
Iceland.....	-13	-155	-144	-19	-48	22	-344
Ireland.....	-234	-671	-24	-262	-287	-989	-2,233
Malta.....	36	13	66	62	47	83	271
Portugal.....	341	-830	-832	-1,252	-961	-572	-4,447
Spain.....	585	-3,233	-3,488	-4,287	-2,458	-1,807	-11,659
Turkey.....	615	-634	-1,848	-1,964	-3,419	-1,332	-9,197
Yugoslavia.....	485	-1,186	-1,036	154	-1,603	(1)	<sup>2</sup> 3,671
Subtotal.....	235	-9,152	-10,539	-9,873	-10,157	-1,658	<sup>4</sup> -41,379
Australia.....	465	-2,627	-603	-1,419	-2,512	-3,888	-11,049
New Zealand.....	212	-1,128	-1,400	-751	-630	-395	-4,304
South Africa.....	-90	-1,457	-2,444	-1,871	512	-1,623	-3,637
Subtotal.....	587	-5,212	-4,447	-4,041	-2,630	-2,660	-18,990
Total more developed primary producers.....	822	-14,364	-14,986	-13,914	-12,787	-4,318	<sup>4</sup> -60,369
Grand total.....	-3,077	-40,655	-28,431	-38,365	-30,287	-6,783	<sup>5</sup> -144,521

<sup>1</sup> Not available.<sup>2</sup> 1974-77 only.<sup>3</sup> Excluding Sweden for 1978.<sup>4</sup> Excluding Yugoslavia for 1978.<sup>5</sup> Excluding Sweden and Yugoslavia for 1978.

Source: International Monetary Fund, "International Financial Statistics," various issues.

In the absence of debt statistics, one can get a rough measure of "burden" by comparing the income paid to nonresident investors (other than direct investors) to gross receipts on goods and services account, although this item includes dividends on portfolio investments, as well as interest. As shown in table 6, in most cases these ratios are relatively modest. If allowance were made for income received on similar investments abroad, they would be even more modest; indeed, in some cases, income received was larger than income paid.

TABLE 6.—SELECTED COUNTRIES: INCOME PAID ON FOREIGN INVESTMENTS<sup>1</sup> 1978

[In millions of dollars and percent]

Area and country	Income	Exports of goods and services	Ratio
<b>"Other industrial" countries:</b>			
Canada.....	\$5, 179	\$54, 225	9. 6
France.....	6, 391	107, 582	5. 9
Italy.....	3, 126	74, 298	4. 2
United Kingdom.....	5, 185	100, 089	5. 2
Austria.....	1, 423	19, 305	7. 4
Belgium.....	6, 246	56, 281	11. 1
Denmark <sup>2</sup> .....	523	12, 897	4. 0
Norway.....	1, 360	16, 979	8. 0
Sweden <sup>3</sup> .....	781	22, 714	3. 4
<b>Total, "other industrial".....</b>	<b>30, 214</b>	<b>464, 370</b>	<b>6. 5</b>
<b>More developed primary producers:</b>			
Finland.....	809	10, 607	7. 6
Greece.....	272	5, 609	4. 8
Iceland.....	48	729	6. 6
Ireland.....	334	4, 158	8. 0
Malta.....	4	736	0. 5
Portugal.....	208	3, 468	6. 0
Spain.....	1, 072	17, 152	6. 1
Turkey.....	384	3, 088	12. 4
Yugoslavia.....	338	7, 745	4. 4
<b>Subtotal.....</b>	<b>3, 469</b>	<b>53, 292</b>	<b>6. 5</b>
Australia.....	634	16, 825	3. 8
New Zealand.....	363	4, 249	8. 5
South Africa.....	931	15, 267	6. 1
<b>Subtotal.....</b>	<b>1, 928</b>	<b>36, 341</b>	<b>5. 3</b>
<b>Total more developed primary producers.....</b>	<b>5, 397</b>	<b>89, 633</b>	<b>6. 0</b>
<b>Grand total.....</b>	<b>35, 611</b>	<b>554, 003</b>	<b>6. 4</b>

<sup>1</sup> Excluding direct investments.<sup>2</sup> 1976.<sup>3</sup> 1977.

Source: International Monetary Fund, Data Bank: "International Financial Statistic," various issues, country pages.

Most of the countries listed in tables 5 and 6 are not presently considered eligible for official long-term financing (except, of course, export credits). Thus a reduction in the availability of credit from private sources could force them to adopt domestic policies (including exchange rate policies) that would reduce or eliminate their deficits. Any reduction in the combined current account surplus of the oil-exporting countries and other surplus countries, such as occurred in 1978, will tend through the operation of market forces to force other countries as a group to reduce their deficits. In any event, over the longer run, countries in more advanced stages of development should be expected to rely more and more on domestic savings to finance investment, or even to provide capital on balance to the lesser devel-

oped areas of the world. The sooner this is achieved, the easier will be the financial problems of the latter; they will not be competing in international financial markets with borrowers that often will be regarded by potential lenders as more credit-worthy.

As shown in table 7, virtually all the financing of the countries in the "more developed primary producers" group was obtained in private financial markets abroad, presumably mainly in the Euro-banking and Eurobond markets. Similar data on a consolidated basis are not available for the "industrial" countries shown in tables 5 and 6, but presumably all, or virtually all, of their financing needs have been met in the private capital markets.

TABLE 7.—MORE DEVELOPED PRIMARY PRODUCING COUNTRIES: SOURCES AND USES OF FUNDS, 1974-77

(In billions of dollars)

	1974	1975	1976	1977	Total 1974-77
Uses of funds, total .....	14.7	15.1	14.6	13.2	57.6
Current account deficit .....	14.7	15.1	13.9	13.2	56.9
Increase in reserves .....			.7		.7
Sources of funds, total .....	14.7	15.1	14.6	13.2	57.6
Use of reserves .....	3.9	2.4			6.3
Public and publicly guaranteed long term borrowing, net .....	2.2	3.9	3.1	2.9	12.1
From official sources .....	.5	.5	1.0	.9	2.9
From private banks .....	1.7	3.4	2.1	2.0	9.2
Other long term borrowing .....	4.7	5.4	6.3	6.6	23.0
Other short term borrowing, net .....	.7	.9	.8	( <sup>1</sup> )	2.4
Direct investment, net .....	2.3	1.3	1.5	1.8	6.9
All other sources, net .....	.9	1.2	2.9	1.9	6.9

<sup>1</sup> Included in "all other sources, net".

Source: International Monetary Fund, "Annual Report," 1978, p. 29. Table not repeated in 1979 report.

The cumulative 1974-78 current account deficit of the Eastern European bloc (excluding Romania and Yugoslavia which are included in "more developed primary producers" in the IMF data) is estimated at \$45 billion (see table 1). According to BIS estimates, total Eurocurrency claims on Eastern Europe rose by about \$23 billion over the 4-year period, to \$31 billion at the end of 1978. On that date, total claims of banks in the G-10 countries and Switzerland, including Eurocurrency claims, amounted to \$48 billion, of which only about \$6 billion was held by U.S. chartered banks. There have also been a few hundred million of bonds offered in Western markets.

*Summary.*—The sharp increase in oil prices in 1979-80 will undoubtedly place renewed strain on the external position of many of the countries discussed in this section. However, with the major exception of Turkey (a country which many would classify among the LDC's), most of the countries listed in Table 6 either will be able to finance their enlarged deficits in international financial markets, or will be able to make any necessary adjustments without undue economic loss (beyond the loss resulting from the oil price rise itself). The same should be true for the Eastern European bloc, which has the additional advantage of being essentially self-sufficient in energy. However, as in the case of the LDC's, concern has been expressed in some quarters as to the size of the area's outstanding debt to the West, particularly to commercial banks.

*The United States—A New Debtor?*

The international investment position of the United States has begun to change in recent years; whether this is a permanent change, or only a temporary aberration, remains to be seen.

Until World War I, the United States was a net debtor to the rest of the world in that foreign investments in (and claims on) the United States exceeded in value similar claims of the United States on the rest of the world. Since the reversal of that position during World War I, the net creditor position continued to grow, except for a brief interruption in 1971-72, until 1976. By the end of 1976 our international assets (including gold valued at par) exceeded our international liabilities by \$80 billion, at \$346 billion and \$266 billion respectively.

In 1977, the net position deteriorated by about \$10 billion (in spite of a drop of about \$5 billion in the market value of U.S. securities held by foreigners), but 1978 showed a small improvement, \$4 billion.<sup>13</sup>

Our still strong creditor position is also reflected in large net receipts of income on international investments, about \$16 billion (or more than 1 percent of our national income) for the year 1976. In spite of the fact that our net creditor position declined slightly in 1977-78, net income increased by another \$5.7 billion (including undistributed profits on direct investments).

In spite of this large creditor position, whether measured by balance sheet or income data, concern has been expressed in some quarters regarding the recent rapid increase in foreign claims on the United States, private and official. The following concerns are among those frequently heard.

1. The danger that foreigners may be acquiring too large a voice in the management of the American economy through: (a) takeovers of existing companies; (b) the establishment of new plants; (c) acquisition of significant minority interests in publicly owned companies; and (d) purchases of real estate, especially agricultural properties.

2. The fear that large holdings of liquid assets (especially bank deposits and official holdings of Treasury debt) are a potential threat to market stability, both the market for domestic securities and the market for foreign exchange.

3. Even the inflow itself, considered as a flow, and independent of the effect of our net creditor position, is not seen as being unambiguously favorable. For one thing, the Federal Reserve has, at least at times, regarded capital inflows as a threat to its ability to maintain a restrictive monetary policy stance (see chapter III). Also the capital Inflow, especially of official funds, has prevented the dollar from depreciating further than it has, thus contributing to the sharp deterioration in our current account (but also, be it noted, helping to reduce the impact of the depreciating dollar on the domestic price level). This deterioration in the current account in turn is seen as a drag on the economy by draining purchasing power; although many of the imports, especially petroleum paradoxically, are essential to the maintenance of economic output and consumption.

4. Currently (August 1979) about 19 percent of Treasury debt held outside official accounts is owned by foreigners. This "captive" market

<sup>13</sup> If the end-1978 gold stock were valued at a recent market price, say \$500 per ounce, U.S. international assets would have exceeded foreign assets in the United States by an additional \$128 billion on that date.

for Treasury debt presumably tends to reduce the interest rate on the public debt relative to that on private debt<sup>14</sup> which has some implications for resource allocation. If the Treasury deficit were taken as given, but there were no net foreign purchases of Treasury debt, private savings would have to be used to finance the Treasury, leaving less available for private financing. The overall level of interest rates, and possibly total savings, would be higher, but the difference between public and private interest rates would probably be smaller.

While each of these concerns may have some measure of validity, no official action has been taken to prevent nonresidents from investing in the United States (except for Federal Reserve actions discussed in chapter III). Indeed, cooperative efforts to support the dollar beginning in late 1978 could have the opposite effect; by sharing the exchange risk we have presumably encouraged foreign monetary authorities to continue their support for the dollar. (U.S. drawings on swap facilities, like other foreign official support, result in an increase in foreign official claims on the United States.)

#### *Foreign liquid dollar holdings—A threat to market stability?*

As of September 1979, foreign official claims of a reserve nature on the United States amounted to \$149 billion; other liabilities to foreigners reported by banks totaled \$106 billion.<sup>15</sup> These figures exclude private holdings of corporate stocks and bonds and direct investments. They represent, for the most part, assets held in fairly liquid form—liquid in the sense that the individual holders can in principle dispose of their holdings at any time, although with some danger of capital loss, investing in other assets within or outside the United States.

The possibility that such asset switching might happen on a large scale is sometimes seen as a threat to: (a) the government securities market; (b) the banking system (if deposits are withdrawn); and (c) the exchange value of the dollar (if for instance, declining confidence in the dollar's value should lead to a flight into foreign currencies).

Such fears are not based on historical events, notwithstanding the so-called exchange crisis of the fall of 1978 and subsequent events. During the seven years 1971–77, foreigners increased their direct and portfolio investments in and other claims on the United States by \$213 billion. This included \$111 million of official holdings of dollars representing part of the official reserves of the countries concerned—dollars which were acquired, in substantial measure, not so much because countries wished to add to their reserves (although such a motive accounted for part of the rise), but because of efforts on the part of foreign authorities to keep the exchange value of their currencies from rising against the dollar. The remaining \$102 billion represented mainly the acquisition of U.S. assets by private foreign investors.<sup>16</sup>

#### *Pressure on dollar exchange rate*

During the period since the suspension of gold payments (August 1971) the dollar has suffered recurrent periods of pronounced weakness,

<sup>14</sup> See Federal Reserve Bulletin, April 1979, p. 302.

<sup>15</sup> Federal Reserve Bulletin, November 1979, pp. 58–59. Official holdings were down from a year-end peak of \$162 billion, which reflected the massive support operation of November–December, but up from the low point of \$141 billion at the end of May.

<sup>16</sup> Official non-reserve assets, mostly advance payments on military procurement contracts, accounted for \$5 billion of the \$102 billion increase.

and overall depreciated about 29 percent against the world's major currencies between December 1970 and October 1978. Presumably the depreciation would have been greater, at least during the periods of weakness, if it had not been for the official support represented by the \$111 million mentioned above (plus additional official acquisitions of Eurodollars). In spite of this evident weakness and official support of the dollar, foreign confidence in the currency and the U.S. economy was sufficiently strong to stimulate the large inward flow of private capital which has been registered; indeed, the inflow is often attributed to the depreciation, which has made U.S. assets cheaper than before in terms of foreign currencies. While it is possible to imagine scenarios that would be less favorable to the dollar than the last seven years have been, and again in spite of the sharp break in the dollar's value in the late summer of 1978 and recurrent periods of weakness in 1979, several factors appear to militate in favor of the dollar—at least over the longer run.

Unless U.S. residents are at the same time willing to reduce their claims on the rest of the world, there is literally no way in which the rest of the world, as a whole, can reduce its claims on the United States, except to the extent that the United States has a surplus on current account (goods, services, and private and official unilateral transfers). In a sense, the United States, vis-a-vis the rest of the world, can be compared to a national banking system, with the rest of the world as its depositors. Shifts in the ownership of the deposits may occur, but the total amount of deposits in a banking system cannot change unless the debtor (the banking system) reduces its assets (loans and investments) by "selling them back to the debtors" (who are also depositors). In the same way, the United States can reduce its debt to the rest of the world only by transferring assets to the rest of the world. This can be done in only two ways. One is by running a balance of payments surplus on current account; the other is by reducing our investments in foreign countries. Either of these developments, especially the first, would probably be welcome under present circumstances; this being the case, there is nothing to fear from a withdrawal of foreign capital; except, of course, that individual foreign investors (private or official) may attempt to withdraw their funds and, in the process, tend to drive down the dollar exchange rate. The potential seller could be either official or private.

#### *Recent reserve diversification*

Official holders of dollars are likely to be sellers on a large scale only if they are incurring balance of payments weakness and are attempting to keep their own currencies from depreciating. If this should happen in any of the countries or groups of countries with previous large surpluses, as it did in the early months of 1979, and as it has to Japan throughout most of 1979, the development would almost certainly be accompanied by an improvement in the U.S. balance of payments; in any event the weakening of foreign currencies would be reflected in a higher dollar exchange rate (though not so high as if the foreign currencies were not being supported by dollar sales). But any combination of weakness in the surplus currencies (yen, DM, Swiss franc) and reductions in those countries' foreign exchange reserves would be welcome evidence of a movement toward balance in the international accounts—and, up to a point, no worry to the United States.

Currently, it is apparent that some official holders (presumably mainly OPEC members and some LDC's) are undertaking to diversify their reserves by moving from dollars to some other currency, such as the mark or yen. Such a development has been and presumably will continue to be resisted, or actually prevented, by officials of the countries concerned; no one seems to want to assume the responsibilities of becoming a reserve currency country.<sup>17</sup> Also, the world in general would be ill served by such a development, whatever the apparent short-run gain to the diversifiers. It would further weaken the dollar, at the expense of all existing holders (including official holders, except when protected by swap agreement or similar arrangements) of that currency. Moreover, the problems of operating an international monetary system with multiple reserve assets (gold/dollar/sterling), with the possibility of speculative shifts from one asset to another, have been amply demonstrated in the postwar period. Small countries may retain the luxury of shifting their reserves, but it is unlikely that the international community would tolerate any large shifts of official reserves out of dollars into some other currency.<sup>18</sup>

Even the establishment of a "substitution account" in the International Monetary Fund or the creation of a European currency unit would not by itself reduce total international holdings of dollars, though they might be more stable than before. The IMF or the European monetary authority would acquire the dollars which would otherwise have been held directly by national monetary authorities.

Finally, and most importantly, foreign official holders of dollars have a strong interest in maintaining the purchasing power of their assets (in terms of other currencies) by upholding the exchange value of the dollar. Unless they felt that their efforts would be in vain, a conclusion that they might reach at some point if official dollar holdings continued to rise at too rapid a pace, they would presumably not willingly sell dollars except when they judged it necessary to support their own currencies. Even under the arrangements announced on November 1, 1978, the foreign authorities will accumulate claim on the United States whenever official support of the dollar in the exchange market occurs. The only change from unilateral support by foreign authorities is that the U.S. authorities now bear part of the exchange risk. Incidentally, it might be noted that, in spite of the sharing of the exchange risk, the foreign authorities continue to receive market rates of interest on their holdings. However, U.S. Government bonds issued to private purchasers in foreign capital markets carry interest rates appropriate to those markets.

#### *Private capital flight*

There is, at least in principle, an ever-present danger that *private* foreigners might, lemming-like, be moved to withdraw capital from the United States on a large scale. However, this possibility too does

<sup>17</sup> However, there is no practical way that any country can prevent another from holding reserves in the form of Eurodeposits denominated in the former's currency.

<sup>18</sup> The foregoing paragraph was written before the author had seen the proposal for "off-market diversification facilities" advanced by Morgan Guaranty in the December 1979 issue of *World Financial Markets*. Clearly such a mechanism would obviate some of the difficulties mentioned. On the other hand, it would place an exchange risk on debtors which most countries would be quite unwilling to assume; many of the countries concerned (notably Japan, Germany, and Switzerland) are already holding large amounts of dollars on an uncovered basis. Furthermore, there seems to be no good reason to provide reserve assets just to supply the desire of reserve holders for increased earnings on their reserve.



not seem to pose a major threat to the U.S. economy. The following points support this view:

1. For reasons given above, and so long as there is no official intervention or repatriation of private U.S. capital, private foreigners as a group cannot withdraw funds from the United States except to the extent that we have a current account surplus.

2. If, in attempting to do so, they drive down the price of the dollar precipitately, the monetary authorities are likely to intervene, as they have in the past. To the extent they do, there is no net outflow of capital; foreign official investment in the United States is substituted for private investment. (Such a development could, however, have an impact on U.S. financial markets, since the asset preferences of the two groups of foreigners are dissimilar.)

3. So long as international transactions on both capital and current account remain reasonably free, currency depreciation cannot go too far too long; it becomes increasingly attractive to convert liquid holdings of the currency into real assets (goods and services) or into capital assets (securities, direct investment). This expectation regarding exchange rate developments may be thwarted in the short run by the familiar J-curve effect, and perhaps by some short-run destabilizing speculation, as decline in value of a currency may stimulate the expectation of further decline. And, of course, if inflation were allowed to accelerate at a more rapid rate than elsewhere, depreciation could become continuous. Official intervention may well be justified to counter short-run unwarranted speculation against the dollar. But what must not be lost sight of is that all such support worsens the net international investment position of the country.

4. In any event, it must be kept in mind that events that would trigger a large outflow of foreign capital would tend to trigger a large outflow of domestic capital as well. Both flows should, however, be amenable to the same types of general policy measures. In utter extremity (e.g., war) exchange controls may be invoked; to be successful they would have to apply to flows of funds owned by residents as well as those owned by nonresidents.

#### *Monetary effect of capital flows*

But the important thing is that capital flows, official or private, do not have a direct effect on the assets of the Federal Reserve System nor, therefore, on the reserves of the domestic banking system. The United States "overall" deficit, as measured by the accumulation of official claims on the United States results only in the shift of financial assets from domestic to foreign ownership (since, except for gold, the United States has little or no reserves of its own to finance a deficit).

In view of the foregoing considerations, it does not appear that recent capital flows, and the concomitant increase in our external indebtedness, have any serious adverse implication for the United States economy. Even more so than in the case of the LDC's, it does not appear—absent a severe financial crisis—that our creditors would demand repayment in their own or some other foreign currency. And the interest burden certainly is not great—total income on all foreign investment in the United States (excluding direct investment), currently running at an annual rate of about \$25 billion, is slightly more than one percent of GNP, and about equal to income received on

similar (i.e., non-direct) U.S. investments abroad. On the other hand, it has been rising rapidly partly because of the sharp increase in the rate on short-term Treasury securities in which most of the foreign reserve holdings are invested. So long as we continue to run a deficit on current account, our net international receipts of investment income will tend to decline, unless rates of return on our investments abroad rise more rapidly than those on foreign holdings in the United States.

### *The Surplus Countries*

Under present institutional arrangements surplus countries have no choice but to accept an increase in their (net) claims on the rest of the world; that is, to "finance" their surpluses. In tables 8 and 9 we show in very brief form how the balances on current account have been financed. The oil-exporting countries, as is well known, have for the most part placed their funds in financial markets, mainly in the United States and Western Europe, including the Eurocurrency markets. Only about \$50 billion of the total of \$180 billion (1974-78) was placed in assets considered "official reserves." Total reserves of the group were reported as \$60 billion at the end of 1978, considerably less than the \$123 billion of liabilities reported by banks in the G-10 countries and Switzerland,<sup>18a</sup> which in turn does not reflect holdings of U.S. Government securities, \$16.5 billion at the end of last year. These figures have not reached the magnitudes broadly anticipated in earlier years, although OPEC price actions taken in 1979 will cause them to rise rapidly again, at least for a while.

As has often been remarked, there is no way the oil countries as a group can withdraw their funds from the rest of the world except in the form of goods and services—a prospect which does not appear unwelcome to most industrialized countries, judging by the official and private efforts that are being made to capture the markets in the oil countries. The threat to shift balances from one currency to another remains, but recent measures of cooperation among the major debt countries to the oil producers provide renewed evidence that such shifts need not prove troublesome.

TABLE 8.—OIL EXPORTING COUNTRIES: USE OF CASH SURPLUSES, 1974-78

[In billions of dollars]

	1974	1975	1976	1977	1978	1974-78
Investment in:						
United States.....	13.0	9.5	12.0	9.3	1.8	45.6
Euro-currency markets.....	22.5	8.0	11.0	12.0	2.5	56.0
United Kingdom.....	7.5	3	-1.0	.8	-.3	7.3
Other countries.....	12.5	16.9	16.7	12.9	1.5	60.5
International organizations.....	3.8	4.3	1.8	.5	-.5	9.9
<b>Total.....</b>	<b>59.3</b>	<b>39.0</b>	<b>40.5</b>	<b>35.5</b>	<b>5.0</b>	<b>179.3</b>
Memorandum: Current account balance (table 1)....	66.0	32.0	38.0	30.0	4.0	170.0

<sup>1</sup> Includes grants to less developed countries of about \$2-\$3,000,000,000 a year.

Source: U.S. Treasury Department, press release, July 18, 1979. Statement of Assistant Secretary C. Fred Bergsten before the Subcommittee on Commerce, Consumer and Monetary Affairs, Committee on Government Operations, House of Representatives.

<sup>18a</sup> See Bank for International Settlements, Forty-Ninth Annual Report, p. 111.

TABLE 9.—GERMANY, JAPAN, SWITZERLAND, AND NETHERLANDS, BALANCE OF PAYMENTS, 1974-78

[In billions of dollars]

	Current account surplus	Increase in reserves <sup>1</sup>	Net capital outflows <sup>2</sup>
Germany.....	30.4	19.5	10.9
Japan.....	26.4	21.0	5.4
Switzerland.....	15.2	13.3	1.9
Netherlands.....	5.9	.7	5.2
Total.....	77.9	54.5	23.4

<sup>1</sup> Sum of annual changes.<sup>2</sup> Derived as a residual.

Source: IMF, International Financial Statistics, various issues.

*Threat to the dollar?*

Certain recent events have reduced the apparent "threat" to the U.S. dollar of these official holdings. One has been the virtual disappearance of the combined surplus formerly registered by the four industrialized nations designated "surplus countries" in table 1; indeed both Japan and Switzerland had significant reserve losses in the first half of 1979. Secondly, to a greater extent than formerly, the reserves of major industrial countries held in the form of claims on the United States will contain an exchange guaranty, since they will have resulted from swap drawings. (U.S. drawings from the International Monetary Fund also contain an exchange rate guaranty feature, being denominated in Special Drawing Rights (SDR's).) While the guaranty feature may lend more stability to reserve holdings, when and if the "guaranteed" reserve balances are reduced (because the holders are threatened with overall balance of payments deficits and do not wish to suffer exchange rate declines), it may require more dollars (and hence more real goods and services) to "repay" these reserve debts than if they had continued to be denominated solely in dollars. But the opposite could occur—(and did occur in the spring of 1979);<sup>19</sup> if the dollar is stronger vis-a-vis the specific currencies involved (DM, yen, Swiss franc, SDR) than the dollar equivalent of the debt will be lower at the time the drawings occur. Similar questions arise with respect to Treasury bonds payable in foreign currencies which, as stated above, are being issued at interest rates prevailing in the creditor markets—so far, lower than U.S. rates.

The issues involved are too detailed and complex for this paper. The United States dollar became a reserve currency not because of overt policy choices by the U.S. authorities, but because for a long time foreign countries freely chose to convert dollars into gold. After such conversions were no longer possible, at first de facto and, since 1971, de jure, the only choices available to surplus countries have been to increase foreign exchange reserves (with dollars or Eurocurrencies the only effective possibilities), to let exchange rates rise (the dollar depreciate) even more than has occurred, or to set up systems of rigid controls which would probably not be effective.

The system is clearly in the process of evolution, but the basic issue remains that of financing versus adjustment. Will some countries continue to prefer financial assets (claims on the rest of the world)

<sup>19</sup> See Federal Reserve Bulletin: September 1979, p. 723.

to real goods and services, while others remain net absorbers of goods and services (albeit somewhat unwillingly, at least at times) and thus increase their net debts to the rest of the world?

### III. THE ROLE OF U.S. COMMERCIAL BANKS

Perhaps no aspect of the recent growth in international indebtedness has received more attention from government officials, academicians, and the public at large than the role of commercial banks, especially U.S. banks. Previous episodes of large scale international lending, such as occurred in the 19th century and in the 1920's, were characterized chiefly by large offerings of foreign securities to the general investing public. Banks were important purchasers of such securities, but the bonds were acquired as investments only. While the banks often acted as underwriters of the securities (a practice outlawed in the United States by the banking reforms of the thirties), direct loans to foreign clients (except for short-term trade and acceptance credits) were virtually unknown.

Commercial banking has of course changed in many ways in the last 30 years. Among the more important of these changes has been the growth of term lending; in turn facilitated, from the banks' point of view, by the advent of so-called flexible or floating rate loans. Another major innovation has been offshore or Eurocurrency banking, under which loans and deposits are booked at foreign branches or affiliates of the bank. The growth of this offshore banking market, which has been copiously documented and analyzed by many observers, has been a major factor in the expansions of international indebtedness. Offshore branches have provided an efficient facility at which typically neither depositors nor borrowers are residents of the home country of the bank or of the country where the branch is located.

#### *Explosion in international lending*

The rapid growth of international bank lending is dramatized by U.S. experience. In 1965, total foreign assets of U.S. banks on the books of their U.S. offices, excluding claims on their own foreign branches, amounted to only about \$9 billion. In addition, their oversea branches reported assets of \$5 billion, excluding claims on other offices of each reporting bank, making total foreign claims of \$14 billion.

Growth of foreign claims at the home offices of U.S. banks was restrained by the Federal Reserve System under the balance of payments programs in effect from 1965 to early 1974. However, operations at foreign branches were excluded from this program since they did not directly enter the U.S. balance of payments statistics. The unsurprising result was a rapid increase in the number of, and in the business at, overseas branches of U.S. banks, plus a much slower growth at the domestic offices. By the end of 1973, just before the controls were lifted, total foreign claims at U.S. offices were \$13 billion and claims at oversea branches \$93 billion, for a total of \$106 billion (again excluding interoffice claims, but not claims of one U.S. bank on the non-U.S. branches of another U.S. bank). This represented an average rate of expansion of about 29 percent per annum. By comparison, total world trade as measured by world export rose at an average annual rate of 15 percent during the same period.

This period of rapid expansion coincided with the breakdown of the Bretton Woods system of (relatively) fixed exchange rates. Many observers had feared that a system of flexible exchange rates, even the less than fully flexible system that has prevailed since 1973, would inhibit international capital flows by increasing exchange risks. However, such has obviously not so far been the case, at least with respect to bank operations. Of course, the banks themselves do not usually incur an exchange risk, but their depositors and borrowers often do, in the sense that their lending and borrowing is denominated in currencies other than their own.

As a matter of fact, in the 5 years ending in 1978, the rate of growth of U.S. bank claims on nonresidents did slow to an annual rate of 21 percent, about equal to the rate of growth in world trade during the same period. But in absolute terms the rate of growth was much faster—\$34 billion a year compared to \$12 billion in the earlier period. And in both periods, the rate of growth of foreign claims far exceeded the rate of growth of domestic assets, which was 10 percent in the earlier period and 8.4 percent in the latter. In 1978, however, claims of U.S. banks on non-U.S. residents rose 13 percent, approximately the same rate as their domestic claims.

### *Factors stimulating foreign lending*

Various reasons have been offered for this explosion in international bank lending. For one thing, it may simply be part of the increasing internationalization of business activity in general in the postwar period—multinational banks and multinational corporations growing together in a symbiotic relationship. The expansion of official international reserves resulting from huge imbalances in international payments both before and after exchange rate floating, and the placement of large amounts of such funds in national and offshore (“Euro”) banking markets represents another stimulative factor.<sup>20</sup> The frequent use of expansionary monetary policies to counteract domestic recessionary tendencies has probably also led banks to use their enhanced lending power in part to extend credits abroad.

Further, it may be that foreign lending, especially lending at foreign branches, is seen as more profitable than domestic lending. Deposits at foreign branches are exempt from reserve requirements. Thus, U.S. banks could achieve a wider gross margin on their Eurocurrency business, while at the same time offering a narrower spread between lending and borrowing rates at their foreign than at their domestic offices. In any event, for many of the largest banks, faced with limits on domestic expansion imposed by institutional arrangements and/or monetary policy, international business opened the only door available to rapid growth.

It may also be possible that worldwide inflationary trends have served to reduce what might have been normal inhibitions on borrowing, in times of greater price stability, especially on borrowing repayable in foreign currencies. The general acceptance in more advanced countries of the political and economic desirability of aiding economic development in the “poorer” countries may also have had a significant, if unmeasurable, influence.

<sup>20</sup> At the end of 1978, according to the International Monetary Fund (Annual Report, 1979, p. 59), official holdings of foreign exchange stood at \$288 billion equivalent, up from \$45.4 billion eight years earlier, an increase of 26 percent per year. Of the 1978 total, at least \$81 billion was held in the Eurocurrency markets.

Whatever the causes of the expansion, it has raised and continued to raise various questions relating to the operation of the U.S. financial system. Some of these issues are adumbrated in the following pages, not necessarily in the order of their importance.

### *Foreign vs. Domestic Role*

One question that has sometimes been raised is whether the overseas activities of U.S. banks have detracted from the ability of the system to satisfy the credit or other banking needs of domestic customers. While no quantitative evaluations of this question have been found, there are certain a priori reasons for believing that the answer is "no" or, at worst, "very little."

In the first place, the foreign business of the U.S. banking system is concentrated in a small number of very large banks. Ten bank holding companies, with total consolidated assets in excess of \$21 billion each, reported total "international" assets of \$218 billion at the end of 1978 (see table 10)—equal to 79 percent of total U.S. bank claims on non-U.S. residents on that date. (The two figures are not exactly the same, definitionally, but are roughly comparable.) All 10 are large money market banks, although some of them do a significant volume of retail business. Domestic customers of such banks are typically large national firms, with access to credit from a variety of sources, including so-called regional banks. Therefore, even if such banks had restricted credit to their domestic customers to make foreign loans (and there is no systematic evidence to support the case that they have), it seems likely that the customers could have obtained the needed credit from other sources. It is possible, of course, that these large banks draw funds from smaller ones and employ the funds for overseas lending, either directly through the loan syndication process, or indirectly by attracting correspondent balances. So far as the writer is aware, there is no evidence that this has happened on a large scale. The major participants in syndicated foreign loans are the large international banks themselves, and correspondent balances are related mainly to services extended by the debtor to the creditor bank.

TABLE 10.—10 MAJOR BANK HOLDING COMPANIES: INCOME AND ASSETS, 1978

	Income				Assets			
	Total	Inter- national (million)	Do- mestic	Inter- national + total (percent)	Total	Inter- national (billion)	Do- mestic	Inter- national + total (percent)
1. BankAmerica Corp.....	514	\$167	347	32	194.9	\$38.5	56.4	41
2. Citicorp.....	482	346	136	72	187.2	56.2	31.0	64
3. Chase Manhattan Corp.....	197	105	92	53	61.2	31.6	29.6	52
4. Manufacturers Hanover Corp.....	182	95	87	52	38.4	18.8	19.6	49
5. J. P. Morgan & Co., Inc.....	267	136	131	51	37.7	21.3	16.4	56
6. Chemical New York Corp.....	112	56	56	50	32.8	14.3	18.5	44
7. Continental Illinois Corp.....	169	54	115	32	31.0	12.1	18.9	39
8. Bankers Trust New York Corp.....	83	56	27	67	25.9	12.2	13.7	47
9. First Chicago Corp.....	131	21	110	16	24.1	8.5	15.6	35
10. Security Pacific Corp.....	133	21	112	16	21.6	4.4	17.2	20
Total.....	2,270	1,057	1,213	47	454.8	217.9	236.9	48

<sup>1</sup> Year-end position allocated between domestic and international on basis of average position during year.

<sup>2</sup> Allocation based on income before tax.

<sup>3</sup> Allocated on basis of income before "general corporate expenses."

Source: Annual Reports to shareholders. International presumably includes overseas U.S. areas; i.e., Puerto Rico, Guam, etc., Income: Net income after tax, before income (loss) on securities transactions and taxes related thereto.

Secondly, as a practical matter, the great bulk of the foreign lending by the U.S. banking system has been matched by foreign deposits, as pointed out by Federal Reserve Governor Wallich.<sup>21</sup> This is particularly true of the Eurocurrency operations and, to a lesser extent and with some cyclical variations, of lending from the home offices as well. In any event, net capital flows of all kinds in a given year are the result of a large number of interacting forces; too much importance cannot be attributed to flows through, or the net position of, a particular channel such as the commercial banks.

Finally, and perhaps most importantly, the domestic loans and deposits of the banking system are more or less direct targets of monetary policy. So far as is known, the Federal Reserve System has not been seriously inhibited from achieving its targets by the banks' freedom to make foreign loans. Under some circumstances, however, the efficacy of monetary policy in achieving purely domestic objectives is probably inversely related to the degree of freedom of capital—not just bank capital—to move internationally (see below).

### *Foreign Lending: Bank Safety and Earnings Stability*

Considerable concern has been expressed, in both private and official circles, for the "soundness" of bank loans to foreigners, and the possible threat to bank stability, and even solvency, if widespread defaults should occur. The disastrous experience with foreign lending in the twenties, which led to wholesale defaults in the thirties (especially by Latin American countries and Germany) is frequently mentioned, along with the possibility that some countries may already be overborrowed. The adequacy of bank supervision has been questioned, particularly in relation to the business done at the foreign branches and subsidiaries of U.S. banks. The question has been raised as to whether a formal limit should be placed on the amount of money one bank is allowed to place in a single country, presumably some given ratio to the bank's capital.

The figures themselves are impressive enough; of the 10 banks shown in table 10, all but one had upwards of 35 percent of their assets involved in their international business, mainly in loans to nonresidents of the United States and placements with foreign banks; the average for the 10 was 48 percent. The proportion of earnings arising from international operations was in some cases significantly higher. International earnings of these 10 banks rose at an annual rate of 25.9 percent from 1970 to 1978,<sup>22</sup> while domestic earnings rose at only a 5.5 percent rate (from 1970 to 1977, 27.9 and 2.2 percent respectively).<sup>23</sup>

International lending (including the placement of deposits with foreign banks, usually classified not as "loans" but as "cash and due

<sup>21</sup> See Risk in Foreign and Domestic Activities of U.S. Banks, in International Banking Operations, Hearings before a Subcommittee of the Committee on Banking, Finance, and Urban Affairs, House of Representatives, 1977, pp. 6 ff. This situation has changed somewhat in 1978-79, as United States institutions, importantly the money market funds, have been placing large sums in the Eurodollar market.

<sup>22</sup> Data for 1970 compiled by Salomon Brothers, reproduced in "International Debt, the Banks, and U.S. Foreign Policy," a staff report prepared for the use of the Subcommittee on Foreign Economic Policy, Committee on Foreign Relations, U.S. Senate, August 1977. Data for 1978 from table 10. International earnings presumably include gains and losses on foreign exchange transactions, a subject not considered in this paper, since it is not directly related to the subject of international debt.

<sup>23</sup> Admittedly, this period includes the recession years of the mid-seventies, when domestic earnings were seriously reduced by large loan losses; in 1977 the rate of growth was virtually the same for domestic and international earnings and in 1978 domestic earnings grew 2½ times as fast as international earnings.

from banks" in bank balance sheets) can contribute to the level and stability of bank earnings, and hence to financial strength, in various ways.

First, the volume of foreign business may vary inversely with the volume of domestic business, particularly if the business cycles in foreign countries are out of phase with the U.S. cycle.

In the second place, since loan loss ratios also tend to vary cyclically, the stability of total net earnings after loan losses might also be improved by international diversification.

Third, the level of earnings may be raised, if the average rate of return per dollar of assets employed is higher abroad than at home. That this is often the case is indicated by the ratios shown in table 10, although it must be remembered that income includes noninterest items and, in particular, "international" income includes commissions (or profits) on foreign exchange transactions, which may be very high relative to the amount of assets employed.

Finally, cyclical variations aside, earnings are affected not only by spreads but loan losses. So far, the latter seem to have been smaller on foreign than domestic loans. A recent study<sup>24</sup> found that only 3 out of 10 banks surveyed reported higher average loss ratios on foreign loans than on domestic loans over the entire period 1962-71. In 1977, 5.8 percent of the outstanding domestic loans of the 17 largest national banks were classified as substandard, doubtful, or loss by bank examiners; the corresponding ratio for foreign loans was 4.8 percent; for the 20 largest state-chartered Federal Reserve member banks the ratios were 8.5 and 2.4 percent respectively.<sup>25</sup>

Therefore, while the situation obviously bears watching, and varies considerably from bank to bank, foreign lending up to the present seems to have had a beneficial effect on both the level and stability of bank profits.

### *Foreign Activities and Monetary Policy*

The extent to which the international activities of U.S. commercial banks infringe on the ability of the authorities to achieve any desired monetary policy stance has been the subject of intense discussion in recent years. Of course, bank activity is only a part, albeit an important part, of the whole universe of international financial flows. As long as private funds are relatively free to move in response to market forces, international capital flows will always be a factor to consider in adopting and effectuating monetary policy. For instance, a restrictive monetary policy may be at least partially frustrated, and hence may need to be applied with greater severity if domestic seekers of credit can readily obtain funds abroad. And attempts to stimulate the economy by expanding credit and lowering interest rates may stimulate an outflow of capital either through the banking system or otherwise, at the expense, at least partially, of the desired expansion in domestic credit and hence in real domestic investment.

<sup>24</sup> See the House Subcommittee hearing referred to in footnote 2, p. 212ff.

<sup>25</sup> Data supplied by Board of Governors of the Federal Reserve System. Two years earlier the spread had been much wider. See U.S. House of Representatives, *International Banking Operations*, op. cit., pp. 222-230. Comparable data for 1978 are not and will not be available, due to a change in the criteria for classifying foreign loans.



### *Use of controls*

So far as the United States is concerned, the second dilemma—that of easing monetary policy without provoking a capital outflow—has been more important than the first.<sup>26</sup> It has led to some discrete official actions designed to prevent capital outflows, and thus to free monetary policy to be as expansive as deemed necessary for domestic reasons. Such actions included:

Operation “twist,” under which the Federal Reserve attempted to change the interest yield curve in the direction of raising short-term rates relative to long-term rates.

Interest equalization tax—a tax on the purchase of foreign securities, designed to reduce such purchases in the presence of interest rate differentials which otherwise would have encouraged them.

Controls on direct investments abroad, at first (1965) voluntary and later (1968) mandatory.

Voluntary restraints on lending abroad by banks and other financial institutions.

The purpose of these programs—all of which have been abandoned—was to “help the dollar” by keeping down the balance of payments deficit. Under the gold exchange standard—operative *de jure* if not *de facto* until July 1971—a deficit was considered a constant threat to the U.S. gold stock. Moreover, it is now clear that the dollar was overvalued in the years prior to 1973; and, given the (justifiable) unwillingness and/or inability to put direct restraints on current account transactions, the capital controls were regarded as a necessary evil. Nevertheless, it can also be argued that a sufficiently restrictive monetary policy could have accomplished the needed balance of payments improvement—presumably at the cost of slower economic growth.<sup>27</sup> Thus, the controls were a reflection of an official conviction that free international capital flows, at least under the existing conditions, would have unduly restricted the ability to adapt monetary policy fully to domestic objectives—a “don’t let the tail wag the dog” approach.

The first dilemma—the case of restrictive monetary policy being frustrated by capital inflows—was never a significant problem for the United States. Unlike every other country in the world, a balance of payments “surplus” did not automatically add to the assets of the central bank (official reserves), to thus expand the reserves of the commercial banking system and, ultimately, domestic bank credit and the stock of money. Instead, if a restrictive monetary policy attracted capital to the United States, or even strengthened the current account balance, the result was a reduction in foreign official holdings of bank deposits or U.S. Treasury securities. Financial assets in the United States were transferred from foreign official to foreign or U.S. private ownership. There was no automatic increase in the total

<sup>26</sup> Although, from time to time, the Federal Reserve has been concerned that the inflow of capital through the U.S. banking system might weaken a domestic anti-inflationary stance. From 1969 to 1977, for instance, there were special reserve requirements related to lending by foreign branches of U.S. banks to their home offices or to other U.S. residents. In late 1979, the Federal Reserve Board imposed a reserve requirement of 8 percent against increments in a bank’s total of so-called “managed liabilities” including, *inter alia*, funds borrowed abroad. This action does not seem to indicate a concern with an inflow of funds from abroad *per se*, but rather with the authorities’ previous inability to effectively restrain the growth of bank credit.

<sup>27</sup> Actually there were times during the control period when banks, or at least many of them, were below their ceilings, presumably because of high domestic loan demand and/or slack loan demand abroad.

volume of such assets available in the market, such as would have occurred if the balance of payments surplus had caused an increase in U.S. international reserves.<sup>28</sup>

Whether or not a shift to a more flexible exchange rate system has enhanced or reduced the ability of national monetary authorities to follow autonomous policies (that is, policies geared entirely, or at least almost so, to domestic objectives) is currently a matter of considerable controversy. A major theoretical argument for exchange rate flexibility, or even for freedom of a country to set its own exchange rate, is that fiscal and monetary policy are freed to meet domestic needs, with any resulting international imbalance to be redressed by exchange rate changes.

This basic issue will be addressed in more detail in papers by Branson, Willett, and Dornbusch (the last in the Federal Finance area). So far as U.S. commercial banks themselves are concerned, it is not clear that the ability of the Federal Reserve to influence the monetary aggregates is significantly different under flexible than under fixed rates. As already observed, even under the prior system the assets of the Federal Reserve System and hence its liabilities (which constitute commercial bank reserves) were not directly affected by balance of payments developments.

On the other hand—and this is merely a specific application of the general problem of international capital flows—the internationalization of the banking system has probably led banks to respond to changes in financial conditions to a greater extent than formerly by moving funds into or out of the country, with a resulting effect on exchange rates. This has been particularly troubling in a period characterized, unhistorically, by both inflation and recession. Providing banks with additional reserves in order to stimulate the domestic economy, especially when domestic demand for bank credit is slack, will lead the banks to try to employ their excess liquidity overseas, in turn leading to exchange depreciation and to some further upward pressure on the price level. However, it has been argued that the “additional” inflationary impact of an exchange depreciation merely represents that part of domestically induced price pressure that under a fixed rate system would have been “exported”.

It is also likely that the exchange depreciation will strengthen the international current account balance, albeit with some delay, thus augmenting the stimulus to domestic expenditures produced by an expansive monetary policy.<sup>29</sup> The obverse may also be the case: a restrictive monetary policy will tend to strengthen the exchange rate and weaken the current account balance, which will, *ceteris paribus*, produce an additional contractionary effect on the economy. Some of these theoretical possibilities should be put to the test as a result of the change in Federal Reserve policy announced in October 1979, which is expected to result in wider swings in interest rates and

<sup>28</sup> It might be noted that as the United States authorities begin to hold foreign currency reserves, movements in such reserves—if held by the Federal Reserve System—will directly affect the reserve base of member banks.

<sup>29</sup> For an example of this line of argument, see Congressional Budget Office, *The U.S. Balance of International Payments and the U.S. Economy: Development in 1978 and Early 1979*, p. 26. The study attributes about one-third of a \$23 billion (annual rate) reduction in the U.S. merchandise trade deficit between the first quarter of 1978 and the first quarter of 1979 to an increase in U.S. competitiveness which “resulted primarily from a decline in the value of the dollar that began in late 1977.”

hence in exchange rates (to the extent not offset by official intervention).

*A Note on the Eurodollar Phenomenon*

Various issues have been raised regarding banks' offshore or Eurocurrency operations—frequently described as a huge pool of international credit and liquid assets (often referred to as “money”), “created” by the market itself, and out of official control. This view has been pretty thoroughly discredited. For one thing, the totals that are frequently cited (e.g., the \$600 billion-or-more “overhang”) include interbank transactions, which represent neither credit to nor assets of individuals and commercial and industrial enterprises. For another, Eurocurrency deposits are not money in the ordinary sense of the word, but more akin to short-term investments, such as Treasury bills or large negotiable certificates of deposit. Neither of the latter are included in the  $M_1$ ,  $M_2$ , or  $M_3$  definitions of the U.S. money supply. In any event, the Eurodollar balances of U.S. non-banks, which for some analytical purposes might be considered part of the U.S. money supply ( $M_4$ ) were only 0.9 percent of the combined total ( $M_4$ +Eurodollar holdings) at the end of 1975.<sup>30</sup> Although comparable data are not available for an extended period of time, it is clear that inclusion in the U.S. monetary aggregates of the Eurodollar deposits of U.S. non-bank residents would not, up to the present at least, have significantly affected the rate of growth of those aggregates.

The question of whether the Eurocurrency system “creates” money and credit in the way that a national banking system does has also been extensively debated; the predominant view is negative. When a national banking system expands its assets by adding to its loan portfolio, its liabilities must expand *pari passu* except for “leakage” into currency. Unless converted into hand-to-hand money, the deposits “created” by the loan expansion must remain in the system, and can only be transferred from one owner to another. In the Eurocurrency system, on the other hand, loans do not create deposits within the system. Normally the borrower of Eurodollars obtains what some call dollar-dollars (i.e., deposits in the United States) which the lending bank already has, having obtained them from the Eurodollar depositor. Dynamically, of course, through the effect on interest rates and liquidity, an expansion of Euroloans may result in an addition to Eurodeposits, but the relationship would be an indirect one, virtually impossible to measure and certainly very minor. The credit and deposit activity of the Euromarket has been frequently compared to the activities of a single bank or group of banks in a national system. Banks in a single category (e.g., all those in a given area, or all nonmember banks) can increase their loans (assets) only if they can at the same time increase their liabilities (deposits).

Of course, if central banks deposit their reserve funds in the Eurocurrency market, it may lead to credit expansion on a worldwide basis since the Eurobanks normally use these funds to make loans to other non-U.S. countries. But even this may not represent a real expansion if in the absence of this type of Eurocurrency activity the ultimate borrower would have secured credit directly from a national banking system.

<sup>30</sup> International Banking Operations, op. cit., p. 79.

*Euromarkets and capital mobility*

The Eurocurrency markets may well facilitate international capital flows by narrowing the spreads between returns to depositors and costs to borrowers, and in other ways providing an efficient channel for international lending. But this is not the same as "creating" credit. It is hard to escape the conclusion that the amount of liquid assets in the world is the more or less direct result of the monetary policies of all countries combined.

But, in the last analysis, the "additionality" of international capital flows, whatever the channel through which they move, will depend on the ability and willingness of the authorities in the recipient countries to take offsetting domestic policy measures, including exchange rate changes, if the inflows are regarded as excessive. In recent years, most such authorities have welcomed the inflows if not actively encouraged them.

There were at an earlier date extensive international discussions, especially by the central banking authorities meeting at the Bank for International Settlements, about the need for and possibility of controls over the Eurodollar market, but no agreement was reached. However, discussion of the possibility of placing reserve requirements against Eurocurrency deposits continues. Apparently the purpose would not be to control directly the volume of such deposits, but to make them less competitive with domestic deposits subject to reserves. The fact that the United States itself is considering the possibility of allowing "Euro" operations directly from domestic offices seems to indicate that such operations are not seen as a threat to the effective conduct of U.S. monetary policy.

*Official Supervisory Measures*

Out of concern for the dynamic involvement of U.S. banks in international finance, Federal bank supervisory agencies have taken three important measures to improve the information on foreign lending (including depositing with foreign banks) and to coordinate the examination procedures for "evaluating and commenting on 'country risk' factors involved in international lending by United States banks."

The first of these was a joint effort with monetary authorities in other major countries, coordinated by the Bank for International Settlements, to obtain more detailed information on bank exposure by country than had previously been made available—both before and after allowing for guarantees by residents of a country other than the one where the debtor resides. The data for U.S. banks are released in semi-annual reports; the first presented data as of December 31, 1977. As of December 1978, total "crossborder" claims<sup>31</sup> on non-U.S. residents amounted to \$217 billion, of which \$148 billion had a maturity of one year or less, and \$116 million represented claims on banks. Reallocating these claims by country where the ultimate obligator is located reduced the total to \$196 billion—the net result of U.S. residents "guaranteeing" about \$26 billion in claims on foreign

<sup>31</sup> The term encompasses claims by banks on residents of a country other than the one where the lending office is located or denominated in a currency other than that of the borrower. The data exclude claims payable in local currency to residents of the same country where the bank office extending the credit is located—e.g., claims on U.K. residents extended by U.K. offices of the reporting banks, payable in sterling. Such claims totaled \$58 billion and were for the most part financed by local currency liabilities of equivalent amounts.

residents (mainly claims on foreign branches of other U.S. banks) considered to be effectively guaranteed by the home office of the debtor bank, and foreigners "guaranteeing" about \$5 billion in claims on U.S. residents (including claims on U.S. agencies and branches of foreign banks).

A second informational change is the complete overhaul of the so-called "Consolidated Report of Condition" and "Consolidated Report of Income" ("call reports") to separate, domestic from foreign items so far as feasible. No country breakdown is requested in the revised report, and for some items the breakdown is by domestic foreign office (the latter include Edge and Agreement subsidiaries which are considered "domestic" in most other reports) instead of by domestic or foreign domicile of the client. The new form is effective with the reports for December 31, 1977, so it will be some time before a consistent historical series can be built up. Clearly the foreign exposure report mentioned above provides more detailed information than the new "call" reports, although the latter do ask for a segregation of net income "attributable to international business", on a pre- and after-tax basis. Moreover, the "call" reports cover only banks and their subsidiaries, whereas the exposure survey, and reports to shareholders in general, provide information on a consolidated basis for the banks' parent companies (bank holding companies) and all subsidiaries thereof, including nonbank subsidiaries.

#### *Exposure assessment*

Finally, and most importantly, the three Federal supervisory agencies announced on November 8, 1978 the adoption of a new and uniform procedure for evaluating "country risk" as part of the examination procedure. This decision resulted from a close examination of existing procedures, a process described in some detail in a note "A New Supervisory Approach to Foreign Lending" in the Spring 1978 issue of the "Quarterly Review" of the Federal Reserve Bank of New York. The new approach provides for a uniform measure of country exposure, implemented in the reports mentioned above. Using these reports, examiners will know the total exposure of the U.S. banking system in each foreign country (adjusted for external guarantees), broken down by type of debtor and maturities. Contingent claims, i.e., agreements to extend credit, are also reported. Thus the bank examiners, and the officers of any bank, can compare the exposure of each bank with that of the industry as a whole.

The exposure of each individual bank will be analyzed not only in relation to the bank's capital resources, but also in relation to "the economic and financial conditions of each country in which the bank has outstanding credits." The analysis will take into account not only the total exposure in a given country, but also the distribution by type of borrower and maturity. It is stated that no attempt will be made to give credit ratings to countries as such, nor "to establish a list of particularly risky countries to which banks would be told to lend." But it seems clear that what will be considered "undue concentration of exposure." (i.e., the ratio of exposure in a given country to the lender's capital) may vary from country to country.

In addition to the measurement of a bank's exposure and the analysis of exposure levels and concentrations, the new approach will include an evaluation of the risk management system used by a bank—whether or not the system is adequate “in relation to the size and nature” of the bank's foreign lending activities.

The new procedures will be administered by an “Interagency Country Exposure Review Committee” made up of representatives from the three Federal supervisory agencies. The functions of the Committee are described as follows:

1. Review and make judgments about economic conditions in countries where loans are made by U.S. banks;
2. Determine the levels of a bank's capital funds at which concentrations should be commented on;
3. Determine when credits should be classified as substandard, doubtful or loss due to an interruption in payment or when an interruption is imminent; and
4. Prepare commentaries on developments in foreign countries for use by examiners.

The Committee will draw on country studies especially prepared for its use within the Federal Reserve System as well as on supplementary analyses by staffs of each of the three agencies and information from other available sources.

### *Summary*

The results of the first two years of exposure surveys indicate that at least for the time being the growth of foreign assets has slowed markedly—to a 12 percent annual rate in 1978, compared to the 1973–77 average of 23 percent. To some extent this may have resulted from a reduction in the demand for credit; although as already indicated there was a deterioration in 1978 in the current accounts of the developing world as a whole, considerable progress was registered in many of the industrial countries that earlier had been heavy borrowers. But there is clearly some practical limit to which any bank whose primary business is to meet the credit needs of a domestic clientele will be willing or able to extend its foreign claims, particularly in times when the domestic demand for credit is large. Whether these limits have been reached, or even approached, is not certain; in any event, there is great variation among individual banks. It does appear likely that natural market forces (combined perhaps with increased oversight by regulatory authorities) will prevent a recurrence of growth rates even remotely approaching the 1970–77 experience.

## IV. ISSUES FOR THE FUTURE

In this chapter, we set forth briefly some of the major policy issues related to the recent large volume of international capital flows and consequent accumulation of international debt. Most of these issues are not new. Some have been in the forefront of attention since the end of World War II, if not before. Most of them were considered at length in the abortive attempt at international monetary reform in the early seventies. That the international economy has not collapsed in the absence of clear, definitive solutions may be evidence that the

problems are not as great as they are sometimes perceived to be—that, in general, “benign neglect” is a policy in itself, and, at least within limits, an appropriate one. Nevertheless, the issues presented here are still with us. Most if not all are currently receiving active attention in official or non-official circles, or both.

### *Financing vs. Adjustment*

It is hard to escape the judgment that, on balance, the large volume of public and private international capital flows has helped foster world trade and output in the period since 1973. If the capital flows had been much smaller, a likely alternative would have been severely restrictive macroeconomic policies in the deficit (capital importing) countries, reducing their demand for imports from the rest of the world. In turn, this would have led to even lower economic activity elsewhere than actually prevailed, possibly converting the 1974–75 recession into a world-wide depression.

However, this view may to some extent fail to take sufficient account of other possibilities. In particular, it may be that a greater measure of exchange depreciation, which presumably would have been necessary if the opportunity for borrowing abroad had been more limited, would have brought the current accounts of at least some of the debtors closer into balance without the degree of domestic deflation many observers thought would have been needed. Of course, such a course of action might have been regarded in some quarters as a “bigger thy neighbor” policy or as “exporting unemployment”. But if the depreciation had been brought about by market forces, and not by driving the exchange rate down with official purchases of foreign exchange (adding to reserves), the accusation would have been difficult to sustain.

#### *Has credit been too easy to obtain?*

The question can legitimately be raised, however, as to whether ease of financing merely enables countries to postpone adjustments which in the end will have to be made anyhow, since sooner or later it will be necessary to accept the reduction in real resource availability caused by the rise in oil prices. The longer the adjustment is postponed, the more difficult it will be to accomplish, and the shock both to the economies involved and to the rest of the world may be greater than if adjustment were achieved earlier. Many if not most economists probably subscribe to the view that a slower adjustment is less disruptive than an abrupt one and therefore economically more efficient. And external borrowing is necessary to avoid disruption. Although obviously a matter of degree, it is vital that the ability to borrow not be used as a device to avoid or unduly postpone an adjustment which in the end will be unavoidable.

By the end of 1978, a great reduction in world imbalances from the 1974–75 peak had occurred. The OPEC current account surplus, viewed by many as intractable, had fallen to virtually zero, and even with the increases in oil prices announced in January 1979 was then not anticipated to be much larger in that year. The combined current surplus of the four industrial “surplus” countries reached \$30 billion in 1978, but dropped even more sharply than foreseen in 1979. Several

of the "other industrialized" and "more developed primary producing" countries (see table 3) that had been running large deficits since 1974 had either greatly reduced them or moved into surplus by 1978. And it was generally expected that the United States would show a smaller deficit in 1979 than in 1978. Only the non-oil LDC's, as a group, showed a widening of their current account deficit in 1978; certainly, in part, this development can be attributed to the relative ease of borrowing abroad. Indeed these countries as a group have not only been able to finance their deficits but to add about \$10 billion a year to their reserves in each of the past three years.

#### *Current situation*

Developments during 1979, particularly the sharp rises in oil prices in mid-year and later, have significantly changed the picture. The combined surplus of the oil-exporting countries appears to have exceeded \$60 billion in 1979 and, barring major unforeseen developments, could reach \$100 billion in 1980 when the higher prices will have been in effect for the full calendar year.<sup>32</sup> Part of the offset to this increase has been the disappearance of the Japanese and German surpluses (due mainly to factors other than the oil price increase). But much of the increase in the oil countries' surplus will be reflected, if financing is available, in a worsening of the LDC position. According to some observers, the combined deficit on current account of these countries may exceed \$50 billion in 1980—more than three times the 1977 figure, since when there has been a more or less continuous deterioration.

History since 1973 demonstrates the importance of the oil surpluses in determining the overall size of net international capital flows. It also demonstrates the resiliency of the world economy both in financial and real terms in adjusting to change. If from here on the real price of energy does not rise further or rises only slowly it would appear that the net international indebtedness will not rise at an unhealthily rapid pace over the longer run.

Whether or not the rise in net debt is slowed (because current accounts are more nearly in balance), gross debt will rise more rapidly than net debt, as it has in the past. This phenomenon will be more marked in countries whose international reserve assets are regarded by their authorities as being at unacceptably low levels. (Borrowing and reserve increases are mutually reinforcing because reserve increases improve creditworthiness, thereby enhancing a country's ability to borrow abroad.) The growing integration of financial markets also stimulates the creation of international debt, both at short and long term, as borrowers seek to take advantage of favorable changes in credit terms between home and foreign capital markets. For countries in strong current account positions, foreign borrowing by their residents will in general result in exchange rate appreciation and/or increased international reserves—depending on the intervention policies of the authorities.

Thus in spite of recent developments, and admitting individual country exceptions, there seems to be no reason for excessive concern over the volume of current and prospective capital flows. The re-

<sup>32</sup> Projection of Morgan Guaranty Trust Company for OPEC countries, *World Financial Markets*, March 1980, p. 3. The country coverage is slightly different from "oil exporting countries," as used in this paper.



newed rise in the oil surpluses may even be regarded, paradoxically, in a somewhat favorable light. With the reduction in current account surpluses of the industrialized countries as a group, the amount of (net) real resources they are providing the rest of the world—mainly to the LDC's—is correspondingly diminished—leaving the oil countries as the net suppliers and the LDC's as net users of real resources flowing internationally.<sup>33</sup>

*Qualifications to an optimistic assessment*

Thus it does not at present seem likely that the existing or prospective amount of outstanding debt, in and of itself, poses any significant threat to world economic stability. However, at least one major caveat against this basically optimistic view must be entered. A severe and prolonged recession in the industrialized countries would reduce the demand for raw materials substantially, thus reducing both the volume and the price of many important LDC exports. In such circumstances the real burden of the debt service would be substantially increased, and widespread defaults might occur. As has often been observed, a primary requisite for a healthy international economy is the maintenance of a reasonable, and reasonably stable rate of growth in the industrialized countries.

It is always possible, of course, that if one or two large debtors should completely suspend service on their external debt, a domino effect could be created, with creditors refusing to extend new credits or to roll over old ones even to countries that continued to service their obligations. Under such circumstances even "good" debtors could be forced into default. And if actual defaults occurred, banks would be forced—under existing practices—to write off debts, with adverse results on their earnings and capital positions.

Such a self-defeating scenario, however, seems only a remote possibility. There is widespread recognition that, as Reserve Board Governor Henry Wallich puts it, "rapidly growing countries cannot and should not be expected to make net repayments of debt \* \* \* particular maturities must be met punctually, but \* \* \* debt paid off must be replaced by new debt or that old debt must be rolled over." Countries heavily dependent on external sources to finance current account deficits are likely to make every possible effort to protect their credit standing; more so as private credit from abroad has become a vital element in the stability and growth of their economies.

*The Question of Inflation*

Whatever the role of capital flows (including reserve accumulations) in the avoidance of world recession, there seems little doubt that they have contributed to world inflation. In the surplus countries, the monetary impact of reserve accumulation likely has been felt—even if on balance the price performance of these countries (notably Germany and Switzerland) has been comparatively remarkable. And the deficit countries by borrowing abroad have been able to avoid restrictive domestic policies which, whatever their effect on output and employment, would probably have meant less price increase than actually occurred. (This may also be true of the United States in 1977-79,

<sup>33</sup> At least this was the position in 1979 according to IMF staff projections.

years in which we have been a net borrower.) Moreover, as is usually true in a national economy, there is a larger number of international debtors than creditors, and because debtors benefit from inflation by being able to service their debts with money that has declined in value, international political pressures tending to promote inflationary policies may be difficult to resist. Recognition of this principle may be a reason why at least one group of creditors—the oil producers—were for awhile willing to accept a relative decline in the price of their product; inflation in the industrialized world, and especially in the United States, erodes the real value of their reserves. Nonetheless, recent oil price increases indicate a change in their position. Apparently the oil producers are now convinced that their previous policy was not successful, and that they can better defend their own interests by avoiding a decline in the real value of their current output, even at the expense of a decline in real value of their accumulated financial assets.

In any event, inflation is not simply a domestic problem for the United States but an international one, and the issue is fraught with possible economic and political repercussions that could seriously affect our own country. That this principle is becoming more widely accepted here as well as abroad seems evidenced by recent policy trends. Clearly the matter will remain in the forefront of economic policy issues for the foreseeable future.

### *Private vs. Official Lending*

The years since 1973 have witnessed a growing importance of private compared to official capital in international lending. In part this has been due to the emergence of large (or increased) current account deficits in industrialized and the more advanced developing countries—countries that generally are not considered eligible for official assistance<sup>34</sup> and are regarded as creditworthy by private lenders. Moreover, official credits to the non-oil developing countries, for the most part linked to the financing of specific development projects, have failed to keep pace with the expansion in their current account deficits. Indeed, many LDC's have not taken full advantage of credit facilities available from the International Monetary Fund, apparently preferring to avoid the restrictions on their economic policies that would have accompanied IMF assistance.

In the last analysis, except for the funds provided by the savings of the OPEC countries, virtually all international capital flows are financed from private savings either directly or indirectly. The distinction between private and official, therefore, is not so much a matter of who is providing the capital, but what is the nature of the organization that from the lender's side controls the terms by which the funds are advanced. This leads directly to the much-discussed question of which group of lenders—private or public—is more able to ensure that borrowed funds are optimally used. In particular, since so much of international borrowing is undertaken by the public sector, what can lenders do to help ensure that the macroeconomic policies of the borrowing country permit optimal use of all savings—those generated

<sup>34</sup> Except for IMF drawings and credits extended by one national monetary authority to another, such as those granted by members of the European monetary arrangements.

domestically as well as those transferred from abroad? Many issues are involved here, one of the principal ones being how far, under modern conditions, a government can appear to allow its economic policies to be influenced from abroad—no matter whether the influence stems from foreign governments, international institutions (World Bank, IMF), or private lenders (especially commercial banks).

A debtor country's ability to develop a current account surplus large enough to finance its external debt service (or to reduce its current account deficit enough to accommodate a reduced *net* inflow of capital) is greatly influenced by economic developments abroad over which it may have little or no control. Nevertheless, no matter how unfavorable the international environment is, there is always some combination of monetary, fiscal, and exchange rate policies (including application of direct controls) that can produce the desired results if it is politically possible to execute them. It scarcely needs documentation that in many, if not most, cases where debtor countries were in severe difficulties, unsuitable domestic policies have been a principal culprit.

It would seem *a priori* that an official international organization would be in a better position than (say) a private bank not only to determine the economic policies most appropriate to a particular situation, but also to negotiate with the government concerned—to lay down the terms, to put it bluntly—that would ensure that the foreign borrowing would be on a sound basis.<sup>35</sup> A typical pattern is a country getting an OK from the IMF (often in the form of a standby agreement) before securing credits from private sources.

While such a procedure should not be relied upon completely by private lenders as a substitute for making their own analysis of a situation, it does seem it may become increasingly important in the next few years. Clearly it is an important issue for the U.S. government not only for general political reasons, but because of the important role of the U.S. government in the operations of the Bank and Fund, and because of the important share of U.S. commercial banks (and other private U.S. lenders) in international capital flows. Even when U.S. funds are not directly involved, the predominant use of the U.S. dollar as the currency in which the vast majority of international credit transactions are still denominated tends to increase U.S. official concern for the system as a whole.

If private lenders would reach the point where they would be unwilling, as a group, to continue their lending—particularly to non-oil LDC's whose collective balance of payments deficits in nominal terms, at least for the time being, are increasing—the issue will be squarely joined. Will the U.S. and other governments be willing to expand official credits enough to take up the slack? Perhaps some new mechanisms can be developed in the way of official guarantees of private national or international credit by official institutions.

### *Role of Commercial Banks*

A major issue facing many countries, especially the United States, is that of reconciling the growing internationalization of their banking systems with: (a) the soundness and stability of commercial banks as

<sup>35</sup> On the other hand, international official organizations may be more subject to purely political pressures than private lenders.

financial institutions; and (b) the ability to conduct a monetary policy suited to domestic economic needs. Both points involve not only direct international commercial bank lending and depositing, but also operations at their offshore offices—the so-called “Euro” currency markets.

The United States supervisory authorities have given considerable attention to the effects of international lending on the financial health of U.S. banks, with the results described in chapter III. While the situation will bear watching and the time may come when a further rise in the foreign proportion of the business of U.S. banks individually or in the aggregate would be unwise, at the moment no new measures of control appear needed. While foreign lending adds the element of “country” or “sovereign” risk to the other risks inherent in commercial banking, it seems generally agreed that adequate portfolio diversification within individual banks, under appropriate official supervision, is the best way of dealing with the problem.

The question has also been raised whether lending at foreign offices is supervised as adequately as at domestic offices, particularly where the branches are located in areas where direct inspection of the books by U.S. government officials may be impractical, or even illegal under local law. Both the banks and the regulatory agencies have denied that such a problem exists. However, recent measures have been taken by the State and City of New York that would in effect permit the operations of Eurocurrency offices in New York. Implementation of this proposal depends on Federal Reserve action; the Board of Governors has the matter under consideration, and a decision is expected in early 1980. Whether such arrangements would enhance the effectiveness of bank supervision, as some protagonists have claimed, depends upon the alternative location (e.g., Nassau, London) where the business would otherwise have been done. At many foreign locations, U.S. bank examiners have the same freedom to examine a U.S. bank's books as they do at the U.S. offices.

So far as improving the effectiveness of monetary policy is concerned, the banks are obviously, only part of the picture. The basic issue is the degree of freedom to be granted to capital movements of all kinds, inward and outward, and all forms of capital, not just banking funds.

#### *Resource Allocation*

According to generally accepted theory, one of the greatest advantages of a free market system—in which prices reflect a balance between supply and demand and interest rates reflect the marginal efficiency of capital—is that resources are allocated in a “rational” manner. In terms of international capital flows, this means that—at least on balance and with due allowance for periods of transition—financial and real capital should flow from countries where the marginal return on capital is relatively low to those in which it is relatively high. Generally, this ought to mean that developed countries, already heavily capitalized and whose high incomes presumably are accompanied by higher propensities to save, should be supplying real resources to countries at a lower stage of development where the opposite conditions are presumed to prevail.

Needless to say, in reality there are many impediments to the efficient working out of these theoretical principles—not least of which is a pervasive, if unacknowledged, spirit of mercantilism which sees a

strong trade position as inherently desirable in and of itself. Another is the widespread use of monetary policy as a macroeconomic tool which often produces relative nominal interest rates out of line with relative marginal capital yields. Moreover, nominal (market) interest rates will be affected by the degree of price inflation present, and therefore will vary widely from country to country and over time—assuming present conditions. Perhaps even more important (related to the previous factors, especially the first) is an unwillingness to permit exchange rates to move freely enough to produce balance of payments equilibrium.

Has the international monetary system in recent years, especially since 1973, operated to produce a reasonably rational allocation of real resources? In the main, the answer has to be yes, but with certain significant exceptions.

First, the surplus of the so-called "low-absorber" members of OPEC has to be regarded as rational, if one accepts as given the pricing policies adopted by the oil-producing countries. They have taken advantage of a monopoly position to force a significant transfer of command over resources to them from the rest of the world. These real resources could not be absorbed (consumed or invested at home) without engaging in investment projects with extremely low, perhaps even negative, rates of return. Thus part of the resources over which they have obtained command has been returned to the rest of the world in the form of the OPEC surplus. There is little question that the resources have been more profitably invested elsewhere than they could have been in the OPEC countries themselves.

Similarly, the deficits of the non-oil LDC's and some of the "more developed primary producers" listed in table 2, chapter II, are rationally defensible, although certainly in some cases they have been larger than justifiable from a long-run point of view.

But it is questionable whether highly developed countries ought to be absorbers of real resources from the rest of the world, except perhaps for brief periods reflecting cyclical developments out of phase with those of their trading partners. One can argue, of course, that it was domestic policies (including exchange rate policies), and not the international financial system as such that produced these incongruous results. So far as the United States is concerned, its unique position in the world has left it little control over its own exchange rate and thus in a sense over its own current account. It can also be argued that the state of the U.S. balance of payments and the exchange rate of the dollar are of more significance to the rest of the world than to the U.S. economy, and that our importance as a market for the rest of the world's goods overshadows our importance as a supplier of real resources. The fact that most of the rest of the world's official reserves are held in the form of dollar claims lends to the holders thereof a special importance to the dollar exchange rate.

Regardless, in the short run at least, it obviously adds to our welfare to obtain goods and services from the rest of the world to supplement our own production. But an overvalued dollar—and, so long as we have a current account deficit, the dollar is in some fundamental sense overvalued—has its costs too; at least producers that are suffering from import competition (or competition abroad for that matter) see the situation as costly. There may be a serious question whether in

the long run it is a wise policy to defend the value of the dollar by foreign borrowing—which is what we have been doing. Like other deficit countries, we may be trying to avoid, or postpone, a more fundamental adjustment which in the end may prove unavoidable: an adjustment which, in any event, would be beneficial to the rest of the world.

As with all economic questions, however, it is difficult to achieve an optimum balance between short-run costs and long-run benefits. A reasonable degree of exchange stability is commonly held to be economically beneficial, presumably because it does lead to more "rational" economic decisions. Thus some short-run developments that might appear to be irrational, such as "uphill" capital flows to the United States and some other developed countries, could result in long-run benefits to all concerned. But in a world in which international reserves are held in the form of claims on other countries, and in which balance-of-payments surpluses effectively provide their own means of financing, policymakers in both surplus and deficit countries may find it politically easier to emphasize the short-run costs of balance-of-payments adjustment over the longer-run benefits of policies that might lead to more efficient resource allocation and greater increases in productivity.

The short-run view is particularly attractive when balance-of-payments adjustment is expected to provoke depression and unemployment in *both* the surplus and deficit countries. A major issue for the future is certainly how to accomplish needed adjustment without that unwanted and perhaps unneeded result. One possibility already indicated is an even greater use of exchange rate variation; but developments in 1978 and 1979 seem to indicate that an opposite trend is setting in.

### *The Question of Controls*

It seems inevitable, in a world of national states and independent currencies, that some international capital flows will be welcomed and officially encouraged while others will be seen as harmful and therefore officially inhibited, depending on circumstances at the time. Furthermore, some flows may be regarded as beneficial by one of the countries involved and harmful to the other. Even in the relatively free international economic system that currently prevails, official controls on capital movements are in most countries regarded as less reprehensible than similar controls on current account transactions, although support for this view may be based more on pragmatism than principle.

In any event, except in time of war, and with certain lapses described in Chapter III, the United States has generally eschewed direct controls over international capital flows. Efforts to influence such flows have been generally limited to traditional market-oriented devices, such as reserve requirements, taxation, and interest rate policies.

So far, this general policy stance continues to prevail. In spite of some public outcry, there have been no actions at the Federal level designed to inhibit capital inflows, even in the form of corporate takeovers and the purchase of agricultural land. Interest on bank deposits paid to nonresident aliens remains free of U.S. income tax, as do the large interest payments made to foreign official holders of U.S.

public debt issues. Reciprocal tax treaties, under which tax rates are usually reduced on interest and dividend payments, remain in effect.

Nor, in spite of the depreciation of the dollar and the continued rise in bank loans to foreigners, has there been any serious consideration of the possibility of reestablishing direct limitations on capital flows. In fact, attempts to change the Internal Revenue Code in such a way to increase the U.S. income tax on direct investment income earned abroad, thus reducing the incentive to make such investments, have not been successful so far.

Nevertheless, it is highly likely that proposals for direct controls will surface from time to time, particularly in periods when the achievement of exchange rate stability and balance of payments equilibrium require more restrictive macroeconomic policies than appear to be appropriate, given the stage of the business cycle. As in many other areas of economic life, increasing demands may arise for more direct government regulation of private business transactions. Very careful study will be needed to determine the extent, if any, to which the economy would benefit from such controls, especially over the longer run.

#### *The Dollar as a Reserve Currency*

Concerning U.S. policy options, many if not all of the issues raised in this paper are importantly affected by the peculiar status of the dollar as a reserve currency. Almost half of the foreign capital invested in the United States represents foreign official claims, mostly in the form of bank deposits and U.S. Treasury securities. Even with the dollar defense program inaugurated in late 1978, we still have far less control over our own exchange rate than any other country of the world. Additionally, because of the peculiar status of the dollar, as well as the sheer weight of our economy in the world system (albeit relatively lessened in the last two decades), the United States is obligated, morally and in its own self-interest, to take account of the international repercussions of its economic policies.

Clearly an important issue for the future is involved. Should the United States welcome a reduction or eventual abolition of the reserve currency status of the dollar? If so, how can it be achieved? Would it make any real difference if existing official holdings of dollars were transferred to the International Monetary Fund (the proposed substitutational account), to a European monetary authority or to some other international agency—perhaps a set of such agencies, each representing a particular region of the world?

The question is intimately associated with the nature of the exchange rate system—the degree of flexibility that is to be allowed. The principle of managed flexibility seems to have been endorsed by most countries, with intervention presumably limited to smoothing out day-to-day, seasonal, and perhaps even cyclical variations in exchange rates plus, occasional intervention to dampen “unwarranted” speculation. But presumably such a system would not involve large net changes in reserves—at least over a “reasonable” period of time.

In this regard, developments in 1979 can be considered encouraging, notably the virtual elimination of Japan's current account surplus, as well as that of Germany by early 1980, according to Organization for Economic Cooperation & Development (OECD) projections.

In fact, in 1979 (through September), Japan and Switzerland have shown net reductions in reserves (in terms of U.S. dollars). But total world reserves have continued to increase (even aside from the increase in the value of gold) and should be expected to do so in nominal terms, especially if current inflationary trends continue, given that many countries probably do not regard their current holdings as adequate. Therefore, unless there are significant changes in institutional arrangements, U.S. debts to foreign official agencies (including the IMF, as well as foreign monetary authorities directly, especially if a substitution facility becomes operative) will continue to rise. For this to occur, there must be a net outflow of other forms of capital from the United States, or a net current account deficit, or a combination of the two.

There is a great anomaly in this situation. The United States, given its high level of income and capital, ought to be a net provider of real resources to the rest the world. The only way, of course, in which this can be accomplished and at the same time permit the rest of the world to continue to accumulate reserve claims on the United States is for (net) capital outflows to exceed the (positive) current account balance by an amount equal to the increase in reserve claims. However, some foreign private capital will also continue to be attracted to this country, further complicating the problem.

Perhaps, over the next few years at least, market forces and other countries' reserve policies will combine to force a current account deficit on the United States—continuing the present anomaly. If this proves to be the case, energetic efforts on our part to reverse the current balance could prove to be a destabilizing element.



# INTERNATIONAL LIQUIDITY ISSUES AND THE EVOLUTION OF THE INTERNATIONAL MONETARY SYSTEM

By Thomas D. Willett\*

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## SUMMARY

International liquidity issues have been in the forefront of recent discussions of international monetary reform and the operation of the world economy. Many have argued that deficiencies in the mechanism for the provision and control of international liquidity have been major causes of worldwide inflation and currency instability and that our new international monetary system based on more flexible exchange rates does not adequately deal with these problems.

This paper is divided into two major parts. The first presents a historical review and analysis of the major international liquidity problems, combining the presentation of major concepts necessary to analyze international liquidity questions with analysis of the most significant international liquidity developments of the post war period.

Drawing upon this analysis, the second part of the paper considers a number of the major international liquidity issues which will face the international monetary system over the next decade and their implications for international monetary reform. The presentation is designed so that readers interested only in current policy issues may begin directly with this latter part of the paper.

Major conclusions of the paper include the following:

1. In analyzing international liquidity, confidence, and adjustment problems, it is important to take into account the bureaucratic and political incentives facing decisionmakers as well as strictly economic considerations.

2. There is not a sufficiently strong and systematic relationship between reserve changes and national economic behavior to use the behavior of international reserve aggregates as a guide to international liquidity policies in the way that the behavior of national monetary aggregates can be used as a guide to national monetary policy. The causes of reserve changes and their distribution among countries have a major impact on their effects.

3. The most promising way to improve the operation of the international monetary aspects of the world economy is through focussing directly on the operation of the international adjustment process. Attempts to control international liquidity aggregates through a return to convertibility of currencies into reserve assets or the establishment of mandatory asset settlement through the International Monetary Fund (IMF) are likely to be less effective than the continuation of flexible exchange rates combined with strengthened international surveillance of national exchange-rate and balance-of-payments adjustment and financing policies. Such surveillance should

include oversight of official borrowing from the private financial markets.

4. While the international liquidity explosion of 1970–1972 did have a significant impact on the acceleration of worldwide inflation, this effect was not nearly as large as many have argued and was a consequence of the breakdown of the old pegged exchange-rate system rather than the new international monetary system based on more flexible exchange rates. Managed floating does not offer a complete cure for the traditional international liquidity and confidence problems of the old pegged rate system, but it has greatly reduced the magnitude of these problems.

5. While the current rather loosely structured international monetary system does not present a neat blueprint for handling international monetary problems, it requires much less sacrifice of national sovereignty than proposals for highly structural reforms of the international monetary system. While it probably would be desirable for countries to accept a greater degree of international control over their international financial policies so as to reduce potential international monetary instabilities, the current international monetary arrangements appear to be much more durable than many critics have feared.

6. Uncontrolled expansion of the Eurocurrency markets and official borrowing from private international financial markets has not been as serious a cause of global inflation and escape from international financial discipline as have concerned many, nor has the existence of multiple official reserve assets led to the degree of international monetary instability that some have predicted. Currency switching by the oil exporting countries has not been one of the most important causes of exchange rate fluctuations. Had their large financial accumulations been accomplished primarily by a redistribution rather than an expansion of international liquidity, there would have been a substantial risk that the oil shock would have generated a much more severe worldwide recession and stimulated economic warfare reminiscent of the 1930's.

7. The potential problems usually associated with "uncontrolled" international liquidity creation and currency switching will not be substantially cured by relatively mild measures such as the placement of reserve requirements on the Eurocurrency market or the creation of an IMF Substitution Facility to acquire unwanted dollar holdings. The most serious problems associated with all of these phenomena come from the existence of high international capital mobility combined with instabilities in underlying economic and financial conditions. To improve international monetary stability, either the stability of underlying conditions and policies must be increased, or comprehensive regulation of private and official international capital flows will be required. There is of course considerable question about both the feasibility and desirability of the latter approach.

8. It is argued that a modest rate of Special Drawing Rights (SDR) creation should be continued, but that greater emphasis should be placed on strengthening the resources of the IMF for discretionary lending in cases in which substantial official exchange market intervention is deemed to be in the international interest. While official demands for international reserve holdings are likely to continue to grow over time and should be met largely by increases in SDR's

rather than national currency holdings, the adoption of managed floating greatly increases the judgmental element in deciding when reserve use is desirable or not. The most important contributions to reducing international monetary instability will come not from formal reform of our international monetary procedures and institutions but from the adoption of more stable national economic and financial policies and continued strengthening of the basic fabric of international economic cooperation. The United States has a particularly strong responsibility in this regard.

9. While an IMF Substitution Facility is not likely to make a major contribution to enhancing international monetary stability, if appropriately designed and linked to provisions for international surveillance of the adjustment process, the creation of such a facility could be well worthwhile.

## I. INTRODUCTION

While the international monetary system underwent major reform during the 1970's this did not quiet controversy about international monetary problems. Considerable concern has been expressed that deficiencies in the mechanism for the provision and control of international liquidity may have been major causes of worldwide inflation and currency instability and that our new international monetary system based on more flexible exchange rates does not adequately deal with these problems.

There have always been differences of judgment about whether international reserves were growing too rapidly or too slowly and about what forms international reserve holdings should take. Should more reliance be placed on gold, on the dollar, on some combination of major currencies, or on an international paper unit? Such was the focus of the international liquidity controversies of the 1960's. These controversies were quite sufficient to generate a huge literature by professional economists and international monetary experts on international liquidity issues and to stimulate a major series of international political negotiations which culminated in the historical agreements which created a new type of official international money, the Special Drawing Rights (SDR's) administered through the International Monetary Fund.

Far from resolving international liquidity disputes, however, the creation of the SDR was soon followed by a series of international financial developments which have necessitated a complete rethinking about the nature of international liquidity issues and how we should analyze them. The old sources of controversy have not disappeared, although their exact nature and importance have been substantially modified in many instances, and a host of new international liquidity questions have been generated as well. The rapid growth of international financial markets and the substantial increase in the extent to which national governments both supply funds to and borrow funds from these markets have tended to blur the traditional distinctions between private and official international liquidity, and have raised serious questions about the control of international liquidity growth. The rapid growth of the Eurocurrency market has similarly caused many to question the extent to which national monetary authorities

can control their domestic financial conditions and has further fueled fears that at present our international financial system is an engine for world inflation.

The potential magnitude of such concerns about liquidity expansion is illustrated by the explosion of official international liquidity generated by the massive U.S. balance-of-payments deficits and accompanying breakdown of the Bretton Woods exchange-rate agreements in the early 1970's, and the second explosion in the growth of official international liquidity which accompanied the huge increases in oil prices in 1973 and 1974 with the resulting enormous balance-of-payments surpluses by OPEC and the corresponding deficits by most oil-importing countries. Over the 1970-72 period international reserves, created by official intervention of surplus countries grew by roughly as much as they had in the whole preceding part of the post-war period. The high rates of inflation throughout the world which were temporally associated with these developments has strongly reinforced these fears that our current international financial arrangements are dangerously deficient.

At the same time that the potential effects of international liquidity issues on the operation of the world economy have reached enormous proportions, our ability to analyze the implications of changes in the levels of recorded international reserves has been subjected to greatly increased uncertainties. The growth of international capital mobility could be expected to greatly increase official demands for international liquidity to offset the greater potential size of disturbances to countries' balance-of-payments positions. On the other hand, however, government measures to attract inflows of internationally mobile capital and direct government borrowing in private financial markets have been important supplements to countries' owned reserves. The net effects of these factors are difficult to predict and are likely to vary greatly from one country to another.<sup>1</sup>

Likewise, it is difficult to assess the effects which the changing positions of gold have had on the effective magnitude of international liquidity. On the one hand gold has been officially demonetized in many respects. On the other hand, it can still be sold to supplement countries' holdings of foreign exchange and can, and has, been used as collateral for official loans. Over the past year, its market price has fluctuated between roughly 6 and 8 times its pre-1971 official price. Again, the net effects are difficult to assess.

Of perhaps even greater importance is the fact that we need to substantially rethink the role of various aspects of the traditional international liquidity issues in our new international monetary system based on considerable flexibility of exchange rates for the major industrial countries. The major purpose of this paper is to aid in this process of rethinking by discussing how we should analyze international liquidity issues in a new international monetary environment. It is not by any means the first such effort, nor will it be the last. It is hoped, however, that the following sections will offer a helpful framework for analyzing contemporary and likely future international liquidity issues over the coming decade.

<sup>1</sup> For an interesting critique of the failure to consider private capital flows in much of the literature on international reserves, and presentation of the "new" efficient markets view of private capital flows as a substitute for official reserve flows, see Mahar and Porter [1977]. On the limitations of using monetary policy to attract private capital flows see Willett [1968] and Willett and Forte [1969].

This paper is divided into two major parts. The first and longer of the two parts is an analytic history of major international liquidity concepts and issues. It attempts to merge a review of the historical evolution of major international liquidity developments and policy issues with presentations of major elements of international liquidity theory. A major theme of this part of the study is an evaluation of the similarities and differences between the manner in which the behavior of national monetary aggregates can be used to control the macroeconomic performance of domestic economies and international reserve aggregates can be used to control the operation of the world economy. Such analogies have often played a prominent role in the development of views that our current international liquidity mechanism may be dangerously inadequate, and in proposals for reform. More detailed research indicates, however, that there may be many differences between the effects of changes in monetary aggregates and in international reserve aggregates on economic behavior.

In general the following analysis suggests that as the international monetary system has evolved from a gold standard to the Bretton Woods system based on adjustably pegged exchange rates and reserve currencies to the current system based on managed flexibility of exchange rates and widespread official use of private international financial markets, there has been a progressive weakening of the usefulness of reserve aggregates as a control mechanism for the operation of the world economy. Indeed, in recent years attempts to restrict the growth of international reserve aggregates in line with historical relationships between such totals and world trade and payments could have been disastrous. Trade warfare and a severe worsening of the worldwide recession of 1974-75 might well have resulted.

My analysis is relatively complacent in the sense that it finds that the more alarmist views of severe dangers from the operation of current mechanisms are generally based on seriously oversimplified views. For example, the reporting of figures that the Eurodollar market is now several times larger than the domestic supply of dollars does not mean that the U.S. monetary authorities have lost control over U.S. monetary conditions as is sometimes implied. The most serious case in which the operation of the international monetary system has itself been a major stimulant to world inflation involved the breakdown of the Bretton Woods system. However disaggregate research suggests that this impact, while certainly to be deplored, was much less than much popular discussion has assumed. Furthermore the subsequent adoption of floating exchange rates offers much greater protection against a recurrence of such excessive international liquidity creation. In short, while our current international liquidity arrangements do not conform to a tidy blueprint for international monetary control, they are not nearly as dangerously inadequate as many have feared. Our current loose decentralized system of international liquidity creation has more built-in stabilizing mechanisms than many have recognized.

This more optimistic or complacent view does not, however, purport to argue that our current international financial arrangements are perfect by any means. What it does argue is that international liquidity questions and controls can be best analyzed in connection with direct analysis of the operation of the balance of payments and

exchange-rate adjustment process and its international surveillance and control, rather than from the standpoint primarily of the behavior of international liquidity aggregates.<sup>2</sup>

The latter part of this paper is forward looking. It considers some of the major international liquidity issues which we are likely to face over the coming decade and analyzes some of the major types of proposals which have been suggested for dealing with these issues such as the future role of the SDR, the control of international liquidity, and the so-called dollar overhang and instability problems caused by the existence of multiple reserve assets. While the justification for the perspective of analysis adopted in chapter III is developed in detail in chapter II, the paper is designed so that readers interested only in the analysis of current policy issues may turn directly to chapter III.

## II. AN ANALYTIC HISTORY OF INTERNATIONAL LIQUIDITY CONCEPTS AND DEVELOPMENTS

Discussions of international liquidity issues quite frequently focus on international reserves as a means of regulating the operation of the world economy. There was considerable professional concern with international reserve issues during the 1960's which culminated in the creation of the SDR. In recent years widespread concern with such questions has increased still further, largely as the result of the resurgence of interest in what is often called global or international monetarism. This view assumes that control over the rate of growth in international reserves will influence macroeconomic development in the world economy in much the same way that variations in the rate of growth of an individual country's money stock will influence that country's macroeconomic performance. It has been reflected in the views of quite a number of leading academic economists and of many people of practical affairs: bankers, businessmen, journalists, and financial officials.<sup>3</sup>

In part, this focus has been a reflection of the general resurgence of attention paid to monetary factors in reaction to the long period of post-Keynesian deemphasis of the importance of such considerations. The current popularity of this view no doubt also received considerable stimulus from the huge explosion in international liquidity in the early 1970's which was accompanied by a rapid rate of monetary expansion in Europe and subsequent acceleration in the rate of inflation—facts which are quite in accord with the international monetarist view. Nor can there be any doubt that there is a significant element of truth in the international monetarist interpretation of this episode.

As will be argued below, however, there are strong reasons to believe that the rapid expansion of monetary growth in the industrial countries in the early 1970's was due to much more than just the explosion

<sup>2</sup> In recent years a number of international monetary experts have reached a similar conclusion, see, for example, Crockett [1978], Haberler [1977], Kenen [1977], Slighton [1978], Solomon [1977b] and my own earlier analysis, Willett [1977].

<sup>3</sup> See, for example, the discussions and references to the literature in Sweeney and Willett [1977b] Whitman [1975], Williamson [1973] and Willett [1977, ch. 4]. The four above-cited authors do not themselves adopt an international monetarism approach. A recent example of this view is given in the following statement by Johannes Witteveen, former Managing Director of the International Monetary Fund, "But it seems to me that just as in a domestic system, one can hardly control inflation without having some control of the money creation by the banking system, so, too, one must control world liquidity in order to influence world inflation." Witteveen [1978, p. 8].

of international liquidity during that period. Nor are the effects of a given increase in international reserves on the world economy likely to be independent of the causes of these increases, their distribution among countries, and the type of international monetary regime in operation. This conclusion is the basic theme for this chapter. While the international monetarist views point to some important elements which should not be overlooked, they cannot safely be taken in their strong forms as an all-purpose guide to international liquidity relationships.

This strong view would perhaps best be termed international reserve monetarism, since arguments that there is not a tremendously strong linkage between international reserves and world inflation need not imply that there is not a strong relationship between global monetary aggregates and world inflation. In other words, criticism of international reserve monetarism as a guide to international liquidity policy need not rest on beliefs that monetary considerations are not of major importance, nor that it is never useful to look at relationships between global monetary aggregates and world inflation. Rather the critique of international reserve monetarism offered here rests on the argument that the interrelationships between national governments' economic behavior and their international reserve holdings are much more complex than those between the injection of greater money balances into the private economy and the resulting spending decisions of private economic agents.<sup>4</sup> Not only is there much more scope for the law of large numbers to even out random factors in the case of private economic decisions, but the importance of imbalances between national governments' demand and supply of international reserves is likely to be a less important motivator of their economic behavior over a wide range than would comparable imbalances between the demand and supply of money for private economic agents. The costs of correcting imbalances between the demand and supply of international reserves will often be much greater relative to the costs of holding nonoptimal reserve positions than is typically the case with respect to the demand and supply of national currencies.

These points may be illustrated by considering a stylized view of the evolution of the international monetary system and national macroeconomic policymaking. As we shall see, the thrust of the history of this century has been away from the conditions under which the strong international reserve monetarist view would be expected to have its highest explanatory power.

### *1. The Gold Standard Rules of the Game*

We begin this review with an idealized version of the liberal gold standard which operated among many of the major industrial countries from the latter part of the 19th century until 1913. While the actual operation of this system was much more complex in practice, the textbook version of the operation of the idealized gold standard presents the world of international monetarism at its strongest.<sup>5</sup> Under

<sup>4</sup> For analysis of differences between the world demand for international reserves and the demand for money in individual economies see Ahtiala [1970], Cooper [1970], Crockett [1978], Polak [1970], Sohmen [1978], Sweeney and Willett [1977b], Willett [1977, ch. 4], and Williamson [1973].

<sup>5</sup> For analysis of the actual operation of the gold standard during the 19th and 20th century see Bloomfield [1959], Dutton [1978, Ch. 3], McCloskey and Zecher [1976], Willett [1968] and Yeager [1976, ch. 15] and references cited in these works.



this idealized system, countries are committed to liberal trade policies, fixed exchange rates, and long run balance-of-payments equilibrium. The "rules of the game" are that balance-of-payments surpluses and deficits should be allowed to have their full impact on national money supplies. If a country is gaining reserves because of a balance-of-payments surplus, its money supply must be allowed to expand. If it is running a balance-of-payments deficit and losing reserves, its money supply should be allowed to contract. These effects would occur automatically as long as the monetary authorities refrained from offsetting the effects of reserves flows on the monetary base, i.e., if they did not sterilize the effects of these reserve inflows and outflows.

In this idealized world, international obligations always took precedence over domestic economic objectives and international reserve flows were the major determinant of countries' macroeconomic policies. This self-regulating mechanism assured long run balance-of-payments equilibrium by placing inflationary pressures on surplus countries and deflationary pressures on deficit countries. Furthermore, in the strong form of this system under which there was a fixed average ratio between gold holdings and national money supplies, variations in gold supply would determine the rate of increase or decrease of the world price level.<sup>6</sup> Adjustments to reserve flows would assure that the price level effects of new gold discoveries would be spread throughout the system.

In versions of the gold standard in which gold was used as international reserves for transactions among governments but could not be obtained on demand by private citizens in exchange for national currency, there was no natural limit to the ratio between gold stocks and national money supplies. When there were no required ratios of gold backing for the national money supply, then national policy decisions, as well as variations in gold supply, could influence the world price level. While the link between gold supply and the world price level could be broken in this manner, there would still be a strong systematic relationship between reserve changes and changes in the rate of expansion of a country's money supply. As long as countries continued to follow the "rules of the game," those countries with balance-of-payments surpluses would have to allow their national money supplies to expand more rapidly than otherwise, while for deficit countries just the reverse would occur. Countries' rates of monetary expansion no longer would be constrained directly by the gold supply, but rather by the average rate of monetary expansion in the system as a whole. Thus the gold standard system never offered assurance against inflation, per se, only against inflation consistently greater than the average for other countries.<sup>7</sup> The gold standard did not necessarily protect countries from "imported inflation" although it did strongly limit the extent to which a single (nongold producing) country could export domestic inflationary pressures to others.

<sup>6</sup> Of course the level of output and velocity of money would also affect the level of prices through the famous quantity theory equation  $MV=PT$ .

<sup>7</sup> Of course rates of inflation can vary among sectors of an economy. For example, because of high productivity growth in its export sectors, Japan's export prices remained virtually constant during the 1960's despite a considerable increase in its overall price level. Thus even under a fixed rate system, there can be differences in the long run behavior of countries overall price indices, but the level of the structure or prices will be forced to conform to global price developments over the long run. For further discussion and references to the literature on this subject see Officer [1976] and Sweeney and Willett [1977a].

## 2. *The Rise of Concern With Domestic Macroeconomic Conditions*

While such a system looked very attractive from the standpoint of its automaticity in correcting international payments imbalances, this success was achieved at the cost of subjecting domestic monetary conditions to the dictates of the balance-of-payments. Historical research shows that the major countries were never willing to play entirely by the rules of the game, and for quite sound reasons. When wages and prices were not highly flexible downwards, deflationary pressures in deficit countries would result not just in falling prices, but also in falling output and rising unemployment.

Nor would full wage and price flexibility eliminate all or the costs of subjecting the internal economy to the dictates of the balance-of-payments. Price stability was itself an important objective and much of the early debate over fixed versus flexible exchange rates was phrased in terms of the relative importance of pursuing the stability of internal or external prices. Both Irving Fisher and John Maynard Keynes were leading advocates of the view that internal price stability was of the greater importance.<sup>8</sup>

As concerns with unemployment grew and knowledge of the effects of macroeconomic policies on domestic economic conditions expanded, governments came under increasing pressure to solve conflicts between the dictates of balance-of-payments equilibrium and domestic economic objectives in favor of the latter. It was still recognized that balance-of-payments equilibrium was a necessary long run requirement, but with ample international reserves, countries could finance payments deficits for a considerable period of time. Thus countries would often continue to follow expansionary monetary and fiscal policies in the short run even if they were running a balance-of-payments deficit. Likewise, surplus countries concerned with holding down inflation would have to offset, i.e., sterilize, at least part of the effects of reserve inflows on the rate of domestic monetary expansion. As adjusting domestic macroeconomic policies to the dictates of the balance-of-payments increasingly became perceived as being very costly, the demands for ample supplies of international reserves increased accordingly. Indeed, until this decade, virtually all of the international discussions of international liquidity were prompted by concerns that available supplies were not adequate for smooth functioning of the international monetary system.<sup>9</sup>

In the newer versions of the pegged exchange-rate systems, considerable "elasticity" was introduced into the international liquidity mechanism, both in terms of the supply of international liquidity and in the relationships between international reserve flows and countries' macroeconomic policies. In terms of the elasticity of the supply of international reserves, countries began to economize on gold (and created reserves in the process) by holding key foreign currencies, initially largely in pounds sterling, as a part of their international reserves. Thus the gold standard evolved into a gold-exchange standard.

Likewise, the automaticity of the international monetary system declined. The question of how international adjustment responsi-

<sup>8</sup> For references to these discussions see Willett [1977] and Thursby and Willett [1980].

<sup>9</sup> On this point, see Haberler [1977] and Solomon [1977b].

bilities would be divided began to emerge as a central aspect of international monetary conflict. Once it is recognized that balance-of-payments adjustment is costly, it is understandable that national governments would want policies which would reduce their own need to make such adjustments. Each government would prefer another to bear the necessary costs of adjusting to the mutual payments imbalances.

Under the rules of the game of the gold standard, such adjustment responsibilities were automatically determined, at least in theory. The problem of "who should adjust" did not arise. It became generally recognized, however, that under modern conditions such rules were not workable. Immediate adjustments of macroeconomic policies to achieve payments equilibrium were viewed as being much too costly for most countries.

Often payment imbalances were caused by temporary or cyclical factors which would reverse themselves over a period of a few months to a few years. International reserve flows and sterilization policies would tide countries over these temporary imbalances without the need to sacrifice domestic economic objectives. Furthermore, even when adjustments were required, it was widely believed that such adjustments would be less costly if they could be spread out over a longer period of time. Thus prolonged payments deficits became socially acceptable and what has been called "the international disequilibrium system" emerged.<sup>10</sup>

### *3. The International Disequilibrium System and the Allocation of Adjustment Pressures*

One of the major difficulties with this system was that there was no systematic guidance for when countries should adjust. It was generally accepted that there were good and valid reasons for not adjusting immediately, but there was no general agreement on when adjustment should begin. There is a strong presumption that while the automaticity of the gold standard's "rules of the game" would have imposed high social costs through excessively rapid adjustment, systems which emerged later generated powerful incentives to each country to adjust less promptly than would have been collectively optimal.

There was a normal tendency to engage in excessive wishful thinking that a natural turnaround in the balance-of-payments was just around the corner, and hence policy actions could be avoided. Furthermore, the longer one waited, the greater was the likelihood that the other parties to mutual payments imbalances would themselves finally take adjustment actions, alleviating, or at least reducing, the need for taking action by the home country. This expected possibility of throwing a greater share of the adjustment costs off onto others presents a classic case of divergencies between private and social interests which can lead the collection of optimal individual decisions to aggregate into inefficient social outcomes.<sup>11</sup>

In a different international economic environment the same type of problem existed during the Great Depression of the 1930's when

<sup>10</sup> See Mundell [1961].

<sup>11</sup> This is one of the major topics emphasized in the literature on public choice theory. For a general survey of this literature see Mueller [1979] and on applications to international economic relations see Willett [1979b].

country after country tried to stimulate domestic employment through devaluations and protectionist trade policies. While such policies could make sense from the standpoint of the welfare of an individual country, trade surpluses could not be run by all countries. The net result of such attempts was a crippling of world trade which ended up reducing, rather than increasing, employment for most countries.

Since the days of Adam Smith's discussion of the "invisible hand," economists have tended to advocate the adoption of institutional mechanisms which minimize the divergencies between the incentives for individual self-interest and the behavioral requirements for socially desirable outcomes. In effect, the international adjustment process has substantial elements of being a public good, and individual countries can have an incentive to free ride. The greater the cost of providing the public good, the adjustment of payments disequilibrium, the more we would expect that public good to be underprovided in the absence of some formal or informal collective agreement.

The gold standard "rules of the game" provided such a type of collective agreement, at least in theory, but it was one which itself imposed what were perceived to be excessive social costs. The "ideal" adjustment system under fixed exchange-rates would have been one which provided a desirable set of standards for deciding when countries should adjust. Unfortunately, however, there was not the technical basis for objectively and unambiguously determining such a set of standards, nor could we have been assured of political acceptance of such criteria even if they would have been devised. De facto, the actual allocation of adjustment actions was left to the combination of informal pressures of participants in a conflict situation, the parameters of which were conditioned by the amount of international liquidity in the system.

The greater was the stock of international liquidity, the more prolonged were the payments imbalances which could be run by deficit countries. Likewise, the greater were the pressures for adjustment by surplus countries, either because of the limited ability to sterilize the effects of monetary inflows or because of the mounting economic distortions generated by the payments imbalances themselves. It was frequently argued that too much of the burden of adjustment tended to be placed on deficit countries because there was a finite limit to the size and duration of the deficits they could run, set by the availability of international liquidity. Surplus countries felt pressures to adjust as well, however. In the first place, for many smaller economies with underdeveloped domestic capital markets, monetary authorities had only limited ability to offset the domestic financial effects of balance-of-payments surpluses. And even for larger economies with better developed domestic financial markets, continued sterilization of large balance-of-payments surpluses could result in increasing dislocations in the allocation of credit across sectors, with expansion in domestic sectors having to be held down to offset the growth of liquidity accruing to the international sectors.

Furthermore, large and growing balance-of-payments surpluses were increasingly recognized as involving a less-than-optimal allocation of the Nation's resources. Many governments found it most comfortable to run moderate balance-of-payments surpluses. This was greeted with much more support by exporters than opposition

by consumers. Surpluses could become too large, however, and induce pressures to adjust.

Thus there were pressures on both surplus and deficit countries to adjust, but they were far from automatic. In this context, the rate of expansion of international liquidity became a major determinant of the distribution of adjustment pressures between surplus and deficit countries. Under fixed exchange rates, a more rapid expansion of international liquidity would tend to raise the world price level by lessening the need for deflationary pressures in deficit countries and consequently placing greater pressures on surplus countries to take on more of the burden of adjusting to mutual imbalances.

In this system the international reserve monetarist view of the relationships between changes in international reserves and world inflation continued to have a good deal of validity, albeit the empirical relationships were likely to be very loose. There were few well-defined limits at which surplus or even deficit countries would begin to adjust. Thus while the direction of effects was clear, the timing and magnitude of these effects could be quite variable.

#### *4. International Liquidity and the Adjustable Peg System*

The linkages between changes in international reserves and macroeconomic policies are further weakened when the assumptions of free-trade policies and fixed exchange rates are dropped. With exchange rates fixed, the alternatives for correcting a balance-of-payments deficit are less expansionary domestic macroeconomic policies or the imposition of import barriers and controls. Given increased perceptions of downward wage and price inflexibilities and concerns about avoiding unemployment, government responses to running low on international reserves were often to impose trade barriers and controls rather than to deflate their economies. And, to a lesser extent, surplus countries would sometimes respond with trade liberalization. Thus, even when the distribution of adjustment was known, the resulting effects on the world economy would depend on the adjustment instruments chosen.

The same, of course, holds with respect to the use of exchange-rate adjustments. The designers of our postwar international monetary system were quite skeptical of freely floating exchange rates, associating them with the economic chaos of the 1930's.<sup>12</sup> They wished equally to avoid the use of trade barriers to adjust the balance-of-payments, however, and felt that the discipline of a new gold standard would often require excessive deflationary policies and high unemployment in deficit countries. The preferred solution of Lord Keynes, the chief British negotiator at Bretton Woods, was an ample supply of international liquidity so that balance-of-payments adjustment actions would be a last resort. When payments imbalances failed to cancel out over a long period of time and adjustment actions were clearly required, Keynes and most of the Bretton Woods negotiators preferred the use of exchange-rate adjustments rather than deflationary policies in deficit countries and inflationary policies in surplus countries to cure such fundamental disequilibrium.

<sup>12</sup> On the establishment of the post war international monetary system, see Willett [1977, ch. 1] and the references cited there.

Given his desire to avoid unemployment in deficit countries to correct balance-of-payments deficits, Keynes recognized that there was a trade-off between the availability of international liquidity and the frequency with which exchange-rate adjustments would need to be used. Keynes, himself, preferred relatively great reliance on abundant international liquidity and less reliance on exchange-rate adjustments. However, when it became clear that the U.S. Congress would not go along with Keynes' imaginative proposals for what was, in effect, a true international central bank, empowered to create international money and, indeed, would be willing to provide only quite limited funds for an international organization (the International Monetary Fund) to lend to deficit countries, he recognized that there would be a need for a much greater amount of exchange-rate adjustment than he had originally envisioned.

He likewise recognized the need for international provisions for adjustment pressures which would operate more directly than through the availability of international liquidity. As a part of his proposal for an international central bank, Keynes had advocated a symmetrical graduated set of financial penalties to be placed on both surplus and deficit countries as their cumulative imbalances increased. With the death of his central bank proposal, this idea appears to have been dropped as well. The problem was officially recognized, but the solution adopted proved to be quite inadequate in practice. The scarce currency clause provided that trade discrimination could be sanctioned against a country in excessive surplus, and that the offending member could even be expelled from the International Monetary Fund. This proved to be much too blunt an instrument for practical use, however, and it was never invoked.

Likewise, while most of the negotiators at Bretton Woods recognized that the limited provisions for international liquidity adopted meant that greater use of exchange-rate adjustments would be required for efficient operation of the international monetary system, the provisions made for such exchange-rate use did not work out well in practice. Extrapolating from the interwar period, many of the Bretton Woods negotiators feared that the major problem of the postwar period would be to hold in check government's propensities to engage in too many exchange-rate adjustments. Instead, however, the problem turned out to be that exchange-rate adjustments were used too infrequently.

Official prestige became associated with maintaining constant exchange rates, and the economic shocks and income redistribution which would accompany occasional large exchange-rate adjustments were viewed by governments in both surplus and deficit countries as being likely to generate more political costs than benefits.<sup>13</sup> These problems were exaggerated by the gradual decline in capital controls and accompanying increases in the quantities of speculative and precautionary movements of funds in the anticipation of possible exchange-rate adjustments. Thus while for most industrial countries the use of exchange-rate adjustments offered an option which reduced the economic cost of balance-of-payments adjustment, the environment of the Bretton Woods system generated large disincentives to the use of this instrument. In practice, the provision for exchange-rate adjustments

<sup>13</sup> See for example the discussion in Murphy [1979b].

did little to reduce the problem of deciding who would adjust to mutual payments imbalances.

While attempts were made to develop a code for determining adjustment responsibilities through the work of the Working Party Three of the Organization for Economic Cooperation and Development (OECD), the accomplishments were quite modest. There was general agreement with the principle that both surplus and deficit countries should participate in the adjustment to mutual imbalances. This may have made surplus countries somewhat susceptible to informal pressures from others to adjust, but in practice disputes over who should adjust continued unabated. Views of the exchange-rate system were that it was so fragile that the role of exchange-rate adjustments could not even be mentioned during the adjustment responsibility discussions of the mid-1960's.

Again, much of the debate over the operation of the adjustment mechanism fell back to the question of the provision of international liquidity. Representatives of deficit countries tended to view the growth of international liquidity as too slow and advanced new provisions for expanding international liquidity. Surplus countries, on the other hand, viewed the prospect of greater international liquidity provisions largely as a way for deficit countries to export inflationary pressures. Thus surplus countries tended to oppose efforts to expand the supply of international liquidity. Of course not all countries stayed perpetually in a surplus or deficit status, and views about aggregate international liquidity policies were not completely determined by a country's current balance-of-payments' position, but these tendencies did carry a great deal of explanatory power.

Thus, again, we see views of international liquidity issues as being largely conditioned by views of the operation of the adjustment process, with changes in international liquidity being considered as an indirect method through which to influence the operation of the adjustment process when more direct methods of control were not in operation.

##### 5. *Determining Reserve Adequacy*

What about the role of objective economic studies in determining how much international liquidity was really needed? Could not such technical analysis have been substituted for the political bickering of surplus and deficit countries? There has been a great deal of very useful technical, theoretical and empirical work on international liquidity.<sup>14</sup> Unfortunately, however, it could not resolve these types of disputes. We do know a great deal about empirical regularities in countries' demands for international reserves.<sup>15</sup> We do know that, as the size and variability of a country's international payments grows, it will tend to want to hold greater international reserves. Thus to maintain a given degree of reserve ease, we know that the stock of international reserves should increase, *ceteris paribus*. But there is considerable uncertainty over what the numerical relationship should be between these variables.

<sup>14</sup> Useful reviews of this literature have been presented by Cohen [1975], Grubel [1971], Hipple [1974], and Williamson [1973].

<sup>15</sup> Recent studies on the demand for international reserves include Bilson and Frenkel [1979]; Clark [1970a], and [1970b]; Frenkel [1978] and [1979]; Frenkel and Jovanovic [1979]; Heller and Khan [1978]; Kelly [1970]; and Makin [1977]. See also the surveys cited in the preceding footnote.

For example, many theories of the demand for international reserves suggest that reserves should rise less than in proportion to the increase in the volume of transactions, but both theoretical and empirical studies differ quite considerably on the actual and predicted deviations from proportionality. Depending upon variations in the size of payments disturbances, the costs of adjustment, availability of loans and the allocation of reserves, a given degree of reserve ease or stringency could be maintained with a rising or falling ratio of international reserves to international trade. Nor was there any unambiguous scientific way of determining whether or not the original degree of reserve ease or tightness was desirable. While technical studies in this area are far from valueless, they could not reasonably be expected to convince the main political disputants whether more or less rapid expansion of international liquidity was desirable.

An alternative approach suggested that instead of attempting to estimate the "correct" growth of international liquidity from demand for reserves equations, the rate of growth of international liquidity should be adjusted upward or downward in line with feedback from the actual operation of the world economy. If a strong preponderance of countries were being forced to devalue, or adopt restrictions or undesirable deflationary policies because of balance-of-payments deficits, then more rapid growth was clearly needed. If a large preponderance of countries were revaluing their currencies and following inflationary policies, the rate of growth of international liquidity needed to be reduced. This is a quite sensible approach. The difficulty is that it gives clear signals only when there are obvious huge imbalances in the aggregate demand and supply for international reserves. In a more normal situation, there will be many countries displaying symptoms of reserve deficiencies, while many others may be showing symptoms of excessive liquidity. In such instances, there are no clear criterion for distinguishing between widespread payments disequilibrium and imbalances in the aggregate demand and supply of international liquidity. The question comes back to the judgmental one of whether, on balance, more or less pressure should be placed on surplus or deficit countries to adjust.

A further deficiency in this aggregate international liquidity control mechanism is that it can be used to place greater pressures to adjust on surplus countries only by reducing the pressures on deficit countries. One can imagine a case in which it would be judged that surplus countries were not taking enough measures relative to deficit countries, while also concluding that in absolute terms deficit countries were, themselves, not undertaking sufficient adjustment. Indeed, in my own judgment this actually was the case during much of the operation of the Bretton Woods system.

This analysis suggests that coherent management of aggregate international liquidity can play an important role in avoiding potential global excesses or deficiencies of liquidity, but that apart from the avoidance of such extreme situations, it has very little power to fine tune the efficiency of the operation of the international adjustment process. For the latter, direct approaches to the international surveillance of the adjustment process are required.



*6. The Reserve Role of the Dollar and the Inefficiency of Adjustment Signaling Under the Bretton Woods Gold-Dollar System*

The relative inefficiency of international liquidity provisions as a method of controlling the operation of the world economy is further illustrated by considering the operation of the gold-dollar system which actually evolved out of Bretton Woods. In the previous examples we have been treating the stock of international reserves as something which could not be manufactured by individual countries themselves. In other words, the supply of international reserves was exogenously determined through the flow of gold into official coffers and/or collective decisions to create international fiat reserves or borrowing rights.

This has been the traditional assumption of international liquidity studies, but even before the establishment of the Bretton Woods system a portion of official international liquidity was demand-determined in the sense that countries deliberately supplemented their holdings of gold by acquiring holding of key foreign currencies which could be used to settle payments imbalances. The gold exchange standard reached its heyday during the operation of the Bretton Woods system, with the dollar becoming the predominant reserve currency. There is some question about the extent to which the emergence of the dollar standard occurred by design. It is clear that it was an objective of Secretary of the Treasury Morgenthau to establish the United States as a major international financial center and it was clear from the beginning that the dollar would play a special role in the Bretton Woods system. It is doubtful, however, that many of the Bretton Woods negotiators anticipated how much of a dominant role the dollar would take on.

The adjustment pressures operating through international reserves flows under pegged exchange rates operated differently for reserve and nonreserve currency countries. Responsibility for maintaining currency values within a narrow band was placed on the nonreserve currencies. A country with a balance-of-payments surplus would have to buy foreign exchange to keep the exchange value of its currency from rising above legal limits. Likewise, a deficit country would have to sell foreign exchange. With the exception of small groupings of countries which pegged to the French Franc and the Pound Sterling, these obligations were maintained by buying and selling dollars. The ability of deficit countries to maintain the exchange rate of their currencies was limited by their holdings of foreign exchange (i.e., dollars), their ability to borrow foreign exchange from the International Monetary Fund or elsewhere, and the ability to sell its gold holdings in order to buy dollars.

Adjustment pressures on the reserve center, the United States were not so direct. The United States did not intervene in the foreign exchange market to maintain exchange rates. Rather, it met its obligations by standing ready to freely buy and sell gold for dollars (at an initial price of \$35 per ounce, plus or minus a small handling charge). The Articles of Agreement of the International Monetary Fund specify that any country could satisfy its obligations under either of these two methods, but the United States was, in fact, the only country to adopt the gold convertibility method.

When the United States ran a balance-of-payments deficit it did not suffer a direct decline in its reserves as did other countries. Other countries purchased dollars in order to maintain the official pattern of exchange rates. Thus, initially, the United States incurred an increase in its liabilities, rather than a reduction in its reserves. The defense of surplus countries against the continued accumulation of unwanted dollars was their option of converting their dollars into gold, thus draining the U.S. reserve position and placing pressures on the United States to adjust.

Charges that the Bretton Woods system was designed to allow the United States to blatantly exploit financial benefits from its international power position are greatly overstated. In the Bretton Woods system, the United States was not free from adjustment pressures, but these pressures were a step removed from the direct consequences of balance-of-payments deficits which faced the nonreserve countries.

Nor did the United States profit as much from its greater ability to run balance-of-payments deficits as many have charged. It is still not universally recognized that the "seniorage" that the United States earned from the growing accumulations of dollars held abroad was sharply limited by the fact that most of these dollars were held in securities and bank deposits carrying competitive rates of interest, not as zero interest-bearing cash and demand deposits.<sup>16</sup> While the United States probably was able to borrow at a cheaper rate than it could have otherwise, it was by no means merely issuing paper I.O.U.'s as charged by General de Gaulle. Nor was this privilege of cheap borrowing entirely at the discretion of the United States. Thus the decisions of other countries could in effect force the United States to borrow when U.S. policymakers might have preferred for this not to occur.

Some theorists have argued that reserve currencies should be expected to run international deficits as a way of maximizing government seniorage.<sup>17</sup> As applied to the actual operation of the Bretton Woods system, however, such models tend to overlook not only that the seniorage which could be earned by the U.S. government was greatly limited by the payment of interest on most of these international dollar holdings, but also that the potential gains from such seniorage would rank relatively low in the scale of priorities of the government. Under the Bretton Woods arrangements, the United States had little control over the exchange rate of the dollar. Thus its major method of assuring a balance-of-payments deficit to gain international seniorage, would have been to adopt more inflationary domestic policies.

It is true that the ability to gain even limited international seniorage would increase calculations of the optimal inflation tax which a government could levy, but I have severe doubts that among the many factors which influenced the U.S. macroeconomic policies such considerations weighed very heavily.<sup>18</sup> U.S. monetary and fiscal policy over

<sup>16</sup> The view that foreign dollar accumulations were actually held predominantly in cash has been widely held by critics of the U.S. special privilege. Although the empirical invalidity of this view has been pointed out time and time again, the frequency with which this view is presented does not appear to have declined—it is still not infrequently encountered. For a recent example see Martin Mayer [1978]. It should also be noted that competition among U.S. financial institutions is sufficient to eliminate most seniorage gains. Only if there were one institution in which dollars could be held would competition from other reserve assets be required for potential monopoly seniorage gains to be substantially reduced. This point is missed in Cohen's recent discussion of seniorage [1977]. There is not general agreement on just how much seniorage was left after these considerations are taken into account, but it was undoubtedly far less than many popular discussions have assumed.

<sup>17</sup> See for example Mundell [1972].

<sup>18</sup> On optimal inflation taxes, see Gordon [1975] and the literature cited there.

the postwar period has been dominated by domestic macroeconomic objectives; and during those times in which U.S. macroeconomic policies have been specifically concerned with international considerations, these have pressed in the direction of less, rather than more, expansionary policies. For example, one of the major difficulties faced by President Kennedy's advisors in attempting to convince him of the desirability of proposing a tax cut in the early 1960's was the concern that this would worsen the U.S. balance-of-payments deficit. Likewise, one of the major arguments advanced to Congress in support of the 1968 income-tax surcharge was the need to improve the U.S. balance-of-payments deficit.

It is true that, especially after the Kennedy tax cut, the U.S. Government was not willing to sacrifice domestic employment by adopting deflationary macroeconomic policies in order to eliminate the U.S. balance-of-payments deficit. While considerable official concern was felt over the payments deficits run by the United States from the late 1950's to the early 1970's, the implementation of such concerns was limited until 1971 to the adoption of various minor measures of export promotion and reducing foreign payments such as by reducing duty-free allowances of tourists and to the eventual adoption of voluntary and then mandatory capital controls.<sup>19</sup> Thus to a great extent, the course of U.S. macroeconomic policies during the operation of the Bretton Woods system was independent of balance-of-payments considerations. The U.S. Government neither strove to run a balance-of-payments deficit, nor was willing to sacrifice the domestic economy to any extent to the requirements of balance-of-payments equilibrium.

Thus, while it is highly doubtful that the Bretton Woods arrangements induced the export of inflationary pressures from the United States, its mechanism for inducing adjustment pressures on the U.S. was far from effective. In the largest part this was due to the deficiencies of the Bretton Woods exchange-rate arrangements. While the Bretton Woods arrangements were highly successful in avoiding a repetition of the chaos of the unilateral beggar-thy-neighbor trade and exchange rate policies of the 1930's, this success came at the expense of the reinstatement of excessive exchange-rate rigidity, discussed above. It applied particularly strongly to the United States, because of the large size of U.S. trade and the special international financial role of the dollar. Even if U.S. officials had reached the point where they were willing to bear what they thought would be the domestic political costs of devaluation, there was serious doubt whether the dollar could be effectively devalued. It was widely assumed, and not just in the United States, that most other countries would follow suit, leaving the results of an attempt at U.S. devaluation as the generation of an economic and financial crisis with little net favorable impact on the exchange rate of the dollar against other currencies.

Given this situation, the only other alternative was balance-of-payments controls, a device to which the United States did gradually turn. The prolonged U.S. deficit and resulting drain on the U.S. gold

<sup>19</sup> An interest equalization tax was also imposed on the purchase of foreign securities. For a more detailed review of the history of U.S. balance-of-payments measures over this period, see Haberler and Willett (1968). Balance of payments reasons were used by the administration as one of the justifications to Congress for the 1968 tax surcharge, but this was primarily a convenient additional rationale for what the administration wanted to do on domestic grounds anyway.

stock did place some adjustment pressures on the United States. The United States may, in fact, have been induced to take as much corrective action as it would have under any set of adjustment signals, given the institutional environment of the Bretton Woods system. It is clear in retrospect, however, that the actual system of adjustment signals provided was seriously defective. It did not provide an efficient mechanism for allocating adjustment responsibilities.

In part, this was due initially to the very attractiveness of holding dollars. As was indicated above, official dollar holdings paid competitive rates of interest. On the other hand, gold holdings carried a positive cost for storage and insurance. As long as free convertibility between dollars and gold at a fixed price was assured, there were strong incentives for countries to hold dollars rather than gold. During the first years of the operation of the Bretton Woods system, the dollar wasn't as good as gold, it was better.

A surplus country thus had a conflict between portfolio balance and adjustment signaling incentives.<sup>20</sup> While it might prefer the United States to take actions which would reduce the size of the payments imbalance, it might not want to convert its dollars into gold, especially if the likelihood that its individual purchase of gold would not be likely to have a strong effect on U.S. policies. And when gold conversions did occur, they could be for reasons unconnected to changes in the state of overall payments imbalances. For reasons of tradition and law and different evaluations of portfolio balance considerations, some countries tended to hold a high proportion of their reserves in gold while other countries tended to hold a low proportion. A change in the composition of surplus countries could then lead the United States to gain or lose gold while the overall size of the U.S. payments deficit remained unchanged. For both of these reasons the actual magnitude of gold conversions could not be taken as a good indicator of the aggregate amount of disequilibrium between the reserve center and nonreserve countries.

### *7. The Interrelationship of International Liquidity and Confidence Problems: The Triffin Dilemma*

The inefficiency of the gold adjustment signaling was further heightened by the emergence of the liquidity-confidence dilemma of the Bretton Woods system which was so brilliantly diagnosed by Robert Triffin.<sup>21</sup> Triffin pointed out in the late 1950's that the Bretton Woods system could not go on operating as it had. Most of the expansion in international liquidity had come from increased foreign official holdings of dollars. At the beginning of the operation of the system there were few outstanding dollar balances abroad and the major portion of global official gold reserves resided in the United States. The international liquidity provisions of the Bretton Woods system had been based on the assumptions that new gold production would be adequate to meet most of the needs for growth in international liquidity over time. These projections turned out to be much too optimistic, however, in part because of the unforeseen burst of world inflation which followed World War II and substantially reduced

<sup>20</sup> See Officer and Willett [1969] and [1970].

<sup>21</sup> See Triffin [1959].

the real value of the fixed nominal price of gold. Provisions had been made to meet a future scarcity of gold through an increase in its price, i.e., a uniform devaluation of all currencies, but the operation of this provision became ruled out in practice. The quotas of the International Monetary Fund were like a pool of national funds which could be borrowed by deficit countries under certain conditions.<sup>22</sup> Thus they increased the liquidity of the system, but did not represent owned reserves in the manner of gold, and expansions of Fund quotas were not viewed as a method of increasing international liquidity on which exclusive reliance could be placed.

Thus it had been fortunate for the operation of the system during the 1950's that countries had desired to accumulate a large part of their balance-of-payments surpluses in the form of increased dollar holdings rather than through draining the United States' gold reserves. This progress was reaching its limits, however. As Triffin pointed out, outstanding official dollar holdings were becoming large relative to their backing—the U.S. gold stock.<sup>23</sup> The growth in dollar holdings relative to gold backing could not continue indefinitely without calling into doubt the continued free convertibility of the dollar into gold.

Since conversion of dollar accumulations into gold were not automatic, there was considerable uncertainty as to just how many dollars abroad could be supported by a given size of U.S. gold stock without generating a run on the world's bank, but continued reliance on dollar acceleration to meet the growth of international liquidity ran an increasing risk that a collapse, or at least a change, of the operation of the system would be required. On the other hand, limiting dollar accumulations to amounts which could unquestionably be supported by the U.S. gold stock would soon generate a shortage of international liquidity. Thus the system faced a basic dilemma. Without some change a crisis of confidence or a liquidity shortage would result.

### *8. The Failure of the Special Drawing Rights Reform*

This analysis presented the intellectual underpinnings of the efforts to create a new source of international liquidity growth which culminated in the establishment of the SDR.<sup>24</sup> As it turned out, however, creation of SDR's was neither necessary nor sufficient to maintain the original provisions of the Bretton Woods system. Before SDR's were created, the dollar had already become de facto inconvertible into gold for large purchases by major dollar holders. A collapse of the structure of the monetary system was avoided by a de facto limitation on the operations of the gold adjustment signaling mechanism. Despite the considerable uncertainties generated by the looseness of the gold conversion mechanism, a combination of luck and interest in preserving the status quo by the major dollar holders brought the system into a more stable region in which dollars outstanding exceeded the U.S. gold backing by so much that it was clear to the major dollar holders that if any followed France in its "war on the dollar" and converted dollars into gold, this would generate a major run on the dollar.

<sup>22</sup> For discussions of the IMF's quotas and international lending operations see "The Fund Under the Second Amendment: A Supplement," *I.M.F. Survey*, September 18, 1978.

<sup>23</sup> For much of this period the entire U.S. gold stock was not available for international backing as a substantial portion was for some time required for backing the U.S. money supply. The ratio of gold backing for both domestic and international liabilities were progressively reduced and eventually terminated.

<sup>24</sup> For discussions of the SDR negotiations see Cohen [1970], Machiup [1968], Solomon [1977a] and Strango [1976].

Given the relatively small number of major dollar holders and their great aversion to running the risk of upsetting the status quo, these countries were willing to absorb more dollars than they wanted, without attempting to convert them into gold. According to the analysis of Officer and Willett,<sup>25</sup> as long as the rate of foreign official dollar accumulation was not far in excess of demands, the Bretton Woods system could have continued on indefinitely without the need for formal revision. In other words, as long as a large part of any U.S. deficit was caused by foreign demands rather than excess supply from the United States, the recognition of mutual interdependence among the major central banks would probably have been sufficient to suspend the operation of the Triffin dilemma.

Thus while the dollar remained legally convertible into gold, and was in fact convertible for the small transactions of nonmajor countries, it became de facto inconvertible with respect to the dollar holdings of the major industrial countries. This de facto inconvertibility provided a shock absorber which increased the stability of the system, but at the cost of almost completely eliminating the adjustment signaling device built into the Bretton Woods system for the reserve currency country. While workable, this could hardly be considered a fully satisfactory system. And, had it been coupled with U.S. attempts to keep other countries from adjusting exchange rates, it would have been an indefensible system.

The United States did not take such a position, however. It rather argued that because of its role in the system it was handicapped in undertaking exchange-rate adjustments and urged other countries to make exchange-rate adjustments if they were accumulating more dollars than they desired. Likewise, the United States was an early advocate of introducing greater exchange-rate flexibility into the system to make it easier for other countries to shield themselves from unwanted dollar accumulations.

A strong case can be made that such a system would make a good deal of economic sense, but other countries were hesitant to accept such a change in the functioning of the system and the debate over who should adjust to mutual imbalances continued.<sup>26</sup> At the same time there was considerable debate over how much of the continuing U.S. deficit represented a genuine balance-of-payments disequilibrium and how much represented an equilibrium deficit resulting from meeting the demands of other countries to increase their international reserve holdings over time.<sup>27</sup> The creation of SDR's could eliminate the equilibrium part of the deficit, but this was not what was causing major pressures on the system. It could do nothing about the disequilibrium part of the U.S. deficit.<sup>28</sup>

One can make a good case for having demands for the growth of international liquidity over time be met by a deliberately created international reserve asset, rather than increased holdings of the dollar, but the SDR reform did not really bring a major increase

<sup>25</sup> See Officer and Willett [1969] and [1970]. See also the subsequent studies by Hirsch [1971], Makin [1971], and Officer [1974].

<sup>26</sup> For references to the literature on this subject see Willett [1977, ch. 3]. Advocates of such a passive U.S. role included Haberler, Krause, McKinnon, Willett, and Wonnacott.

<sup>27</sup> The classic analysis of how the role of the U.S. as a world banker could give rise to measured payments deficits which did not represent a genuine disequilibrium was presented in Depres, Kindleberger, and Salant [1965].

<sup>28</sup> The equilibrium and disequilibrium parts of the U.S. deficits were sometimes referred to as demand- and supply-determined deficits respectively.

in international control over the expansion of international liquidity. It could do nothing to deter aggregate increases in the demands for reserves which were greater than the rate of SDR creation, nor could it do anything to deter the more serious problem of an increase in supply-determined international liquidity emanating from U.S. payments deficits.

The former problem could have caused serious problems if genuine convertibility of the dollar into reserve assets had been reestablished, for in that case any increase in reserve assets less than the growth in aggregate demand for reserves could have fed back disproportionately on the United States. This was a major concern of U.S. negotiators during the later efforts to reform the international monetary system in 1973-74 after the Bretton Woods structure had broken down.

The latter problem was what caused the breakdown of the system. The efforts to finance the Vietnam war without an increase in taxes led to a substantial overheating of the U.S. economy and substantial increase in the size of the U.S. payments deficit. While masked somewhat by tight money during 1969, the deterioration in the U.S. trade position was soon followed and then magnified by a deterioration in the overall balance-of-payments. The deterioration in the underlying payments position was accompanied by capital outflows motivated by anticipation of revaluations of the strong foreign currencies and even by fears of an eventual devaluation of the dollar or collapse of the whole pegged exchange-rate structure. While official settlements deficits of \$1 to \$3 billion per year had been the cause of worries in the past, the U.S. deficit ballooned to almost \$10 billion in 1970 and accelerated further during 1971.

It is doubtful that any system without a great deal of exchange-rate flexibility could have avoided such a situation, although a system with better adjustment signals might have helped to generate a move toward greater exchange-rate flexibility more rapidly. The consequent explosion of international liquidity clearly had an adverse effect on the world economy, transmitting inflationary pressures from the United States to the rest of the world. This certainly represents a case in which deficiencies in the organization of the international monetary system combined with an episode of instability in a major economy to generate inflationary pressures abroad.

It is open to question how alternative adjustably pegged rate systems would have operated under the enormous pressures of the overheating of the U.S. economy. My guess is that none would have survived these pressures, but that a more symmetrical system which required asset settlements for U.S. deficits might have forced the adoption of exchange-rate flexibility sooner.

This explosion in international liquidity continued throughout the efforts to restore a new structure of pegged exchange rates in 1972 and 1973. This was a case in which large reserve increases, because they were undesired, clearly placed inflationary pressures on the recipient countries as would be predicted from international reserve monetarist views. It is important to remember, however, that this destabilizing supply-determined explosion of international liquidity was the result of the death throes of the old pegged exchange-rate system. As will be reviewed below, the consequences of "uncontrolled" reserve increases under flexible exchange rates may be quite different

While fears are often expressed that under our current flexible rate system international liquidity is demand determined, it must be remembered that this was also the case under the Bretton Woods pegged-rate system as well. It was not the demand-determined component of international liquidity expansion which caused major problems, it was the supply-determined portion. (The fears of demand-determined expansion of international liquidity will be considered in more detail below.) Thus it is not legitimate to take the 1970-72 international liquidity explosion as an example of the instabilities which can be generated by an uncontrolled demand-determined international liquidity mechanism under our new international monetary arrangements based on flexible exchange rates.

### *9. The Effects of the International Liquidity Explosion of 1970-72*

Even in the case of this destabilizing supply-determined spurge of international liquidity expansion in 1970-72 the effects on world inflationary pressures were not nearly as great as many international reserve monetarists have argued. The use of aggregate statistics in many of these monetarist studies has led to a greatly exaggerated impression of the magnitude of inflationary pressures generated by the 1970-72 international liquidity explosion.

Investigations of the behavior of the relationships between the growth of international reserves and rate of growth of the sum of the money supplies of the major non-U.S. industrial countries led the authors of several studies to conclude, not unreasonably, that the international liquidity explosion was the dominant explanation of the accompanying rapid acceleration in the growth of the money supplies in these countries.<sup>29</sup> The aggregate facts were thus in accord with the prediction of the international reserve monetarist theories and these authors saw little need to search for further explanations.

In subsequent analysis, however, it turned out that this strong apparent relationship did not hold up well on a country-by-country basis. There was little correlation between the countries which received the largest reserve increases and those which showed the most rapid accelerations in their rates of monetary expansion.<sup>30</sup> This suggested that a considerable portion of the aggregate acceleration in monetary growth may have resulted from domestic causes which happened to coincide with the explosion of international liquidity.

Further recent research has found results consistent with this latter hypothesis. As part of a study on the causes of monetary expansion in the major industrial countries, Leroy Laney and I have estimated policy reaction functions for the monetary authorities of these countries. (See Laney and Willett [1980].) These reaction functions include both domestic variables, such as budget deficits and wage increases, and international variables, such as import prices and international reserve changes. Using these estimates we calculated how much of the monetary expansion in each country over the 1970-72 period was due to international reserve increases and how much was due to domestic factors.

<sup>29</sup> See Goldstein [1974], Heller [1976], Keran [1975], and Meiselman [1975].

<sup>30</sup> See Willett [1976].



As is indicated in table 1, of the 11 countries investigated, only for Germany, the Netherlands, and Switzerland did domestic considerations fail to explain the majority of the expansion of narrowly defined money stocks. For the group as a whole, domestic factors accounted for from 68 to 72 percent of the aggregate rate of increase, depending upon the weights used in the aggregation and whether narrowly or broadly defined money supply figures were used. The direct estimates of the effects of reserve increases accounted for only 11 to 18 percent of the aggregate money supply increases.

Of course, any particular set of such estimates cannot be definitive and alternative specifications of the equations and inclusion of different domestic variables would undoubtedly lead to somewhat different empirical results. I suspect that subsequent studies are unlikely to upset the basic picture offered by these results, however.

TABLE 1.—CAUSES OF MONETARY GROWTH DURING THE INTERNATIONAL LIQUIDITY EXPLOSION, 1970-72

	Narrow money stock				Broad money stock			
	Percent M <sup>1</sup>	H <sup>2</sup>	R <sup>3</sup>	R <sup>U4</sup>	Percent M <sup>1</sup>	H <sup>2</sup>	R <sup>3</sup>	R <sup>U4</sup>
Australia.....	10.07	9.36	3.48	3.48	11.17	9.55	2.22	2.22
Belgium.....	11.13	9.56	2.60	2.60	12.60	11.82	1.01	1.01
Canada.....	9.03	5.56	( <sup>5</sup> )	3.47	11.23	18.89	( <sup>5</sup> )	( <sup>5</sup> )
France.....	12.60	7.83	2.10	4.77	17.33	6.37	1.62	10.96
Germany.....	12.10	5.97	.19	6.13	13.93	.34	( <sup>5</sup> )	13.59
Italy.....	21.23	13.20	.43	8.03	16.47	14.34	.04	2.13
Japan.....	23.73	19.76	6.80	6.80	21.97	17.76	5.54	5.54
Netherlands.....	14.83	4.88	8.16	9.95	13.80	7.06	6.66	6.74
Sweden.....	8.77	5.82	( <sup>5</sup> )	2.95	9.33	8.96	.02	.37
Switzerland.....	11.37	.23	6.24	11.14	10.33	1.35	4.33	8.98
United Kingdom.....	12.37	11.90	1.08	1.08	16.83	17.80	.36	.36
<b>TOTALS</b>								
1. Aggregate average rate of monetary growth:								
(a) Weighted by money stock changes.....	18.40	13.18	3.39	6.31	17.61	12.31	2.66	6.23
(b) Weighted by real GNP.....	15.12	10.50	2.50	5.32	16.08	11.02	1.83	6.17
2. Proportion of aggregate monetary growth estimated due to each factor:								
(a) Weighted by money stock changes.....		.72	.18	.34		.70	.15	.35
(b) Weighted by real GNP.....		.69	.17	.35		.69	.11	.38

<sup>1</sup> Percent M equals average annual rate of monetary growth.

<sup>2</sup> H equals estimate of average rate of monetary growth due to domestic factor.

<sup>3</sup> R equals estimate of average rate of monetary growth due to international reserve changes.

<sup>4</sup> R<sup>U</sup> equals upper bound estimate of average rate of monetary growth due to reserve increases (equals R plus any positive residuals from estimating equations).

<sup>5</sup> In cases in which the estimated reserve coefficient in the regression is negative, the contribution of reserve changes to monetary expansion is constrained to be equal to zero.

Source: Leroy Laney and Thomas D. Willett (1970), "The International Liquidity Explosion and Worldwide Monetary Expansion, 1970-72," Claremont Economic Discussion Paper, 1979. The methodology for these estimates is presented in Willett and Laney (1978).

The supply-determined increases in international liquidity in 1970-72 undoubtedly did contribute to more rapid global monetary expansion than would otherwise have been the case. And the amounts of these effects were not trivial. But for most countries, higher rates of monetary expansion would have occurred for domestic reasons anyway, and many countries have considerable ability, at least in the short run, to sterilize most of the effects of undesired international reserve inflows on domestic monetary aggregates.

Systematic empirical studies tend to suggest that many countries have displayed much greater abilities to sterilize the effects of monetary inflows than is often implied by the statements of monetary officials. A tabulation of the results of a number of these studies is presented in table 2.

TABLE 2.—STERILIZATION COEFFICIENT ESTIMATES

Author(s) and country	Frequency and interval	Estimates
<b>Argy and Kouri (1974):</b>		
Germany.....	Q; 1963:3 to 1970:4.....	<sup>1</sup> -0.34; <sup>2</sup> -0.19
Italy.....	Q; 1964:1 to 1970:4.....	<sup>1</sup> -1.37; <sup>2</sup> -0.67
Netherlands.....	do.....	<sup>1</sup> -0.74; <sup>2</sup> -0.87
Artus (1973): Germany.....	M; 1973:4 to 1975:7.....	-0.745
Herring and Marston (1977): Germany.....	Q; 1960:1 to 1969:2.....	-0.91
Hickman and Schleicher (1978): Australia.....	A; 1958 to 1976.....	-0.83
Belgium.....	do.....	-0.68
Canada.....	do.....	-1.09
France.....	do.....	-1.56
Germany.....	do.....	-0.61
Italy.....	do.....	-1.43
Japan.....	do.....	-1.22
Netherlands.....	do.....	-0.69
Sweden.....	do.....	-1.40
Switzerland.....	do.....	-0.39
United Kingdom.....	do.....	-1.23
<b>Laney (1978):</b>		
Australia.....	M; 1966:1 to 1977:8.....	-0.81
Belgium.....	M; 1964:2 to 1977:6.....	-0.69
Canada.....	M; 1963:1 to 1977:11.....	-1.00
France.....	M; 1963:8 to 1977:9.....	-1.20
Germany.....	M; 1964:2 to 1977:9.....	-0.68
Italy.....	M; 1966:2 to 1977:10.....	-0.83
Japan.....	M; 1966:3 to 1977:10.....	-1.69
Netherlands.....	M; 1958:1 to 1977:11.....	-0.80
Sweden.....	M; 1962:8 to 1977:5.....	-1.13
Switzerland.....	M; 1963:4 to 1977:6.....	-0.07
United Kingdom.....	M; 1964:1 to 1977:2.....	-1.31
<b>Miller (1976):</b>		
Canada.....	Q; 1960:1 to 1969:4.....	-1.10
Germany.....	do.....	-0.979
Japan.....	do.....	-0.538
United Kingdom.....	do.....	-1.02
Willms (1971): Germany.....	Q; 1958:1 to 1970:2.....	-0.863

<sup>1</sup> Current account.

<sup>2</sup> Capital account.

Source: Leroy Laney and Thomas D. Willett [1980].

A negative sign on these estimates indicates that the domestic component of the monetary base has varied to offset the effects of variations in the foreign component of the base caused by reserve inflows or outflows. A coefficient of -1 indicates complete offsetting.<sup>31</sup> Again, these estimates should not be taken as definitive and variations appear among the specific results of various studies. Taken together, however, they indicate that many countries do have considerable ability to insulate their money supplies from international capital and reserves flows in the short run even under pegged exchange rates.

<sup>31</sup> Early studies in this area did not attempt to distinguish between the effects of international capital flows offsetting the effects of a tightening or loosening of domestic monetary policy and the effects of sterilization of reserve inflows. Thus initial findings of a high negative correlation between the domestic and foreign components of the monetary base were interpreted by some as evidence of high monetary interdependence with international capital flows swamping the efforts of national monetary authorities to alter domestic monetary conditions while the same results were interpreted by others as an indication of a higher degree of national monetary control which could offset the domestic effects of international disturbances. The solution to this controversy involved attempting to identify when developments were due to desired changes in the money supply and when they were due to exogenous international disturbances. This was done by estimating reactions functions for the domestic monetary authorities and all of the results reported in table 2 come from second-generation studies which do attempt to identify the causes of disturbances in this manner. For further discussion on this point see Argy and Kouri [1974], and Sweeney and Willett [1976].

Indeed, as is indicated in table 3, these studies would tend to suggest even smaller effects from the 1970-72 liquidity explosion than did the Laney-Willett estimates.

TABLE 3.—CALCULATIONS OF THE MONETARY EFFECTS OF THE INTERNATIONAL LIQUIDITY EXPLOSION 1970-72 BASED ON ESTIMATES OF STERILIZATION COEFFICIENTS

	Percent M <sub>1</sub> <sup>1</sup>	S <sub>H</sub> <sup>2</sup>	S <sub>L</sub> <sup>3</sup>	S <sub>A</sub> <sup>4</sup>	Percent M <sub>2</sub> <sup>1</sup>	S <sub>H</sub> <sup>2</sup>	S <sub>L</sub> <sup>3</sup>	S <sub>A</sub> <sup>4</sup>
Australia .....	10.07	6.93	7.70	7.32	11.17	6.89	7.79	7.34
Belgium .....	11.13	3.59	3.71	3.65	12.60	3.62	3.74	3.68
Canada .....	9.03	(9)	(9)	(9)	11.23	(9)	(9)	(9)
France .....	12.60	(9)	(9)	(9)	17.33	(9)	(9)	(9)
Germany .....	12.10	.5	10.91	5.58	13.93	.5	11.18	5.72
Italy .....	21.23	(9)	.25	(9)	16.47	(9)	.23	(9)
Japan .....	23.73	(9)	11.27	(9)	21.97	(9)	11.03	(9)
Netherlands .....	14.83	(9)	4.41	(9)	13.80	(9)	(9)	(9)
Sweden .....	8.77	(9)	(9)	(9)	9.33	(9)	(9)	(9)
Switzerland .....	11.37	8.29	12.64	10.47	10.33	8.12	12.37	10.25
United Kingdom .....	12.37	(9)	(9)	(9)	16.83	(9)	(9)	(9)
TOTALS								
1. Aggregate average rate of monetary growth:								
(a) Weighted by money stock changes .....	18.40	.45	5.67	.94	17.61	.51	6.55	1.36
(b) Weighted by real GNP .....	15.12	.61	5.20	1.66	16.08	.61	5.20	1.68
2. Proportion of aggregate monetary growth estimated due to each factor:								
(a) Weighted by money stock changes .....		.02	.31	.05		.03	.37	.08
(b) Weighted by real GNP .....		.04	.34	.11		.04	.32	.10

<sup>1</sup> Percent M equals average annual rate of monetary growth.

<sup>2</sup> S<sub>H</sub> equals average annual rate of monetary growth due to international reserve increases based on highest estimates of sterilization coefficients. (Based on the sterilization coefficient estimates reported in table 2.)

<sup>3</sup> S<sub>L</sub> equal average annual rate of monetary growth due to international reserve increases based on average of estimates of sterilization coefficients.

<sup>4</sup> S<sub>A</sub> equal average annual rate of monetary growth due to international reserve increases based on lowest estimates of sterilization coefficients.

<sup>5</sup> In cases in which average, high or low surveyed sterilization coefficient exceeds minus unity, international reserve flows are assumed to be completely sterilized.

Source: Laney and Willett (1980).

Of course, not all countries have a great deal of ability to sterilize reserve inflows. It has been argued that a few smaller industrial countries actually used their balance-of-payments as a means of controlling the rate of domestic monetary growth, using variations in administrative procedures, etc., to induce a surplus if they wanted to increase the rate of monetary expansion and to induce a deficit if they wanted to slow the rate of monetary growth.<sup>32</sup> Such countries were quite susceptible to the adverse effects of international liquidity supply shocks. It is interesting to note that many of those practitioners and officials most sympathetic to international reserve monetarist views come from the smaller European countries which do have the least scope for monetary independence.

Thus views on the international liquidity mechanism are often strongly influenced by extrapolation from the conditions of one's home economy. The same has held with respect to views on the relative desirability of fixed versus flexible exchange rates. The theory of

<sup>32</sup> See, for example, Katz [1969].

optimum currency areas suggests that flexible rates will tend to be more attractive for relatively large economies while fixed rates have greater relative attractiveness for small open economies, and the views of both academicians and officials in this debate have not been entirely uncorrelated with the characteristics of their home economies.<sup>33</sup> A large liquidity supply shock, such as occurred in 1970-71, will undoubtedly force some countries to inflate more rapidly, but the effects are likely to vary greatly from one country to another. This is likewise true of the other mechanisms through which reserve increases may ultimately cause more expansionary policies.

#### *10. Alternative Views of the Demand for International Reserves*

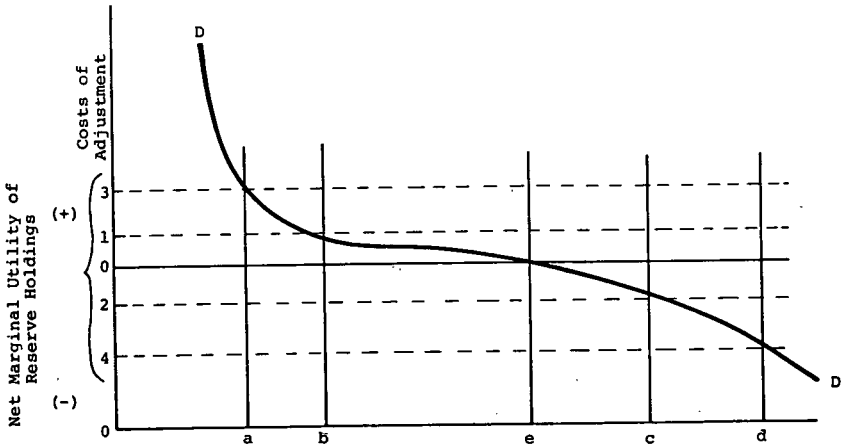
One popular view of the role of international reserves is quite similar to some versions of Keynesian, as opposed to monetarist, monetary theory. In domestic monetarist theory, excess demands and supplies of money motivate economic behavior equally. In some versions of Keynesian theory, however, the money supply is considered to be more like a constraint than a behavioral variable. This view is typified by the old analogy of monetary policy as a string; tight money can hold back the economy, but easy money cannot push it forward. Such behavior would characterize an economy if it were in Keynes' famous liquidity trap.

Modern research has tended to discount the empirical importance of this condition as applied to the relationship between money supplies and the behavior of domestic economies. As a description of the relationships between international reserve changes and the behavior of governments, this view becomes much more plausible, however.<sup>34</sup> National governments have much weaker incentives to achieve optimal reserve holdings than firms have to achieve optimal holdings of money balances. In some respects the demand for international reserves for many industrial countries would be analogous to the demand for money by a wealthy individual who manages his own money. Except when he or she is running out of it, the wealthy individual might pay little attention to the level of his or her cash balances. In technical terms, we would say that over a wide range there would be little change in the marginal utility of additions to or subtractions from the level of money balances. Only when they reached a very low level would variations in the level become important. A similar case would apply to the utility function of government officials for wealthy industrial countries whose main concern was achieving domestic macroeconomic objectives. In each case, the demand for money or demand for reserve functions would be like that depicted in figure 1. The steep portion of the curve at low reserve levels would approximate the view of reserves acting primarily as a constraint.

<sup>33</sup> The theory of optimum currency areas was named by Robert Mundell although some of its basic elements had been identified in earlier literature. For discussions of the subsequent development of this approach and references to the literature see Tower and Willett [1976].

<sup>34</sup> For example, Walter Salant has argued that "Global reserves are less an instrument closely geared to a target variable than a potential constraint on the attainment of targets." Salant [1970, p. 304].

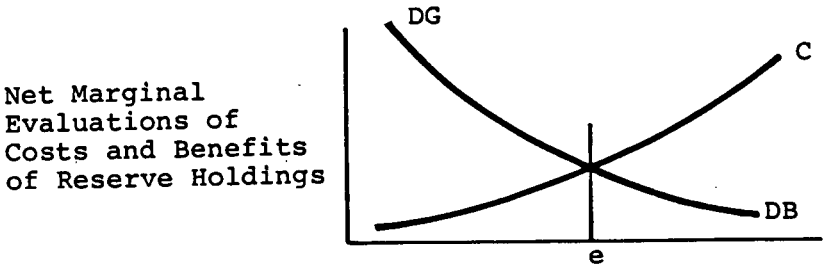
FIGURE 1.—Reserve levels



Note: This DD curve is drawn net of the opportunity costs of holding reserves. Thus point e where  $MU=0$  represents the economic optimum. The opportunity costs of holding reserves are reduced by the fact that most reserve holdings yield interest earnings. On portfolio or asset balance grounds, however, the opportunity costs of reserve holdings would begin to increase after some point, as more and more of total national assets were being held in this form.

Thus underlying figure 1 would be schedules of gross benefits and opportunity costs from reserve holdings which look like the following:

FIGURE 1a.—Level of reserves



Note that the costs on the vertical axis of fig. 1 are adjustments, not interest rate opportunity costs per se as in typical demand for money diagrams. The graph is not meant to imply that the demand for reserves is highly elastic with respect to the interest rate.

Concern for money balances or international reserves would constrain spending or induce other adjustments when they were very short, for example at point a, but at higher levels they would have very little effect on behavior. This would not have to reflect irrational or nonmaximizing behavior, only that variations in the utility generated by increases or decreases in reserve levels would be low relative to the costs of adjustment which would be required to adjust reserves. For a country under adjustably pegged exchange rates, exchange rate adjustments or changes in macroeconomic policies necessary to acquire or get rid of reserves would be viewed as being more costly than deviations from optimal reserve levels over a wide range (ob to oc in figure 1). In such cases, as long as a country had the ability to sterilize the domestic monetary effects of reserve flows, there could be a wide range over which accumulations or losses of reserves would

not influence economic behavior.<sup>35</sup> Of course private entities also have such thresholds with respect to adjusting their financial positions, but these thresholds are likely to be of much less aggregate importance for predicting the relationships between money supply changes and private behavior than between changes in international reserves and national behavior. This is because of both the lesser scope for the law of large numbers to operate in the latter case and because of the relatively lower weight of optimal financial positions in the hierarchy of government concerns.

Again this need not be due to irrational or nonmaximizing behavior. It is based on recognition that officials have more than one factor in their demand for reserves functions. The range of inaction in response to reserve changes is also likely to be substantially widened because financial officials are likely to view economic adjustments as being much more costly in political terms, than they are in terms of the aggregate economic effects on the economy. Especially with the use of exchange-rate changes under the adjustable peg, officials tended to view adjustments as being much more costly than did most economists. This status quo bias was undoubtedly influenced to some extent by the general tendency of most political officials to be less enthusiastic about the use of the price system than most economists. To a large extent, however, it reflected rational shortrun political views that such adjustments might be particularly costly in political terms to those initiating them. Personal prestige would often be damaged and there was a not unreasonable suspicion that those who were adversely affected by the change in exchange rates would react more strongly politically than those who gained from it.

In typical democratic institutional frameworks, the costs of information and free-riding incentives against political action by highly decentralized interests emphasized in public choice theory can cause the pursuit of individual rational behavior to lead to collective outcomes which deviate substantially from full optimality. Thus in a manner analogous to the prevalence of protectionist measures which benefit some groups at the expense of aggregate economic efficiency, there can be substantial, politically rational deviations from economic optimality in international financial policies.<sup>36</sup> It is hard to think of an election being lost or a finance minister being fired because a country's international reserves were 50 percent higher than an economic calculation of optimal reserve holdings, but there are numerous instances of job loss for Finance Ministers who did preside over exchange-rate changes under the adjustable peg.<sup>37</sup>

In terms of figure 1, if we consider the original cost of adjustment lines at 01 and 02 to have been based on considerations of aggregate economic efficiency, these political or bureaucratic self-interest considerations would increase the perceived costs of adjustment to the

<sup>35</sup> The reserve levels in figure 1 should be thought of as expected average levels and would not correspond to actual reserve holdings at all times. Thus if a reserve increase were expected to be soon reversed this increase would not cause an outward movement on the DD schedule.

It should also be noted that we are dealing with international reserves being held primarily for purposes of balance of payments financing and exchange-rate maintenance. The normal assumption is that apart from this contribution, international reserves will earn a lower rate of returns than alternative uses of the nation's capital stock. This is a reasonable assumption for most of the industrial and developing countries, but would not apply to many of the OPEC countries for whom a considerable portion of their official reserves reflect investment rather than traditional international reserve considerations. Thus a country like Saudi Arabia would hold much higher level of international reserves than would make sense on balance of payments and exchange rate grounds.

<sup>36</sup> On the application of public choice analysis to the demand for international reserves and to trade policy see Amacher, Tollison and Willett [1975] and [1979]; Tower and Willett [1972]; and Willett [1979b].

<sup>37</sup> See, for example, Cooper.

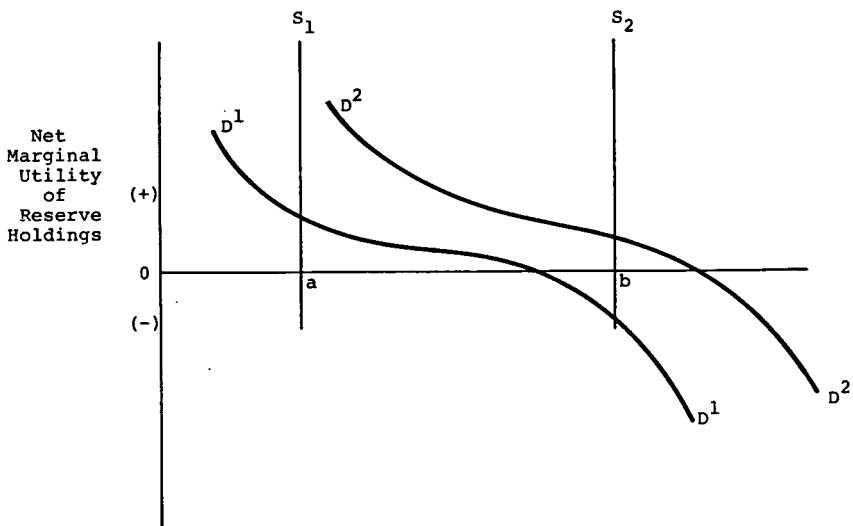
decisionmaking officials, say to 03 and 04. This would lengthen the reserve range over which economic adjustments would not be induced. Over this extended range it would be likely that the DD curve would be falling at a more gradual pace at the upper end than it would be rising at the lower end. As a consequence, the range of inaction would be likely to be expanded to a greater extent on the upper end than on the lower end, i.e.,  $cd > ab$ .

This would tend to reduce the amount of adjustment measures undertaken by surplus countries relative to deficit countries. From the perspective of this constrained view of international reserves, an increase in the supply of international liquidity would loosen the constraints placed on deficit or low reserve countries. Thus some countries would be allowed to undertake more expansionary policies, which they would have liked to undertake anyway, but had been constrained from undertaking because of a weak international financial position. Such a situation would apply to perhaps a majority of the non-oil exporting less-developed countries and at times to particular industrial countries as well.

For countries not in this constrained position, however, reserve increases might have no influence at all on economic behavior, at least initially. Countries in this position have been called reserve sinks. The initial inflationary effects of a given sized increase in international reserves could, therefore, obviously vary greatly, depending upon what proportion went to reserve sinks and what proportion went to countries which had relatively little ability to sterilize reserve inflows or were in a reserve constrained position.

Similarly the "adequacy" of any given aggregate level of reserves could depend crucially on how it is distributed. Mechanical indicators of reserve totals in relation to the volume of world trade or even more sophisticated indicators such as measures of payments variability cannot be considered adequate guides for the supervision of the operation of the international adjustment process. There is far too much slippage possible between reserve totals and the adjustment pressures generated by international liquidity effects.

FIGURE 2.—Level of reserves



## RESERVE SINKS AND SECOND ROUND EFFECTS

Uncertainties about the effects of a given change of international reserves are further increased when the second round effects of international liquidity creation are considered. The fact that reserves may initially flow into a reserve sink does not necessarily mean that these reserves are permanently sterilized.<sup>38</sup> Countries do not tend to stay forever in balance-of-payments surplus or deficit. A country which accumulated reserves while a sink will have the ability to run deficits for a longer period if its payments position reverses. Thus the initial expansion of international liquidity may generate more expansionary policies by some countries at a latter stage.

These second-stage effects would bring the long run effects of international liquidity expansion closer to the predictions of the international reserve monetarists, but the lags involved would be both much longer and more variable than in the case of national economy responses to money supply changes. Indeed, they might often be measured in decades, rather than years.

Furthermore, there is reason to believe that a considerable portion of the reserves which initially flow into reserve sinks may be permanently sterilized. There is likely to be a dependence effect in operation. As Fritz Machlup has argued [1966], reserve accumulations are likely to ratchet up the minimum reserve levels with which financial authorities feel comfortable and because of the public choice considerations discussed above, such bureaucratic objectives may often have a major impact on the decisions which are ultimately made. This is illustrated in figure 2. The increase in reserves from say a to b would shift the DD curve to the right by some fraction of this amount. To the extent that such an effect does operate: after a country moved into deficit, its authorities would begin to implement adjustment policies at a higher level of reserves than if the additional accumulation had not occurred.

To date, there has been no formal empirical study of the magnitudes of such dependence effects, but casual empiricism suggests that they might be quite large.<sup>39</sup> Japan's balance-of-payments experience over the past decades, for example, is quite consistent with the hypothesis of a sizable dependence effect. So is the relatively modest amount of dollars sold off by the European countries after floating exchange rates were adopted in 1973. (This will be discussed below.) To the extent that such ratchet or dependence effects operate then some and perhaps a large portion of the flow of reserves into reserve sinks would be permanently rather than only temporarily sterilized.<sup>40</sup>

Of course, discussions of possible slippages between reserve changes and national spending do not guarantee that important empirical regularities may not be found which can be useful for aggregate control. When looking at the behavior of particular economic entities,

<sup>38</sup> This has been emphasized by Johnson [1970] and Niehans [1970].

<sup>39</sup> While not direct tests of the Machlup ratchet effect, Bilson and Frenkel [1979] have tested a related hypothesis which could be derived from the Mrs. Machlup approach. They found that industrial countries do tend to adjust more rapidly to an even demand for reserves than to an excess supply. Bilson and Frenkel caution that they did not have sufficient observations of cases of excess supply to have great confidence in these particular results, but they are suggestive especially when combined with the earlier similar findings of Michaely [1968].

<sup>40</sup> For further analysis on this point see Sweeney and Willett [1977b].



one could easily convince oneself that there would be little connection between the supply of money and private economic spending. Yet we know from extensive empirical testing that while there is variability in the exact effects of changes in monetary aggregates on private spending, the relationships are rarely sufficiently strong to make the control of monetary aggregates an important aspect of macroeconomic policies. (This proposition would be accepted by most nonmonetarists as well as monetarists, although not in a form which advocated fixed monetary growth rules.)

Might not the same apply with respect to international reserve monetarism? I am very doubtful that this is the case. There are, of course, some empirical regularities with respect to studies of the demand for international reserves which help explain why some countries hold higher levels of reserves than others. Finding statistical significance in such studies is quite consistent with there being enormous variability in aggregate relationships. There have been several studies recently which do look at aggregate relationships between changes in international reserve totals and world inflation; see for example, Heller [1976], Heller and Kahn [1978], Keran [1976], and Meiselman [1975].

The examination of the strong divergence between the aggregate and country-to-country results for the 1970-72 period discussed above may make one suspicious, however, about the extent to which such statistical analysis of aggregated national data has really picked up economically meaningful casual relationships of great strength. Particularly with equations with a large number of lags it is often possible to fit regressions *ex post* which have strong statistical properties, but which are of little economic significance or use in forecasting future relationships.<sup>41</sup>

In my judgment, support from much more detailed and disaggregated empirical studies would be required before acceptance of any strong form of the international reserve monetarism hypothesis is justified.

An initial look at the developments immediately following the adoption of generalized floating does not offer much support for strong forms of the international reserve monetarism view. From this perspective, the limited magnitude of the run off of European reserves in 1973 and 1974 must be considered quite surprisingly small.

### *11. The Reserve Runoffs After the Adoption of Floating Rates*

As is indicated in table 4, the Western European countries did take advantage of the adoption of floating exchange rates in 1973 to sell off over \$5 billion worth of international reserves in aggregate during 1973 and 1974. From a monthly peak of \$47.5 billion in October 1973, official dollar holdings declined to a low of \$42.3 billion in August 1974.

<sup>41</sup> For further discussion of questions about the economic significance of these aggregate studies see Sweeney and Willett [1977b]. See also however the more recent study by Heller [1979] which meets some, although in my judgment not all, of the criticism and questions about the economic significance of these types of studies raised by Sweeney and Willett.

TABLE 4.—U.S. LIABILITIES TO OFFICIAL FOREIGN INSTITUTIONS, 1972-75

[Billions of dollars, amounts outstanding]

	Total	Western Europe <sup>1</sup>
1975:		
December.....	80.6	45.7
November.....	80.2	45.1
October.....	80.7	45.3
September.....	78.8	45.8
August.....	79.9	44.3
July.....	80.3	44.5
June.....	80.8	45.5
May.....	80.0	45.5
April.....	79.3	45.2
March.....	79.3	45.9
February.....	78.7	44.8
January.....	76.0	43.3
1974:		
December.....	76.6	44.2
November.....	75.2	43.2
October.....	73.8	43.0
September.....	72.7	42.7
August.....	71.1	42.3
July.....	71.1	43.0
June.....	70.0	43.2
May.....	68.2	42.9
April.....	67.2	42.6
March.....	65.5	42.8
February.....	64.1	42.4
January.....	63.9	43.3
1973:		
December.....	66.9	45.7
November.....	67.4	46.0
October.....	69.7	47.5
September.....	69.8	47.1
August.....	70.5	47.3
July.....	71.0	47.1
June.....	70.7	47.0
May.....	70.9	46.6
April.....	70.1	45.6
March.....	71.3	45.2
February.....	68.5	40.8
January.....	60.8	34.1
1972: December.....	61.5	34.2
1971: January.....	20.5	13.7
1970: January.....	12.7	6.3

<sup>1</sup> Includes Bank of International Settlements and European Fund.

Source: Treasury Bulletin: table IFS-3, various issues.

By the end of 1974, however, aggregate European reserve holdings were rising again. The maximum run off of \$5.2 billion in official dollar holdings for Western Europe during 1973 and 1974 represented only about 15 percent of the over \$40 billion increase in reserves from the beginning of 1970. Of course, there would have been a normal increase in the demand for reserves over this period. The value of Western Europe's international trade grew by approximately 86 percent from 1970 through 1973. Assuming that the Western European reserve holdings were in equilibrium at the beginning of 1970 and assuming a one-for-one relation between the value of trade and the demand for reserves, this would have accounted for an \$11.8 billion increase in the demand for reserves.<sup>42</sup> The huge growth in the value of interna-

<sup>42</sup> This assumption of a one-to-one relationship is likely to bias upward the calculation, as optimal inventory approaches to both the demand for money and the demand for international reserves suggest that there should be economies of scale in reserve demands with respect to an increase in the volume of transactions. Under pegged exchange rates the value of the elasticity of the demand for reserves with respect to imports appears to have typically been on the order of 0.8 to 1.0. See, for example, Polak [1970] and Heller and Kahn [1978]. Some lower estimates have recently been made by Frenkel, however. See Frenkel [1978] and [1979], Bilson and Frenkel [1979] and Frenkel and Jovanovic [1979].

tional trade in 1974 because of the oil price increases, would have accounted for a further increase of \$15.1 billion. This crudely-adjusted calculation of the excess supply of reserves still show that over \$14 billion of the initial reserve imbalance was not reversed.

Of course, several other important factors were also at work. Increased uncertainty and expected variability of balance-of-payments positions would further increase the demand for international reserves. On the other hand, by reducing the cost of adjustment for many countries the adoption of floating exchange rates would be expected both to reduce the demand for international reserves and to reduce the costs of selling off an excess supply of reserves.<sup>43</sup> Countries no longer had to adopt more inflationary domestic policies in order to run down reserves, as was required under pegged exchange rates. In terms of figure 1, the adoption of floating rates would both shift the DD schedule to the left and collapse the costs of adjustment lines in towards the horizontal axis. On both grounds one would expect a larger and more rapid selloff of reserves than would occur under pegged exchange rates.<sup>44</sup>

#### A. THE INCREASED MARKET VALUE OF GOLD

Furthermore, over this period a further huge increase in potential international liquidity had been generated by the run up in gold prices associated with the breakdown of the Bretton Woods exchange rate arrangements. Indeed, if official gold stocks were valued at the private market rather than official prices, the increase in official international liquidity from this source was of even greater magnitude than the increase in official foreign exchange holdings resulting from the U.S. payments deficit. National gold stocks, with an official value of \$43.7 billion were worth more than three times that amount if valued at market prices. (See Fand [1975, p. 150]).

This increase in potential international liquidity did not generate the same direct pressures for monetary expansion as was caused by the U.S. payments imbalances. They represented the appreciation of the value of already-held assets. This could have an expansionary wealth effect on the spending of private gold holders, but would put no direct inflationary pressures on government policies which required monetary sterilization to offset. Thus the appreciation of gold did not directly generate monetary expansion even in small countries with limited ability to sterilize reserve inflows.

<sup>43</sup> It would be theoretically possible for the adoption of managed floating to increase the demand for international reserves if private speculation behaved in a sufficiently perverse manner. This possibility was pointed to by Harrod [1965] and analyzed in more detail by Williamson [1976]. In practice, however, private speculation appears to have predominantly stabilizing rather than destabilizing effects (see, for example, Willett [1977, ch. 2], and Logue, Sweeney, and Willett [1978], and the references cited in these works), and while there has still been very heavy intervention, the net effect of the adoption of the floating rates does appear to have reduced the demand for international reserves, *ceteris paribus*. (See, for example, Heller and Kahn [1978].) The rationale of course is that the higher is the cost of adjustment which can be avoided or postponed through the use of reserves, the higher will be the demand for reserves. The analysis assumes that for many countries, exchange-rate changes will be a less costly method of adjustment than demand management. As is emphasized in the theory of optimum currency areas (see Tower and Willett [1976] and references cited there), this will not be true for all countries, especially small open ones, but the adoption of managed flexible rates can be viewed as giving countries greater freedom to use exchange-rate changes if they desire, while not prohibiting the use of demand management. Thus the cost of adjustment for some countries would be lowered, while for others it would be unaffected. In aggregate this would unambiguously lead to a decline in the aggregate demand for reserves, with the magnitude depending in part on optimum currency area considerations. In my own judgment the adoption of flexible exchange rates reduced the cost of adjustment for most, although probably not all, of the European countries.

<sup>44</sup> While aggregate foreign dollar holdings could be reduced only through a balance-of-payments surplus by the United States or the reversal of dollar creation in offshore markets such as the Eurodollar market, official dollar holdings of the European countries could be reduced through sales either to the private market or to other countries such as the members of OPEC.

The increased value of national gold stocks could facilitate increased spending, however. Even with the abandonment of official gold transactions among monetary authorities, official gold stocks could be sold to the private market, helping to finance government budget deficits, and balance-of-payments deficits as well when sales were to foreigners. The increased market value of gold holdings could also and, in fact, sometimes was used as collateral for balance-of-payments loans from other financial authorities (see, for example, Fand [1975]).

This huge increase in the potential market value of gold holdings further undercut the meaningfulness of the official international reserve aggregates. It should have also increased the desires of countries to sell off official dollar holdings along international monetarist lines. Given the strong efforts being made to demonetize gold officially and the sharp divergence between the official and market prices of gold, actual official transactions in gold virtually came to a halt for several years. This would not eliminate the potential expansionary effects of the gold price increases, however. Many countries appeared to have a strong preference for maintaining their gold holdings, but thought of them as a last line of defense.

An increase in the value of this last line of defense would thus increase total effective liquidity and shift the DD curve in figure 1 to the right. Under these assumptions the excess supply of international liquidity which would be sold off would be foreign exchange holdings. Of course, what would be important here is how officials viewed their effective liquidity position, not the extent to which they followed France's example and marked up the value of their gold stocks in their own financial accounts.<sup>45</sup>

In light of all of these developments, the rather limited selloff of international reserves during 1973 and 1974 would have to seem rather surprising from the standpoint of a strong international reserve monetarism perspective.

#### B. TRANSITIONAL CONSIDERATIONS

Of course, the oil shock and resulting increases in the demand for international reserves did limit the period over which there should have been strong clear-cut pressures to sell off excess reserves. Even with the adoption of floating rates one would not expect all excess reserves to be sold off immediately. Floating rates greatly lowered the costs of adjusting an excess demand or supply of international reserves for many countries but these costs were not completely eliminated. Under floating rates, such costs would be reflected in deviations of the exchange rate from levels desired on overall policy grounds. Often this goal could be approximated by the objective of avoiding large and rapid changes in exchange rates. The more rapidly were reserves sold off, the greater would be the appreciation of the exchange rate.

We live in a much less mercantilist world today than at many times in the past, but governments still tend to be quite sensitive to

<sup>45</sup> The DD curve here refers to official reserves as measured by the International Monetary Fund which still uses the official price of gold. If reserves were defined as including gold at a market or some other higher price, as some countries have done in their national statistics, this would be represented as a movement along the curve. One should arrive at the same description of behavior whichever convention were adopted, except to the extent that balance sheet considerations influence central bank or national behavior. While such considerations may have been of some importance in contributing to the official aversion to revaluations because of the resulting accounting losses on reserves, the formal statistical treatment of the value of gold in national reserves would seem unlikely to have a major influence on behavior.

taking policy measures which reduce the competitiveness of their trade positions. This sensitivity would limit the rate at which financial authorities would want to sell off an excess supply of reserves.

Thus even though authorities had a much lower cost method of running down excess reserves, they would not want to sell off all of these reserves immediately. The rate at which excess reserves tended to be sold off would be less: (a) the less was the total excess surplus of reserves; (b) the less the authorities were concerned by the misallocation of resources resulting from above optimal reserve holdings; (c) the more governments were concerned with export and import competing producer interests relative to those of the users of imports; (d) the greater was their concern about exchange rate variations; and (e) the less were market pressures generating a tendency toward balance-of-payments deficit or exchange-rate depreciation in the absence of official actions.

The aggregate rate of selloff of reserves would also be less, the more highly concentrated in a few countries was the bulk of total excess reserves. As is indicated in table 5, while most countries shared in the reserve increase of 1970-72, a few of the major industrial countries accounted for a quite significant portion of the total.

For such reasons it is quite likely that the total amount of excess supplies of international reserves was not worked off during the 1973-74 period. The oil price increases had a two-sided effect, however. Whereas they undoubtedly greatly increased uncertainty and hence the precautionary demand for international reserves, the huge increase in oil import payments offered a means of running down excess reserve holdings with little adjustment costs. Thus while the oil shock reduced the level of excess reserves it also reduced the cost of selling off that portion of reserves which were still in excess.

The available evidence is not conclusive, but the reversal toward increased demands for reserves during 1974 seems quite consistent with the view that the supply-determined international liquidity explosion of 1970-72 ratcheted up substantially the minimum levels of reserve positions with which many monetary authorities felt comfortable.

TABLE 5.—DISTRIBUTION OF RESERVES, END OF YEARS 1950, 1960, AND 1970-71<sup>1</sup>

(In billions of SDR's)

	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977
<b>Industrial countries:</b>										
Austria.....		0.7	1.8	2.2	2.5	2.4	2.8	3.8	3.8	3.5
Belgium-Luxembourg.....	0.8	1.5	2.8	3.2	3.6	4.2	4.4	5.0	4.5	4.7
Canada.....	1.8	2.0	4.7	5.3	5.6	4.8	4.8	4.5	5.0	3.8
Denmark.....	.1	.3	.5	.7	.8	1.1	.8	.7	.8	1.4
France.....	.8	2.3	5.0	7.6	9.2	7.4	7.2	10.8	3.4	8.4
Germany, Federal Republic of.....	.2	7.0	13.6	17.2	21.9	27.5	26.5	26.5	30.0	32.7
Italy.....	.7	3.3	5.4	6.3	5.6	5.3	5.7	4.1	5.7	9.6
Japan.....	.6	1.9	4.8	14.1	16.9	10.2	11.0	10.9	14.3	19.1
Netherlands.....	.5	1.9	3.2	3.5	4.4	5.4	5.7	6.1	6.4	6.6
Norway.....	.1	.3	.8	1.1	1.2	1.3	1.6	1.9	1.9	1.8
Sweden.....	.3	.5	.8	1.0	1.5	2.1	1.4	2.6	2.1	3.0
Switzerland.....	1.6	2.3	5.1	6.4	7.0	7.1	7.4	8.9	11.2	11.4
United Kingdom.....	4.8	5.1	2.8	8.1	5.2	5.4	5.7	4.7	3.6	17.3
United States.....	24.3	19.4	14.5	12.1	12.1	11.9	13.1	13.6	15.8	16.0
Total, industrial countries.....	36.8	48.5	65.8	88.8	97.5	96.0	97.9	104.1	113.5	139.4

See footnotes at end of table.

TABLE 5.—DISTRIBUTION OF RESERVES, END OF YEARS 1950, 1960, AND 1970-77<sup>1</sup>—Continued

[In billions of SDR's]

	1950	1960	1970	1971	1972	1973	1974	1975	1976	1977
<b>Primary producing countries:</b>										
<b>More developed countries:</b>										
Other European countries <sup>2</sup> .....	1.5	2.3	5.6	8.0	11.7	13.4	12.4	11.1	11.8	12.9
Australia, New Zealand, South Africa.....	2.0	1.3	3.0	4.2	7.6	6.5	5.0	4.2	4.0	3.0
Subtotal, more developed primary producing countries.....	3.5	3.6	8.5	12.1	19.4	19.9	17.3	15.3	15.8	15.9
<b>Less developed countries:</b>										
Major oil exporting countries <sup>3</sup> .....	1.3	2.3	5.0	7.8	10.0	12.0	38.4	48.3	56.1	62.1
<b>Other less developed countries:</b>										
Other Western Hemisphere <sup>4</sup> .....	2.4	2.2	4.5	4.5	7.5	10.0	9.7	8.6	13.1	16.7
Other Middle East <sup>5</sup> .....	1.1	.7	1.6	2.0	2.7	3.6	3.9	4.4	5.0	6.3
Other Asia <sup>6</sup> .....	3.7	2.7	5.8	6.3	7.8	8.8	10.5	11.3	16.3	19.3
Other Africa <sup>7</sup> .....	.5	.9	2.0	1.7	1.9	2.2	2.4	2.4	2.6	3.0
Subtotal, other less developed countries.....	7.7	6.6	13.9	14.5	19.9	24.6	26.5	26.7	36.9	45.4
Subtotal, less developed countries <sup>8</sup> .....	9.9	9.0	18.9	22.3	29.9	36.6	64.9	75.0	93.1	107.5
<b>Total, primary producing countries.....</b>	<b>13.4</b>	<b>12.6</b>	<b>27.4</b>	<b>34.4</b>	<b>49.3</b>	<b>56.5</b>	<b>82.2</b>	<b>90.3</b>	<b>108.9</b>	<b>123.4</b>
<b>Total.....</b>	<b>50.2</b>	<b>61.2</b>	<b>93.2</b>	<b>123.2</b>	<b>146.8</b>	<b>152.6</b>	<b>180.2</b>	<b>194.5</b>	<b>222.4</b>	<b>262.8</b>

<sup>1</sup> Official reserves of Fund members except Romania, plus the Netherlands Antilles and Switzerland. In addition to the holdings covered in IFS, the figures for 1973 include official French claims on the European Monetary Cooperation Fund; those for 1950 and 1960 include amounts incorporated in published United Kingdom reserves in 1956 and 1967 from proceeds of liquidation of the United Kingdom official portfolio of dollar securities. For a number of countries (beginning in 1974, United States, in 1975, France, in 1976, Italy, Mexico, and Jordan, and in 1977, Australia, Costa Rica, Cameroon, Central African Empire, Chad, People's Republic of the Congo and Gabon) stock reserve figures may differ from those published in national sources because of differences in valuation of gold, which in the IFS is valued at SDR 35 per ounce. Totals may not add to figures shown because of rounding and because some totals include unpublished data for component areas.

<sup>2</sup> Finland, Greece, Iceland, Ireland, Malta, Portugal, Spain, Turkey, and Yugoslavia.

<sup>3</sup> Algeria, Indonesia, Iran, Iraq, Kuwait, Libya, Nigeria, Saudi Arabia, Venezuela, and beginning in 1970, Oman and Qatar, and in 1973, the United Arab Emirates.

<sup>4</sup> Argentina, Bolivia, Brazil, Central America, Chile, Colombia, the Dominican Republic, Ecuador, Guyana, Haiti, Jamaica, Mexico, Panama, Paraguay, Peru, Suriname, Trinidad and Tobago, Uruguay, and, beginning in 1970, the Bahamas, Barbados, and the Netherlands Antilles.

<sup>5</sup> Cyprus, Egypt, Israel, Jordan, Lebanon, the Syrian Arab Republic, and, beginning in 1970, the People's Democratic Republic of Yemen and Bahrain, and in 1973, the Yemen Arab Republic.

<sup>6</sup> Afghanistan, Burma, the Republic of China, India, Korea, Malaysia, Nepal, Pakistan, the Philippines, Singapore, Sri Lanka, Thailand, Vietnam, and, beginning in 1970, Fiji, Lao People's Democratic Republic, and Western Samoa, in 1972, Bangladesh, and in 1973, Papua New Guinea.

<sup>7</sup> African Fund members other than Algeria, Libya, Nigeria, and South Africa.

<sup>8</sup> Includes residual.

Source: "International Financial Statistics," "International Monetary Fund," annual report, 1978, p. 51.

## 12. International Liquidity Implications of the Oil Shock

The extent to which there was such an increase in the demand for reserves had very important implications for the appropriate international liquidity response to the oil shock. It was clear that for many years a number of the OPEC countries would be earning revenues greatly in excess of their international expenditures, and that there was only limited scope for exchange-rate adjustments to reduce this imbalance for a number of years. Likewise, it was unreasonable to expect that a sizeable portion of their resulting net foreign investment would not go into the types of liquid assets traditionally recorded as

international reserves. As a consequence, unless the international payments system broke down, these countries would have to acquire large holdings of international reserves. While some initial projections greatly overstated the likely magnitude of these accumulations, even the more "optimistic" projections foresaw accumulations on the order of \$200 billion over the rest of the decade.<sup>46</sup>

Again, this was a situation in which the behavior of reserve aggregates was likely to give a very misleading picture of the overall degree of reserve stringency in the world economy. Clearly, such a large redistribution of reserves would not be manageable within the context of only modest aggregate reserve growth without placing extremely severe deflationary pressures on many oil-importing countries. Nor was it clear to what extent the pressures of reserve stringency would result in deflationary domestic economic policies or in beggar-thy-neighbor trade and exchange-rate policies.

Views on the appropriate response for international liquidity aggregates varied widely. To the extent that there were substantial excess reserves still in the system, the demands in the oil-exporting countries would allow these reserves to be used up without the need for a corresponding growth in reserve totals.

On the other hand, if the past reserve increases generated their own demand to a large extent, through ratchet effects, or if there was little scope to run down these excess reserves without substantial adjustment costs, a substantial increase in international liquidity would be required if severe deflationary pressures on a number of countries were to be avoided. Such uncertainties were compounded by lack of knowledge about the quantitative effects of the other factors discussed above, the adoption of greater exchange-rate flexibility and the gold price increases in reducing the demand for currency reserves, and the effects of the oil-induced international financial uncertainties in increasing the demand. Given the lack of previous experience with such developments, one had little basis on which to judge, much less precisely estimate, the magnitude of such effects.<sup>47</sup>

It is hard to know what the official response would have been had we had true international control over international reserve aggregates. My guess is that we may have been very fortunate that we did not have such control. I am doubtful that any I.M.F. body or group of leading Finance Ministry officials would have voted to create nearly as much international liquidity as was generated by decentralized decisions during the following years. However, on balance, I am skeptical that substantially too much aggregate international liquidity was generated.<sup>48</sup> Given the widespread fears at the time that the oil situation would lead to a breakdown in international cooperation and a return to the beggar-thy-neighbor scramble of the 1930's, a strong case can be made that it was much better to err on the size of allowing too much reserve creation rather than too little. With flexible exchange rates countries had a good deal of scope to shield themselves from the effects of excessive international liquidity creation.

<sup>46</sup> For a discussion and references on this issue see Willett [1975].

<sup>47</sup> For an interesting effort in this direction, however, see Makin [1977]. See also the latter work by Heller and Kahn [1978].

<sup>48</sup> In a similar vein Robert Triffin has argued that "The slowness of the international decision-making process—even under the weighted-voting *majority* procedures of the I.M.F. as opposed to the usual *unanimity* rule—might have seriously impeded the prompt recycling of OPEC surpluses if they had been channeled into SDR's or similar reserve holdings with the I.M.F. rather than into dollars and Eurodollars." Triffin [1978, p. 12].

While many countries suffered from high rates of inflation over this period, this was due much more to the direct effects of the oil price increases and macroeconomic policy choices made primarily on domestic grounds, not the results of pressures generated by the operation of the international monetary system.<sup>49</sup>

Whether there should have been more or less monetary accommodation to the oil shocks remains a controversial question. Some have argued that the following global recession was unnecessarily severe because national governments did not fully understand the direct oil-price deflationary effects of increases and the collective limits on each country's individual ability to export its way out of recession. Others believe that there was excessive monetary accommodation which further fueled the fires of world wide inflation. These disagreements rest on both normative and positive issues and are unlikely to be ever fully resolved. Inflation was clearly excessive in the sense that it was higher than most people would have liked. However, given the worsened short run inflation-output relationships caused by the oil price increase, the question of whether monetary accommodation was itself excessive is in my judgment an open one. My own normative view would be that while monetary accommodation during the last decade has generally been excessive, this may well not have been the case in the oil shock episode.

What is relevant for this paper, however, is not the overall issue of the appropriate degree of monetary accommodation, but the appropriateness of international liquidity developments. Given the serious danger of widespread beggar-thy-neighbor trade and exchange-rate policies pointed out above, one can consistently argue that in general there has been a political bias toward excessive national monetary accommodation, but that the oil shock was a particular type of episode in which considerable international reserve ease still made sense.<sup>50</sup>

### *13. Criteria for Evaluating Excessive International Liquidity Creation*

Because of their ability to create international currency reserves by borrowing from private international financial markets, it is undoubtedly true that many countries were able to run more expansionary policies than would have otherwise been the case. As a result, the average level of world inflation was increased.

To some commentators, this is taken as direct evidence that too much international liquidity was created. According to this view international financial arrangements are too permissive if they allow countries to follow more inflationary pressures than the external observer thinks is appropriate.

The international monetary system is viewed as a mechanism for constraining the options of national governments in order to secure policies more in line with those that the observer desires. From the perspective of many who are greatly concerned about inflation, international monetary arrangements are judged deficient if they allow such "excessively" inflationary pressures to be undertaken. Indeed, although such reasoning is seldom fully spelled out, I believe that this

<sup>49</sup> Of these factors, by far the greatest proportion of inflation in most countries was due to domestic macroeconomic policy choices.

<sup>50</sup> For further discussion of the political economy of monetary accommodation see Laney and Willett [1980] and references cited there.



is one of the most important motivations for charges that the current arrangements for the provisions of international liquidity are seriously deficient.

In my judgment, however, this is not a satisfactory criteria for evaluating the operation of the international liquidity mechanism or, indeed, of the international monetary system in general. In the first place, reasonable people may have quite different views about how much inflation is "excessive" under various circumstances. Thus it is certainly not an unambiguous standard.

Given divergencies of view about what is correct, it would seem that the ideal international monetary mechanism would be that which gave each country the greatest ability to make its own decisions, subject to limits on the adverse effects which such decisions might have on other countries. In other words, a liberal approach to the design of the international monetary system would attempt to minimize the external constraints placed on domestic economic policymaking, the rationale for constraints being the protection of other countries from the export of serious economic instabilities or beggar-thy-neighbor policies.

From this perspective, the criteria for judging the operation of the international liquidity mechanism is to what extent liquidity creation which improved the economic position of some countries, as viewed by their governments, may have had adverse effects on other countries. The availability of greater liquidity to deficit countries will of course allow them to engage in a greater export of inflation to other countries. Minimizing the export of inflationary pressures is not, however, a sufficient criterion for judging whether there has been excessive international liquidity creation because the oil shock becomes much more complicated, especially when it is recognized that the response to greater reserve stringency may have been beggar-thy-neighbor trade and exchange-rate policies rather than less expansionary macroeconomic policies. Thus once one drops the assumptions of pegged exchange rates with liberal trade policies, it is not always clear that placing greater adjustment pressures on a deficit country through greater reserve stringency will always reduce the export of negative externalities.

These considerations further illustrate the difficulties of judging the appropriateness of the operation of the international liquidity mechanism on the basis of the behavior of reserve totals or the rate of world inflation. The use of these criteria would have very probably led to much less international liquidity creation over this period if such creation could have been centrally controlled. I do not wish to argue that there was an exactly optimal pattern and total amount of international liquidity creation over this period. On the contrary, I think there were a number of instances in which countries were able to finance large payments deficits for too long a period before they began to take serious adjustment actions. As will be argued below, however, the most effective way to reduce these particular instances of excessive payments deficits would have been through direct international surveillance of the international adjustment process.

Had the aggregate growth of international liquidity been considerably less, the odds that the often-predicted massive breakdown in international economic cooperation would have actually occurred

would have been much greater. Although it was not fully planned by any means, the composite outcome of central and decentralized decisions was to err on the side of too much rather than too little international liquidity creation in response to the oil shock. In retrospect, this appears to me in balance to have been fortunate. I strongly agree with the judgment of Walter Salant, presented in an earlier context, that, ". . . since the danger of too high levels and too high growth [of international reserves] are much more easily offset by national policy than are those of too low levels and too low growth, it is better to overestimate than to underestimate needed levels of growth." (Salant, 1970, p. 305.)

In the context of the oil shock, one of the results of substantially less access to international liquidity would have been an increased likelihood of beggar-thy-neighbor trade policies. On the other hand, the effects of "excessive" access to international liquidity by deficit countries meant that these countries were able to prop up their exchange rates at artificial levels for too long. The results of such actions on the stronger countries were that their exchange rates were depressed below equilibrium levels. In general, the currencies of the surplus countries did not appreciate as much as they would have in the absence of foreign official intervention. This did mean that the stronger countries faced higher import prices than otherwise, and thus would find it somewhat more difficult to achieve a given low inflation rate target. I doubt that the quantitative significance of this direct price transmission of inflationary pressures from deficit countries was extremely great however. Furthermore the stronger countries did have considerable scope for retaining control over the growth of their monetary aggregates.

It was when the surplus countries themselves intervened to hold down the appreciation of their currencies that they found direct international pressures for more rapid monetary expansion than they desired on domestic grounds. These imported inflationary pressures, which in practice have appeared to the greater concern of the low inflation countries such as Germany and Switzerland, stemmed not from excessive access to international liquidity by the deficit countries, but official intervention based on perceptions (which may or may not have been well founded in reality) that destabilizing private speculation was causing excessive exchange-rate movements. There is little evidence that the high rate of international liquidity created over this period had more than relatively minor effects in terms of forcing individual countries to inflate more than their governments desired.<sup>51</sup>

There has been a long tradition of suspicion that governments will have biases toward overspending. This, for example, underlies arguments for independence of central banks from governments. Recently there has been a growing body of analysis which has analyzed such questions more rigorously and similarly concludes that governments are likely to face incentives to follow more inflationary policies than would be desired by the majority of voters were they fully informed.<sup>52</sup>

<sup>51</sup> This is not to say that I do not believe personally that the average rate of world inflation has been too high over the past decade, in terms not just of some ideal, but also in relation to hard policy choices which had to be made given actual rather than ideal inflation-unemployment relationships.

<sup>52</sup> Major contributions and survey pieces on this public choice type analysis of macroeconomic policies and the incentives to engage in political business cycles include Buchanan and Wagner (1977), Frey (1978), Hirsch and Goldthorpe (1978), and Nordhaus (1975). Extensive references to this rapidly growing literature are given in Frey (1978) and Laney and Willett (1980b) and (1980c).

This literature focuses on tendencies toward excessive government expenditures and accompanying inflationary pressures which result from biases in the process of collective decisionmaking and on incentives to generate political business cycles and higher overall rates of inflation by exploiting voter myopia and differences between short run and long run inflation-unemployment relationships. These considerations can provide a second-best argument for attempting to exert additional discipline on national governments through international monetary constraints. Such thinking has undoubtedly been behind the traditional arguments for the discipline of fixed exchange rates. In fact, however, the discipline implied by different international monetary systems is itself quite difficult to assess (see, for example, Corden [1977] and Mullen and Willett [1980]).

On both grounds of reliability and democratic self-determination, the most appropriate response to perceived biases in the domestic decisionmaking process would be the implementation of constitutional measures to reduce these biases through domestic reforms. It is not reasonable to expect international monetary arrangements to serve this function. It is a quite sufficient set of tasks for the international monetary system to attempt to facilitate the financing of international trade and investment while limiting the extent to which countries are subjected to the import of negative monetary and financial externalities from abroad.

#### *14. The Eurocurrency Markets and Private International Liquidity*

Before turning to the analysis of current international liquidity policy issues in Chapter III, one more major area of international liquidity developments should be considered. This is the role of the private international financial markets, particularly the Eurocurrency markets. The use of these markets as a source for official borrowing has already been briefly touched upon above. In this section, the various major aspects of the international liquidity effects of the operation of the private international financial markets will be reviewed.

Before discussing the effects of the private international financial markets on official international liquidity issues, a brief digression on private international liquidity considerations is in order. A first point is that there is not a concept of the adequacy of private international liquidity which is analogous to that for official international liquidity. Private international liquidity is usually measured as the total of private holdings of liquid assets in foreign markets. In a free market, such holdings would be determined by private calculation of economic advantage to finance trade and gain maximum returns on investments. It would always be adequate by definition. An inadequacy of private international financial holdings would occur only as a result of restrictions on international capital movements. The latter in turn would tend to be the consequence of either official reserve inadequacy (for countries limiting capital outflows), or concern to preserve a greater degree of monetary independence (particularly for countries limiting capital inflows). Thus for concerns about inadequacy of private international liquidity one should look to the prevalence of capital controls,

not any particular relationships between private international liquidity holdings and the value of world trade.<sup>53</sup>

In recent years, the primary focus of concern has been with the possibility of excessive private international liquidity, especially as a result of credit creation in the Eurocurrency markets. A frequently voiced concern is that the operation of the Eurocurrency markets has added greatly to the effects of monetary expansion by national authorities on the aggregate level of world spending, thus making a sizable unforeseen contribution to the acceleration of world inflation during the 1970's.

Such concerns have often been greatly exaggerated, however, often because of misleading comparisons between figures on the size of the Eurocurrency markets in relation to national money supplies. For example, newspaper stories periodically rediscover that some figures reported for the size of the Eurodollar market are several times the size of the U.S. money supply, narrowly defined. Likewise, it has frequently been argued that figures for the Eurocurrency market should be added into estimates of the aggregate world money supply. Such analysis often fails to recognize that most of the approximately \$800 billion of the gross figures for the size of the Eurocurrency is already covered in national monetary statistics. Furthermore, only a very small portion of Eurocurrency market assets has the same degree of liquidity as the funds included in even the broadly defined measures of national money supplies (such as  $M_2$  and  $M_3$ ).<sup>54</sup> The substantial majority of the financial assets in the Eurocurrency markets would conventionally be called credit, rather than money.

It is true that the Eurocurrency markets do have an effect on global monetary conditions, but the quantitative magnitude is actually relatively small. While there is some effective money and credit creation resulting from the operation of these markets, it is highly unlikely that this has been a major source of global inflationary pressures. From the standpoint of national financial authorities, the expansion of the Eurocurrency markets could best be thought of as having caused, *ceteris paribus*, a slight increase in the velocity of the money supplies, as traditionally measured.<sup>55</sup>

The other major aspect of the Eurocurrency markets and national monetary control is really a question of international capital mobility per se.<sup>56</sup> National monetary authorities have often complained that the rate of capital flows into or out of the Eurocurrency market is complicating or undercutting the operation of domestic monetary policy. Such authorities have often advocated such measures as requiring reserve requirements on Eurocurrency holdings as a method

<sup>53</sup> For further discussion of the concept of the adequacy of private international liquidity and how it is influenced by the adequacy of official international liquidity, see Willett [1969], and Machlup [1964]. See also Mahar and Porter [1977].

<sup>54</sup> For further discussion of these points, see Sweeney and Willett [1977b], Mayer [1976], Morgan Guaranty [1979] and Throop [1979]. For recent general discussion of the Eurocurrency markets and references to the extensive literature in this area, Crockett [1976], Dufey and Giddy [1978], Little [1979], McKinnon [1978a], Niehans and Hewson [1976], Stem, Logue, and Makin [1976] and Willms [1976].

<sup>55</sup> For further discussion on this point see Willett [1976].

<sup>56</sup> There is also a question which lies beyond the scope of this study. This is the issue of the supervision of the safety of lending in the international financial markets and provisions for avoiding a credit collapse in the face of defaults or liquidity squeezes. In recent years there has been considerable advance in the understandings among major central banks about divisions of lend of last resort responsibilities for international banking activities. For recent discussions of such international credit issues, see Murphy [1979] and Sammons [1979].

of reducing such problems (see, for example, Carli [1972], Ossola [1973], and Savona [1974].<sup>57</sup>)

The issue here is not really one of the Eurocurrency market, however, but of international capital mobility in general. At present the Eurocurrency market happens to be the least-cost conduit for a substantial portion of international liquid capital flows. This does not mean, however, that if the Eurocurrency market were regulated out of existence, international capital mobility would decline to a corresponding degree. On the contrary, the majority of transactions which now go through the Eurocurrency market would merely be diverted to other channels. One would expect some decline in international capital mobility, as a preferred method was eliminated for many investors and borrowers, but the overall effects on the international mobility of capital would be likely to be relatively marginal. Our world economy is far from completely integrated, and as was noted earlier, empirical studies indicate that even under pegged exchange rates many countries had considerably more ability to control their domestic monetary conditions in the short run than was often implied by officials. International capital mobility is sufficiently high, however, that its effects must be taken into account in implementing domestic monetary policies.<sup>58</sup>

To preserve a high degree of monetary independence, then, for most countries either acceptance of exchange-rate variability or adoption of comprehensive capital controls is required. There are, obviously, many disadvantages to the latter course, but it is what is required if a country wants a great deal of monetary independence and is not willing to accept substantial exchange rate variability. Given the degree of economic interdependence among nations, it is a vain hope that this dilemma could be substantially reduced by international regulation and control of the Eurocurrency markets.

Now let us return to questions of the control of official international liquidity.

### *15. Official Reserve Holdings in the Eurocurrency Markets*

The Eurocurrency markets have been increasingly important both as a location for international reserve holdings and as a source of borrowing for deficit countries through which international reserves are generated. The earliest development of quantitative significance began occurring in the 1960's, as central banks began to place a portion of their dollar accumulation in the Eurocurrency market rather than holding them exclusively in bank deposits and Treasury securities in the United States. This broke the link between U.S. official settlements deficits and the expansion of foreign official dollar holdings and also probably led to some direct reserve creation through the operation of the Eurocurrency market.<sup>59</sup> While relatively unnoticed for a good while, the total magnitudes involved quickly grew. By 1970, identified official holdings of Eurocurrencies (almost all of which were in dollars) had become almost half as large as official dollar holdings, SDR 10.9

<sup>57</sup> For a recent well balanced analysis of the effects of the Eurocurrency market and a proposal for establishing a uniform, minimum reserve requirement for all Eurocurrencies see Wallich [1979].

<sup>58</sup> For discussion and references to the literature of the effects of international capital mobility on the effectiveness of monetary and fiscal policy under pegged and flexible exchange rates, see Cooper [1976], and Willett [1976].

<sup>59</sup> For further discussion, see Hewson and Sakakibara [1974], and Mayer [1970].

billion as contrasted with SDR 23.8 billion (see table 6). Concern about the consequences of this development led to agreement among the major industrial countries in 1971 not to further increase their reserve holdings in the Eurocurrency market.

TABLE 6.—OFFICIAL HOLDINGS OF FOREIGN EXCHANGE, BY TYPE OF CLAIM, END OF YEARS 1970-77<sup>1</sup>

	[In billions of SDR's]							
	1970	1971	1972	1973	1974	1975	1976	1977
Official claims on United States <sup>2</sup> .....	23.8	46.6	56.7	55.4	62.8	68.9	79.2	103.8
Official sterling claims on United Kingdom.....	5.7	7.3	8.1	6.5	8.3	6.4	3.2	3.3
Official deutsche mark claims on Federal Republic of Germany.....	1.3	1.0	1.4	2.2	2.4	2.5	4.3	5.7
Official French franc claims on France.....	.6	.8	1.0	1.2	1.1	1.1	.9	.8
Other official claims on countries denominated in the debtor's own currency.....	.9	1.0	.9	1.6	1.5	2.7	3.8	4.6
Official foreign exchange claims arising from swap credits and related assistance.....	.7	.....	.....	.4	*1.6	*1.3	*1.5	*1.2
Identified official holdings of Eurocurrencies:								
Eurodollars								
Industrial countries.....	5.1	3.4	5.6	7.3	6.5	7.0	7.9	14.7
Primary producing countries:								
More developed countries.....	1.6	1.7	3.2	3.4	3.0	3.8	3.7	4.8
Less developed countries.....	3.8	5.4	9.2	10.3	22.8	27.7	34.0	38.5
Western Hemisphere.....	1.0	1.6	3.6	4.0	5.0	5.6	5.9	7.3
Middle East.....	.6	1.1	1.9	2.3	12.0	16.7	19.1	20.6
Asia.....	1.1	1.1	2.0	2.7	3.0	3.5	5.9	7.8
Africa.....	1.1	1.6	1.7	1.3	2.8	2.0	3.1	2.9
Memorandum item: Major oil exporting countries.....	1.6	2.8	3.9	4.0	15.6	20.7	23.7	25.8
Total identified Eurodollars.....	10.5	10.4	18.0	21.1	32.3	38.5	45.6	58.0
Other Eurocurrencies.....	.4	1.1	3.2	5.3	5.8	7.2	7.6	12.3
Total identified holdings of Eurocurrencies.....	10.9	11.6	21.2	26.4	38.0	45.7	53.1	70.3
Identified claims on IBRD and IDA.....	.7	.6	.6	.6	.9	1.8	2.5	2.1
Residual <sup>4</sup> .....	1.0	6.2	6.3	7.7	10.4	7.1	12.1	9.3
Total official holdings of foreign exchange.....	45.4	75.1	96.1	102.0	126.9	137.5	160.6	201.2

<sup>1</sup> The official foreign exchange reserves covered in this table are described in table 14, footnote 1. Includes the estimated change in the value of holdings owing to the general realignment of currencies in 1971, the U.S. dollar devaluation in 1973, and the widespread floating of currencies since 1974.

<sup>2</sup> Covers only claims of countries, including those denominated in the claimant's own currency.

<sup>3</sup> Comprises the double deposit arrangement between the Deutsche Bundesbank and the Bank of Italy.

<sup>4</sup> Part of this residual occurs because some member countries do not classify all the foreign exchange claims that they report to the Fund. It also includes asymmetries arising because data on United States and United Kingdom currency liabilities are more comprehensive than data on official foreign exchange as shown in IFS.

Sources: "International Financial Statistics" and Fund staff information and estimates. "IMF" annual report, 1978, table 16, p. 53.

The significance of this agreement was swamped by the huge U.S. payments deficits of 1970-72. Eurocurrency reserve holdings by the nonindustrial countries did continue to grow rapidly over this period however. As a result total Eurocurrency reserve holdings almost doubled during 1972 (from SDR 11.6 to SDR 21.2 billion). At the same time, a significant movement to diversify Eurocurrency reserve holdings toward nondollar currencies began. These identified holdings rose from only SDR 0.4 billion in 1970 to SDR 3.2 billion in 1972. As is indicated in table 6 this trend has continued, with identified non-dollar Eurocurrencies equating SDR 12.3 of the total SDR 70.3 billion at the end of 1977.

After the adoption of floating exchange rates, Eurocurrency holdings became a more important source of growth of international liquidity than direct claims on the United States for several years. Not until 1976 did the latter show a larger increase. This shift toward greater quantitative importance of the Eurocurrency market in aggregate

reserve increases reflected both the termination of the large supply-determined outpouring of dollars from the United States as a result of the adoption of floating rates and the huge increases in revenues of the oil-exporting countries a high portion of which was deposited in the Eurocurrency market. As is indicated in table 6, the Eurodollar holdings of the major oil-exporting countries rose from SDR 3.9 billion in 1972 to SDR 20.7 billion at the end of 1975.

The relative magnitude of Eurocurrency and direct dollar reserve increases reversed again in 1976 and 1977, due to a combination of the decline in the OPEC surplus, the substantial rebuilding of weak reserve positions by several major industrial countries, particularly the United Kingdom, and the substantial weakening of the U.S. balance-of-payments and exchange-rate position which resulted in substantial exchange market intervention by a number of the major industrial countries. (This latter episode will be discussed further below.)

### 16. Official Borrowing and "Uncontrolled" International Liquidity Creation

Over these initial years of the oil shock, the Eurocurrency market also came into its own as a source of official borrowing to finance balance-of-payments deficits. The fact that many of the industrial and upper-income less-developed countries financed their huge increase in oil payments with only relatively small reductions in their gross levels of reserves was due largely to a tremendous increase in official international borrowing from the private financial markets, particularly the United States and the Eurocurrency markets. This phenomenon had been anticipated in many of the early discussions of the problems of recycling the oil surpluses. These initial discussions focused primarily on where the OPEC money would be put and what the resulting reshuffling generated by induced private capital flows would be. In practice, however, much of the ultimate matching of surplus and deficit financial positions came from direct borrowing activity by deficit countries.

TABLE 7.—INTERNATIONAL RESERVE TOTALS, 1973-78  
[End of period, millions of SDR]

		1973	1974	1975	1976	1977	1978
All countries.....	010	152,069	179,522	193,780	221,548	261,668	277,007
Industrial countries.....	110	95,748	97,935	104,112	113,483	139,420	160,392
United States.....	111	11,919	13,115	13,567	15,768	15,965	15,032
Canada.....	156	4,782	4,758	4,549	5,029	3,793	3,507
Japan.....	158	10,151	11,042	10,947	19,149	19,149	25,714
Austria.....	122	2,382	2,801	3,796	3,494	3,494	4,611
Belgium.....	124	4,228	4,366	4,952	4,743	4,743	4,535
Denmark.....	128	1,098	764	749	788	1,375	2,471
France.....	132	7,070	7,230	10,757	8,392	8,392	10,692
Germany.....	134	27,497	26,461	26,510	29,954	32,713	41,360
Italy.....	136	5,335	5,669	4,078	5,727	9,573	11,380
Netherlands.....	138	5,426	5,682	6,073	6,358	6,639	5,822
Norway.....	142	1,306	1,575	1,911	1,919	1,811	2,209
Sweden.....	144	2,096	1,418	2,628	2,144	3,020	3,376
Switzerland.....	146	7,063	7,360	8,908	11,385	11,385	16,550
United Kingdom.....	112	5,368	5,667	4,663	17,335	17,355	13,100
Oil exporting countries.....	999	12,033	38,384	48,292	56,149	62,152	45,915
Other less developed countries.....	201	24,389	25,884	26,047	36,146	44,188	50,725

Source: "International Financial Statistics."

The huge increase in oil surpluses of course created severe international financial strains, but the world avoided anything approaching the disasters which many leaders feared. The private financial markets proved to be quite resilient. This—combined with prudent financial behavior by the OPEC countries, official recycling through the International Monetary Fund, and official borrowing from the private financial markets—kept from occurring the extreme financial and exchange rate instability and trade warfare which many had feared.

The majority of oil-importing countries responded in a much less mercantilist manner than many had anticipated. The initial concern was that the oil-importing countries individually would not be willing to bear the size of deficit collectively required by the OPEC surplus. The possibility of a resulting scramble for a total of individual balance of payments which was collectively infeasible gave rise to the spectre of a repeat of the destructive beggar-thy-neighbor scrambles for surpluses in the 1930's. Thus a major focus of international discussions was on the need for countries to be willing to bear their "fair share" of the collective oil deficit.<sup>60</sup>

While there were some countries which were widely viewed as behaving in an excessively mercantilist manner, for example Japan, for most countries the willingness to run trade and current account deficits was much greater than had been anticipated. With the acceleration of world inflation, desires to avoid the effects of exchange-rate declines in increasing prices had become an important political goal in many countries. As a consequence, many countries borrowed heavily to limit the depreciation of their currencies. While largely removing the danger of a mercantilist scramble for surpluses, the appetite of some countries for running deficits soon itself became a source of concern.

It was widely recognized by international monetary officials that initially it was much safer to err on the side of too much financing than of too much adjustment. As time went on, however, concern grew that some countries were putting off needed adjustments unduly long. This concern combined with the continued large growth in international reserve aggregates, gave rise to renewed worries about uncontrolled expansion of international liquidity. Indeed, although floating exchange rates had been adopted, due to the increased magnitude of underlying disequilibrium, official intervention in the foreign exchange markets was much greater in aggregate than for comparable lengths of time during the pegged rate system of the 1960's and the proportion of "controlled" international liquidity had continued to decline.<sup>61</sup>

It became fashionable to argue that international liquidity was now demand determined and that by analogy to domestic monetary theory and the real bills doctrine, this would be likely to result in an unstable inflationary process.<sup>62</sup> As I have argued elsewhere, however, this analogy is misleading.<sup>63</sup> Demand-determined international reserve accumulation through official borrowing and/or running a balance-of-payments surplus is a quite different matter from the operation of a

<sup>60</sup> For discussions and references to the literature on this episode and the deficit sharing proposals, see Solomon [1975], Willett [1975], and Willett [1977, ch. 4].

<sup>61</sup> "Controlled" international liquidity refers to noncurrency reserve assets, and reserve positions in the Fund. See OECD *Economic Outlook*, July 1978, p. 53.

<sup>62</sup> See, for example, de Vries [1976].

<sup>63</sup> Willett [1977].



domestic monetary policy on the basis of accommodating the growth in the demand for money at below equilibrium interest rates. The latter causes a cumulative inflation spiral because economic actors are not given correct signals and monetary authorities respond to maintain a disequilibrium situation by expanding the money supply too rapidly.

The most appropriate international liquidity analogy to the real bills doctrine would be determining the allocation of SDR's on this criterion. In the current system, however, the demand-determined expansion of international liquidity places an opportunity cost on the acquisition of reserves. To acquire "uncontrolled" international liquidity a country must pay the price either of foregoing current absorption by running a balance-of-payments surplus or by borrowing from the international financial markets on commercial terms. Thus contrary to what is sometimes implied, such reserve accumulations do not by any means free countries entirely from external discipline. As will be discussed below, the amount of discipline generated through these decentralized mechanisms may not always be optimal from the standpoint of views of the most efficient operation of the internal monetary system, but it should not be overlooked. It should also be remembered that demand-determined reserve creation is not something new. Indeed, it formed a major part of reserve creation throughout the Bretton Woods system. Furthermore, as our previous analysis argued, it was the uncontrolled supply portion of international liquidity expansion which created the really serious problems, not the uncontrolled demand creation.

What is largely new about demand-determined reserve creation is its huge magnitude and the fact that much of it in recent years has been created by borrowing from private markets rather than by running balance-of-payments surpluses. These factors make it quite understandable that many have become concerned that there is continuing to be excessive creation of international liquidity and that this may be a major factor contributing to world inflation. Closer analysis suggests, however, that it is not at all clear that the world economy would have operated better if there had been substantially less international liquidity creation since 1972.

#### *17. An Ideal Solution to the Interrelationship Between International Liquidity and Adjustment Policies*

As has been emphasized a number of times, simple analogies between changes in international reserve totals and world economic performance can be highly misleading. The effects of international liquidity creation must be analyzed within the context of the overall operation of the international adjustment process. The effects of a given increase in aggregate reserves may vary greatly depending on both the causes of the increases and how they are distributed. While many have expressed fears that excessive access to international liquidity generated excessive world inflation, much concern was also expressed that a number of countries, for example, Germany, Japan, and Switzerland, were running too large a trade or current account surplus. Such conflicting complaints suggest that from the standpoint of the overall operation of the adjustment process, aggregate international liquidity was neither obviously too abundant nor obviously too scarce.

Concern that there needed to be a great deal of adjustment by both surplus and deficit countries is not a signal of aggregate reserve imbalances, but rather reflects either differing judgments about desirable balance-of-payments patterns, or the need to improve the operation of the adjustment process. Except when there is a clear imbalance of pressures placed on surplus and deficit countries, variations in the rate of growth of aggregate international liquidity cannot be used to improve the operation of the adjustment process. This problem must be attacked directly through international surveillance of the adjustment process.

Considerations of how best to try to undertake such international surveillance lie beyond the scope of this paper.<sup>64</sup> The point here is that *with effective international surveillance concerns about excessive access to international liquidity become irrelevant*. Of course as will be discussed below, international surveillance is not fully effective and mechanisms for liquidity control thus can play a useful supplementary role. The important point is that such issues can be approached more productively from the standpoint of aiding the operation of the surveillance process, than from the standpoint of gaining better control of international liquidity aggregates.

In a well-functioning international monetary system, international surveillance should be the primary method of keeping both surplus and deficit countries from unduly delaying needed adjustments. The problem of international liquidity would be to assure that financing was available for cases in which it was generally agreed that adjustment should be delayed or deficient behavior by private speculation should be supplemented or offset as the case might be.<sup>65</sup> From this perspective, the primary focus of international liquidity management should be on providing financing where needed.

As long as a system of universal freely floating rates is rejected such official international liquidity would be needed for those countries (largely the lower income developing countries) which have little effective access to the private international financial markets. Further, official liquidity would be needed for supplementary or lender-of-last-resort finance where delaying adjustment or offsetting current market forces is judged to be internationally socially desirable, but private lenders are not willing to provide finance, at least at normal commercial rates. The first consideration (LDC's without effective market access) would call for a regular growth of SDR's or some other official source of finance, while the latter considerations would call for discretionary (and usually conditional) lending authority by the IMF. A reasonable, though controversial case, can also be made for relying primarily on SDR creation to provide the secular growth in demand for reserves by countries who enjoy regular access to private international financial markets. This issue will be considered in Part III.

The major point is that the ideal operation of the international monetary system would have international surveillance determine the desirable pattern of adjustment actions and the international liquidity

<sup>64</sup> For my own views on this topic and extensive references to the literature on this subject see Willett [1977, ch. 4] and [1978b].

<sup>65</sup> In the case of destabilizing speculation, one would want to offset its effects, whereas if the problem was an insufficiency of stabilizing private speculation, one would want to supplement the operation of these forces. Of course, in practice, it may be very hard to clearly identify such speculative deficiencies in practice. See, for example, Logue, Sweeney and Willett [1978] and Willett [1977, ch. 2].

problem would be to assure that adequate financing was available when official intervention by deficit countries was called for. From this perspective, if deficit countries were unduly avoiding undertaking needed adjustments by borrowing excessively from private financial markets, the appropriate response would be direct pressure from the IMF on these countries to adjust more and borrow less, not some attempt to reduce aggregate international liquidity. The latter is usually much too blunt an instrument to be an effective method of influencing the operation of the international adjustment process.

Of course, international surveillance of the adjustment process does not work perfectly by any means. The effective power of the International Monetary Fund to influence the adjustment policies of its member countries is limited, as is the influence of less inclusive organizations such as the OECD and the Group of Ten and ad hoc international and bilateral exercises in moral suasion and bargaining. Where international surveillance is not fully effective, access to borrowing from the private international financial markets can allow countries to run larger and/or longer deficits than the international community would judge desirable.

In this connection several points should be made, however. First, the best way to reduce the amount of deficiencies which result from this process is to try to improve the operation of international surveillance of the adjustment process, not to attempt to exert greater control over international liquidity aggregates. Countries are, of course, quite reluctant to relinquish to an international body effective control of their exchange rate and balance-of-payments adjustment actions. Part of the attraction of some schemes for more centralized control of aggregate international liquidity may be the hope that greater centralized control of the adjustment process may be slipped in by the back door than could be achieved directly. I am doubtful that this is a promising approach, however.

Second, as was discussed earlier, to the extent that excessive borrowing takes place, other countries under floating rates have relatively greater scope to protect themselves from the importation of serious inflationary pressures.

Third, the actual amount of international deficit financing which has occurred in recent years would probably not have been significantly lower if formal IMF approval of all official borrowing from the private international financial markets had been required. In almost all of the cases of such private borrowing on a significant scale, the countries in question were also receiving discretionary official loans from the IMF. In such cases if the IMF had judged that the overall amount of a country's borrowing was too great, the IMF could have refused to grant official loans. Thus it is doubtful that in practice, access to borrowing from private financial markets has seriously undercut international discipline placed on deficit countries to the degree many have argued. Judgments that many countries were allowed to postpone adjustment for too long must largely imply a belief that the IMF and other sources of official loans were too lenient; that is, that the controllers of the system erred, not that uncontrolled access to international credit allowed countries to escape the IMF discipline.

To some extent such judgments, with which I agree, are a reflection of beliefs that it was better to err on the side of under rather than over

adjustment. As noted earlier, this was definitely the prudent side on which to err initially. A second aspect is that the IMF undoubtedly lent more funds than it would have ideally liked and was able to secure less in the way of commitments to adjustment actions than it would have preferred. This was because in countries like the United Kingdom and particularly Italy, governments faced severe political pressures to delay adjustments and feared that the policies which the IMF would have preferred on economic grounds would result in political instability, or at a minimum significantly reduced chances of reelection. In such circumstances, the likely outcome of IMF surveillance is less adjustment than the IMF would like, but more than would be undertaken in the absence of IMF involvement.

Given such inevitable political limitations on IMF surveillance, each access to private financing does reduce IMF leverage and can contribute to balance of payments financing which is excessive from the standpoint of the efficient operation of the international monetary system. Probably the best solution, however, is careful monitoring of official borrowing from private markets and the initiation of warnings against excessive borrowings at an early stage. One suspects that informal word that the IMF was growing concerned about the level of a countries' official borrowing could have a quite substantial effect in terms of increasing the cost and reducing the availability of private international credit to such a country. While I am more sanguine than many have been about the problems in this area, it is certainly important that the interrelationships between IMF surveillance and lending policies and official access to private international receive a great deal of attention.

A final consideration is whether official borrowing from private international financial markets should be allowed at all. Such a prohibition would provide at least some increase in centralized control and would contribute to a much more tidy blueprint of the international monetary system. Indeed on such grounds one can make a strong case for allowing only SDR's to be used as international reserves (over and above some level of working balances required for actual exchange market intervention). There are several counter arguments to such an approach, however. It clearly interferes with the individual choice of nations and on basic liberal principles one would be hesitant to prescribe such restraints unless they are required to avoid severe adverse effects on other countries or on the system as a whole. The preceding analysis has suggested that the costs of allowing individual choice in this area has not been nearly as great as many have implied. Thus when approached from a liberal, rather than a central planning perspective, the case for learning to live with considerable official access to private financial markets looks much stronger.

This consideration is reinforced if one considers the problems of attempting to secure agreement on such prohibitions and of enforcing such agreements if they could be achieved. Agreements among sovereign nations to limit their freedom of action are difficult to achieve. The supply of international cooperative actions is far from unlimited. Thus it seems reasonable to attempt to save efforts at agreement on strong international prohibitions to areas in which the prospective aggregate benefits generated are the greatest. Based on the preceding analysis, it is doubtful that the prospective aggregate

benefits from the greater control of international liquidity which might result from prohibitions would be sufficient to put such prohibitions high on the agenda of needs for international action. In terms of political adverse effects from decentralized decisionmaking, the problem of potential instability due to reserve switching which will be discussed in chapter III would seem to be of much greater importance.

Two additional points might be noted here. One is that the private markets' judgments about willingness to lend can give useful information to officials responsible for international liquidity and adjustment surveillance. The other is that such access has greatly reduced a major aspect of the asymmetrical position of reserve currency countries—the extent of their differential borrowing privileges. Today a large number of countries have the ability to run balance-of-payments deficits without running down their reserves or borrowing from the IMF. Most of these countries do still have to pay somewhat higher interest rates on such borrowing than does the United States, but the difference in positions for many countries is substantially less than a decade ago. It should also be remembered that the members of this new class of borrowers are able to borrow largely at their own discretion, while the borrowing resulting from the key currency portion of the dollar comes largely at the discretion of other countries, thus at least somewhat offsetting the U.S. advantages of borrowing at lower rates.

#### *18. Developments in 1976-78: A Final Example of the Need To Look Beyond the Behavior of Reserve Aggregates*

International reserve aggregates have continued to grow rapidly since the oil shock. The causes and distribution of reserve increases have changed substantially, however. The rate of accumulation by the OPEC countries has slowed considerably, as has the amount of borrowing by deficit countries to limit the decline of the levels of their international reserve holdings. At the same time, however, the U.S. balance of payments position began to worsen again as oil import payments continued to increase and the nonoil trade balance deteriorated in response to more rapid economic recovery in the United States than abroad and the acceleration of inflationary pressures in the United States. The resulting pressures on the foreign exchange market led to substantial official intervention to moderate the magnitude of exchange rate changes. The United Kingdom used the market strength of the pound to replenish its seriously depleted net international liquidity position, adding almost SDR 14 billion to its reserves during 1977. Both this and the other SDR 3 billion increase in reserves for Italy were clearly desirable developments from the standpoint of achieving better balance in the world economy.

The substantial reserve increases by Germany and Japan were of questionable desirability, however. From the perspective of many U.S. financial officials these increases during 1976 and 1977 represented undesirable attempts by these surplus countries to maintain their surplus positions. This was leading to a serious overvaluation of the dollar and an excessive concentration of the counterpart of the OPEC surplus on countries which were not in the financial position to accumulate

substantially larger debts. From this perspective these reserve accumulations represented a threat to international financial stability.<sup>66</sup>

As is indicated in table 7 aggregate reserve growth sped up during 1976, increasing SDR 28 and 40 billion respectively as contrasted with a little over SDR 14 billion in 1975. In 1978, aggregate reserve increases dropped sharply, to approximately SDR 15 billion, but the reserve increases of the financially strongest industrial countries accelerated. While the aggregate reserves of the OPEC countries actually dropped, the reserves of Germany, Japan, and Switzerland soared, increasing SDR 8.7, 6.5, and 5.2 respectively. Thus—while the aggregate rate of reserve increases during 1978 looked more reasonable by historical standards—from the previous perspective, international financial balance worsened rather than improved during 1978.

German and Japanese officials offered a quite different perspective, however. They maintained that they were not intervening to maintain under valued currencies, but only to promote stable market conditions. They were leaning against the wind to offset perceived tendencies of the private market to generate exaggerated exchange rate swings. Thus while their exchange market intervention and reserve accumulation did reflect international financial imbalances they were seen as contributing to international financial stability and avoiding disorderly market conditions, rather than as being the cause of imbalance.

TABLE 7.—INTERNATIONAL RESERVE TOTALS, 1973-78  
[End of period, millions of SDR]

	1973	1974	1975	1976	1977	1978	
All countries.....	010	152, 069	179, 522	193, 780	221, 548	261, 668	277, 007
Industrial countries.....	110	95, 748	97, 935	104, 112	113, 483	139, 420	160, 392
United States.....	111	11, 919	13, 115	13, 567	15, 768	15, 965	15, 032
Canada.....	156	4, 782	4, 758	4, 549	5, 029	3, 793	3, 507
Japan.....	158	10, 151	11, 042	10, 947	19, 149	19, 149	25, 714
Austria.....	122	2, 382	2, 801	3, 796	3, 494	3, 494	4, 611
Belgium.....	124	4, 228	4, 366	4, 952	4, 743	4, 743	4, 535
Denmark.....	128	1, 098	764	749	788	1, 375	2, 471
France.....	132	7, 070	7, 230	10, 757	8, 392	8, 392	10, 692
Germany.....	134	27, 497	26, 461	26, 510	29, 954	32, 713	41, 360
Italy.....	136	5, 335	5, 669	4, 078	5, 727	9, 573	11, 380
Netherlands.....	138	5, 426	5, 682	6, 073	6, 358	6, 639	5, 822
Norway.....	142	1, 306	1, 575	1, 911	1, 919	1, 811	2, 209
Sweden.....	144	2, 096	1, 418	2, 628	2, 144	3, 020	3, 376
Switzerland.....	146	7, 063	7, 360	8, 908	11, 385	11, 385	16, 550
United Kingdom.....	112	5, 368	5, 667	4, 663	17, 335	17, 355	13, 100
Oil exporting countries.....	999	12, 033	38, 384	48, 232	56, 149	62, 152	45, 915
Other less developed countries.....	201	24, 389	25, 884	26, 047	36, 146	44, 188	50, 725

Source: "International Financial Statistics."

My own judgment concerning these events falls in between these contrasting positions. The case that the exchange rate pressures resulted largely from disequilibrating private speculation is not nearly as strong as the surplus countries, especially Japan, argued. There was certainly a strong tendency in Japan to define exchange market stability in terms of the constancy of nominal exchange rates, rather than whether rates were moving toward or away from equilibrium,

<sup>66</sup> For further discussion on the worsened position of the dollar over this period see Willett [1978c] and [1979].

and there was a great deal of support for the belief that it was important to maintain an export surplus. Germany displayed similar tendencies, although to a much lesser degree. I suspect that the views of U.S. officials about equilibrium exchange rates was more nearly correct, but many U.S. officials probably also overestimated the damage to the stability of the system threatened by the continued German and Japanese current account surpluses and failed to distinguish sufficiently between balance of payments positions resulting from market forces and from government policies.<sup>67</sup> Likewise some U.S. statements tended to give a considerably exaggerated view of the benefits to international monetary stability being generated by the shift of the U.S. trade position into substantial deficit. Not long after, the worsening of the U.S. balance of payments position became generally acknowledged to be adversely rather than favorably affecting international financial stability.

The major point for this paper, however, is not to attempt to determine who was right, but rather to illustrate that these reserve accumulations needed to be judged in terms of views of the operation of the international adjustment process, not in terms of norms for rates of reserve growth. This requires detailed knowledge about the distribution and causes of such changes. As has been indicated in the last several sections, while the rate of international reserve increases has been unusually high by historical standards in almost every year since 1970 when Bretton Woods entered the last stages of its breakdown, the causes and distribution of these increases have changed significantly over this period. In judging the effects and desirability of such changes there is no substitute for careful evaluation of their relationship to the operation of the international adjustment process on a disaggregate basis.

The international adjustment process has far too many important short-term consequences to leave the international control of its operation to the long run regulator of the rate of international reserve increases, even if the long run effectiveness of this approach were not open to the serious questions raised in earlier sections. On the other hand, when the problem of international supervision of the adjustment process is confronted directly, the basis for concerns about the behavior of reserve aggregates largely disappears.

This conclusion does not imply that there are no important international liquidity issues, however. In the following chapter a number of current international liquidity issues will be addressed from the perspective developed in the preceding analysis.

### III. INTERNATIONAL LIQUIDITY ISSUES: SUMMARY AND POLICY DISCUSSION

#### *1. The Never Ending Search for International Monetary Reform*

There can hardly be an area for which there has been more conflicting advice offered, and more proposals penned, than that of international monetary reform. So many different types of interests are affected and there are so many different concepts of the objectives of the international monetary system that one can safely forecast that

<sup>67</sup> For further discussion on this point see Willett [1978a].

while events may cause the strength of cries for international monetary reform to rise and fall, substantive disagreement over the adequacy, much less the optimality, of existing international monetary arrangements will never be entirely eliminated.

Some of the disagreements surround issues of technical economic analysis. Views on how well floating rates have worked differ substantially depending on whether one views the observed volatility of exchange rates as resulting primarily from the instability of underlying economic fundamentals or from perceived inherent tendencies of private market speculation to magnify the effects of disturbances and generate chaotic conditions. Over time there is some scope for accumulating evidence to narrow the range of substantive differences of view. It is obvious now for example that the adoption of floating rates need not generate a resurgence of the economic warfare and crippling of world trade of the 1930's which some influential critics of floating had prophesized. Thus we might say that floating rates have proven themselves to be a *feasible* basis for a functioning monetary order.

Conflicts of views on the *desirability* of floating rates and/or on the degree of desirable official management of exchange rates have not narrowed nearly so much, however. As is typical, recent history has not given us the basis for a simple and unambiguous interpretation of how well floating rates have worked. The simple facts do not accord with only a single interpretation, obvious to all reasonable observers, as would have been the case if floating rates were accompanied by a high degree of stability in underlying world economic conditions. As a consequence, distinguishing between cause and effect becomes no easy matter. Various types of technical economic analysis can narrow the range of uncertainty about interpretations, but even the results of the most advanced economic analysis at present leaves some range of ambiguity. Furthermore, such analysis often does not appear to influence the major disputants.

In part this may be because the analysis is often complicated, but more often I fear it is due to the natural human tendency to render our interpretations of the facts consistent with our perceived notions. There has been remarkably little switching of views between those who initially were predisposed toward floating and those who were largely critical. It is important though that few of those critical of floating would now advocate a return to a full-fledged adjustable peg system like Bretton Woods. I take as an article of faith that while experience and technical analysis do not quickly change views which are strongly held, they do gradually over time influence views and help tend to at least narrow the range of controversies among responsible individuals and policymakers.

## 2. *Control Over International Liquidity*

### THE MISPLACED FOCUS ON CONTROLLING INTERNATIONAL LIQUIDITY AGGREGATES

As with the debate over the exchange rate system, one cannot expect debate over the control of international liquidity to soon cease, nor should it. It is my hope, however, that the terms of debate in this area will gravitate toward a more satisfactory framework for analysis



than has underlain many of the charges that the generation of international liquidity under our new international monetary system is almost completely out of control and that this in turn has been a major cause of world inflation in recent years.

As has been argued in the preceding chapter, the most reasonable charge was that deficient international monetary arrangements were a major cause of world inflation. However, the charge applied to the last years of the old pegged exchange rate system—not to our new system based on more flexible exchange rates. Even in that case, statements about the magnitude of the inflationary effects of the failures of the operation of the international monetary system have often been greatly exaggerated. While the huge expansion of the Eurocurrency market and official international reserves have been temporally associated with a substantial acceleration of the world inflation rate, more comprehensive analysis suggests that this has been due less than many believe to the cause and effect scenarios posited by some of the simple versions of international reserve monetarism.

Nothing in this analysis suggests that proper management of national monetary aggregates is not quite important for securing economic stability. Thus the results of this paper are not in any broad sense antimonetarist, but it does strongly suggest that a simply global focus on control of international reserve and Eurocurrency aggregates is not a viable basis for restoring global economic stability. The distribution of international liquidity and the causes of its creation are as important as the value of its global aggregate. For example, the creation of international liquidity through the undesired payments imbalances associated with the breakdown of the Bretton Woods system placed much greater direct inflationary pressure on recipient countries (that is, were more difficult to sterilize) than do SDR allocations and increases in the market price of gold. Similarly the second round effects of such international liquidity creation will vary greatly depending on whether the increases accrue primarily to reserve sinks like Germany or Saudi Arabia, or to balance-of-payments constrained countries which would rather quickly spend their increased reserves.

Appropriate levels and distribution of international liquidity can only be determined on the basis of a careful disaggregate analysis of the operation of the adjustment process. For example, after the oil shock, had the expansion of international liquidity been limited to a normal trend rate of growth, it is quite likely that the consequent worldwide recession would have been much more severe and that the resort to trade restrictions and competitive exchange rate manipulation would have been much more widespread. The best approach to improving the operation of the international monetary system is through direct surveillance of the international adjustment process, and not restoration of convertibility or asset settlement.

Indeed, most international liquidity issues can only properly be analyzed in relation to the operation of the international adjustment process. Thus many of the concerns about lack of control of international liquidity are relevant only to the extent that direct multilateral surveillance of the adjustment process through the IMF and other forums is not working well. With a well functioning process for international surveillance and management of the adjustment process,

the main function of international liquidity management would be to assure that international liquidity was available for the support of exchange rates and the financing of balance of payments deficits which were deemed internationally desirable or at least acceptable.

Of course international surveillance of the adjustment process does not work ideally and in consequence international liquidity considerations can influence the operation of the adjustment process where differences of view about policies are present. A country with ample owned reserves or access to borrowing from the private market has more power to run a larger and more prolonged balance of payments deficit against the judgment of international officials, than a country which is more dependent on discretionary financing from the IMF. Thus in the actual operation of the international monetary system, international liquidity considerations are not irrelevant to the operation of exchange-rate policies and the adjustment process. However, when dealing with such issues as gaining better international control of official borrowing from private markets, proposals labelled as attempting to gain better control over international liquidity would be generally identical to the ways in which one might hope to strengthen international surveillance of the adjustment process. Viewed from either perspective the object would be to strengthen the ability of the IMF to discourage "excessive" official borrowing from the private international capital markets. In my judgment efforts to deal with such problems are likely to be more effective if they focus more directly on the supervision of the operation of the adjustment process than on control of international liquidity aggregates.

The restoration of convertibility into reserve assets and particularly mandatory asset settlement—as proposed in the early stages of the post-floating, international-monetary-reform negotiations—would facilitate the control over international reserve aggregates; but the resulting effects on adjustment pressures would be likely to be quite haphazard. To improve global economic performance it is much more sensible to focus international attention directly on the operation of the adjustment process and allow flexibility in the resulting international reserve aggregates than to focus primarily on the behavior of reserve aggregates and leave the operation of the adjustment process and distribution of reserves to work themselves out. There is not the degree of automaticity in the balance of payments adjustment behavior for changes in reserve aggregates to represent an efficient mechanism for controlling the operation of the international adjustment mechanism.

In the process of international surveillance it will be desirable to focus attention on the behavior of a wide range of net and gross reserve indicators for each country. However, a simple pure reserve indicator role such as was proposed by the United States in the C-20 negotiations would be unlikely to prove adequate (or politically acceptable). Detailed discussion of how best to approach international surveillance of the adjustment process goes beyond the scope of this paper and achieving stronger international surveillance will be no easy matter, but this is the direction from which the issue of gaining better control over the international aspects of the operation of the world economy should be approached.<sup>68</sup>

<sup>68</sup> I have discussed approaches to international surveillance of the adjustment process in Willett [1977, ch. 4] and [1978b]. These works contain extensive references to the literature on this subject.

## OFFICIAL BORROWING FROM PRIVATE MARKETS

Official access to borrowing from private financial markets does not allow nearly as much escape from balance of payments discipline as many have feared. The private market does impose a discipline of its own as evidenced by the higher interest rates and reduced access to credit which face countries judged to be poorer financial risks. Of course the standards for lending by commercial bankers are unlikely to coincide identically with those for the most desirable operation of the international adjustment process. We cannot reasonably rely on commercial lending policies alone to provide and manage international liquidity. A clear example is the provision of balance-of-payments financing for the numerical majority of developing countries whose financial situations do not give them effective access to commercial markets. Likewise, as noted above, it is possible for nations to escape official international discipline through commercial borrowing. The magnitude of problems of this latter kind have often been greatly exaggerated, however. There is likely to be a strong interdependence between commercial and official lending policies, with commercial institutions being extremely hesitant to lend to borrowers whose access to official credit has been terminated. In almost all cases of large balance of payments financing from the private markets, the borrowing country has also had concurrent access to official lending or standby arrangements.

Clearly there have been situations in which countries have prolonged adjustment for too long as judged *ex post*, but seldom has this occurred as a result of official borrowing from the private market in opposition to pressure from the IMF. Thus most past cases of excessive financing can be ascribed at least as much to inappropriate national and international management as to a lack of official control over international liquidity. As noted in the previous chapter, however, given the limits on IMF political leverage, the interrelationships between IMF and private lending policies can be of considerable importance and should receive a good deal of attention.

It should also be remembered that appropriate balance of payments financing is not an unambiguous concept. In my judgment charges of excessive, uncontrolled, international liquidity have usually had more to do with disagreements about what are appropriate policies than about genuine and serious deficiencies in current institutional arrangements.

### *3. International Monetary Stability and the Tightness of International Monetary Organization*

A major thesis of this paper is that various bureaucratic, political and economic incentives make the current international monetary arrangements a great deal more stable than many critics have argued. The principal source policy inconsistencies in the postwar-international-monetary system has been the tendency to delay adjustment with sticky exchange rates, not that of over adjustments which characterized the 1930's. The adoption of more flexible exchange rates has substantially reduced this problem. Of course we do not have a system of completely freely floating exchange rates—and even if we

did, this would not automatically eliminate all possibilities of policy conflicts and inconsistent balance of payments and exchange-rate policies which can threaten international monetary stability. Nor do we have the kind of centralized control or clear cut standards for acceptable behavior and effective sanctions against deviations which assure policy consistency and system stability.

Nonetheless, the combination of the adoption of substantial exchange-rate flexibility, the development of a basic fabric of international cooperation and the perceived interests of the major countries in avoiding extreme monetary instability, and the maintenance of a relatively passive balance of payments policy by the United States have been sufficient so far to contain the problems of policy inconsistencies from reaching severe dimensions. While some might view the current loosely structured system as a free-for-all regime which is likely to replicate the severe instabilities of the 1930's, it is in fact a reasonably workable compromise between a number of extreme prototypes for international monetary reorganization.<sup>69</sup>

#### DESIRES FOR TIGHT INTERNATIONAL CONTROL

It is an easy matter to construct various pure international monetary systems which would be logically consistent. The major problem is that all such systems require countries to cede substantial amounts of traditional national sovereignty to automatic rules or discretionary international authority and/or to the maintenance of perceived hegemony by the United States. There have been two major types of motivation behind proposals for tightly structured international monetary systems. One is the desire for logical purity which assures that the institutional framework contains certain solutions for all possible problems. The second motivation stems from beliefs that a relatively decentralized system will provide the United States with unfair economic and/or political and prestige benefits from the operation of the international monetary system.

While many critics substantially exaggerate the special benefits to the United States from an international monetary system which is not highly centralized they do correctly perceive that under such a system the dollar does tend in Orwellian terms to be "more equal" than other currencies. Because of the payment of competitive rates of interest on most foreign dollar holdings, it is doubtful that the United States receives any substantially disproportionate net economic benefits from such a system; but to the many concerned primarily with political and prestige factors, this is of little consequence.

<sup>69</sup> For recent discussions of various basic organizing principles for the international monetary system, see Cohen (1977), Cooper (1975), and Hirsch, Doyle, and Morse (1977). For example, in addition to a free-for-all regime without any organizing rules, Cohen lists automaticity (e.g., a gold standard, or freely floating rates), supranationality (with the IMF as a true international central bank), hegemony (a pure dollar standard and which many would argue characterized the early postwar operation of the Bretton Woods system), and negotiation as basic organizing principles for international monetary management. Of course, as these authors recognize, actual systems tend to be based on combinations of the basic organizing principles. Thus, for example, while I believe that the United States should display a large element of benign neglect philosophy with respect to our balance of payments and exchange, I do not think it is feasible to rely entirely on a passive U.S. policy to solve the so-called nth country or consistency problem among national balance of payments and exchange rate policies. As indicated in Willett (1977) and (1978), my own judgment on this score is that the best practical solution to this problem is a combination of judgmental international guidelines combined with a great deal of passivity on the part of the United States. As was indicated by some of the reviews of my recent book there is far from complete agreement on this score, McKinnon (1978), for example, continued to argue for a pure passive policy strategy which would make international guidelines unnecessary, whereas Basevi (1979) found fault with my analysis on just the opposite grounds that greater emphasis on international rules was needed.

## THE POLITICAL INFEASIBILITY OF A TIGHT SYSTEM OF INTERNATIONAL CONTROL

The attempts in the Committee of Twenty (C-20) international-monetary-reform efforts to construct a highly structured system based on the restoration of exchange rate pegging and convertibility of all currencies into reserve assets were motivated both by concerns to cut the role of the dollar down to size and to provide a logically consistent solution to all potential major international monetary problems. As John Williamson [1977] has convincingly argued, the decision to include a return to a par value system as a part of the C-20 reform packaged doomed the original exercise to failure. Even within the context of managed flexibility the negotiating history makes it abundantly clear that almost no country was willing to give up the degree of traditional national sovereignty over international monetary behavior necessary to secure agreement on a tightly organized international monetary system.

The current system is dominated much more by multinational negotiation concerning the implementation of generally agreed principles than it is by pure dollar hegemony as some politically concerned critics charge. Yet it still provides the United States much greater freedom than many in other nations would prefer. Concern about the asymmetrical position of the dollar remains prevalent. The basic problem, however, is that to construct a meaningfully consistent and symmetrical system which places substantially greater formal international discipline on the United States would require that many of the traditional areas of other countries national prerogatives would also have to be substantially more constrained. As the U.S. negotiators quite correctly argued, one could not expect to construct a durable system based on a restoration of convertibility into reserve assets without establishing much stronger central control over the operation of the adjustment process and the management of the composition of international reserves.

For most countries, unwillingness to accept the latter outweighed dislike of the former. This explains both why a highly centralized system was not adopted, and why criticism of major aspects of the current system are bound to be continued. It is of course a continual objective of individuals and governments to have one's cake and eat it too, and recognition that this is impossible, hardly ceases laments about what is not obtained.

On strictly economic grounds, a strong case can be made for a highly centralized international monetary system. This would have strong international control over the operation of the adjustment process and international financial arrangements based on the SDR or some new international fiat asset. The International Monetary Fund would take on more of the traditional functions and powers of a true central bank. Provided that such a system were operated sensibly, it could indeed represent the optimal international monetary system on aggregate efficiency grounds.

It bears repeating, alas, that national governments rightly or wrongly display considerable unwillingness to cede substantially greater amounts of explicit formal power either to international rules or discretionary authority. In this regard, national governments appear

to be extremely risk averse. It is easy for the officials of almost any country to conceive of realistic situations in which the creation of greater formal international control would hamper the conduct of desired national policies. My suspicion is that in the absence of serious imminent threats, this risk aversion creates a substantial bias against agreements to cede strong formal and detailed authority over various aspects of international monetary behavior. This is true even though countries are in fact willing to give a good deal of weight to international moral suasion and to substantially reduce their propensities to engage in exploitive or destabilizing actions in response to such moral suasion.

#### THE WORKABILITY OF A LOOSE SYSTEM

When one broadens the analysis to political economy rather than exclusively economic efficiency considerations, the presumption must be that political desires for at least nominal autonomy should be given weight as legitimate considerations. If national preferences are for a great deal of continued national sovereignty, it is unrealistic to expect a highly centralized international monetary system to be acceptable.

Deviations from aggregate economic optimality are not sufficient to establish a substantial need for international monetary reform. On the other hand, one does not need to be a naive economic idealist to recognize that there are dangers in assuming that whatever is currently politically feasible or expedient is therefore unambiguously desirable in a broader political-economy context. Maximizing short run political expediency is quite likely to result in short sightedness and the substantial underprovision of collective goods such as international monetary stability.<sup>70</sup>

Responsible political-economy analysis should deal not just with current expedience but also with longer run considerations and the seriousness of potential inadequacies of current arrangements. On this score, there is little practical value in pointing out that current arrangements fall short of complete optimality according to some particular criteria, but there is considerable relevance to longer term analysis of directions for future policy evolution as current political constraints become more malleable over time. Likewise there is a need for analysis of potentially major shortcomings of current arrangements which, if uncorrected, may give rise to serious problems in the future. There is also scope for offering proposals which may make modest improvements at relatively low cost and for both policy advocacy and more dispassionate attempts at evaluating aspects of proposals on technical grounds.

There is thus no one correct set of guidelines for good political-economy analysis. What is important is that the various types of analysis be carefully distinguished.<sup>71</sup> In this regard the analysis in chapter 2 suggests that current arrangements for international liquidity are not nearly as deficient as many have argued. In other words, while improvements may certainly be possible, the new international

<sup>70</sup> For discussions of international monetary stability as a public good see Cooper [1975] and Officer and Willett [1969] and [1970].

<sup>71</sup> Williamson [1977, pp. 202-203] provides a good example of realistically indicating the importance of recommended reforms. While advocating a number of additions to the Jamaica Agreements, he concludes that it would be a pity, but not a disaster, if his recommendations were not adopted.

monetary system accepted at Jamaica is in my judgment a quite reasonable one. While by no means definitively complete, it is by no means as seriously incomplete or defective as many advocates of highly centralized systems have argued.

#### 4. *Concerns About the Eurocurrency Market and Reserve Switching are Particular Manifestations of the Effects of International Capital Mobility in General*

The analysis in this paper also provides a framework for evaluating proposals for more marginal improvements in the operation of the international monetary system. A major difficulty with many proposals for specific reforms is that they attempt to do something about an area which is perceived to be a problem without full consideration of the likely effects of the proposal and particularly consideration of whether it would really do much to reduce the basic problems. In this vein, as discussed in chapter 2, many recommendations to control aspects of the operation of the Eurocurrency market are based on incorrect or exaggerated views of the effects of the expansion of this market and fail to sufficiently recognize that controlling the Eurocurrency market would do relatively little to reduce international capital mobility which is in fact often the critical concern. (While it is inevitable that most policy discussions focus on the problems caused by international capital mobility, it is important to remember that such capital mobility provides substantial benefits as well.)

Similarly, attempts to reestablish convertibility into reserve assets and control of international reserve aggregates are often taken as proximate objectives without sufficient attention being paid to the actual full effects on the operation of the international monetary system. As was argued in chapter 2, control over reserve aggregates alone is not sufficient to establish efficient management of the international financial aspects of the world economy.

Neither would the establishment of required ratios of SDR's to countries' total reserve assets be an effective basis for establishing centralized control over global reserves aggregates.<sup>72</sup> The problem is that countries could not reasonably be expected to be responsible for offshore Eurocurrency transactions denominated in their currencies. As was discussed in chapter 2, Eurocurrency transactions have to a considerable extent replaced U.S. balance of payments deficits as a source of "uncontrolled" international liquidity creation. To avoid unreasonable obligations on reserve currency countries, a workable system of mandatory convertibility into reserve assets would require strong international regulation of official lending and borrowing in the Eurocurrency and other offshore markets. This is an area in which half-way measures are most unlikely to be workable and may be positively harmful.<sup>73</sup>

<sup>72</sup> Study of such an approach was recommended by Johannes Witteveen [1975], while he was Managing Director of the International Monetary Fund, but evaluations of the proposal were largely negative (see, for instance, Crockett [1978], Kenen [1977], Solomon [1977], Whitman [1977], and Williamson [1977]) and it appears to have been dropped from current consideration by the IMF (see, for example, the report on the March 1979 meeting of the Interim Committee of the Board of Governors of the IMF in the *IMF Survey*, March 19, 1979).

<sup>73</sup> In this respect there is a strong analogy to national capital-controls programs. As was clearly evidenced in the U.S. experience during the 1960's, a piecemeal approach did not work. In the initial quite limited applications of control and tax measures, each control on a particular type of capital flow was quite successful in reducing that category, but largely with the effect of deflecting capital flows to other channels rather than reducing substantially. Only when the program was expanded in a substantial number of categories did it begin to have a major impact on aggregate-net-capital flows. See Haberler and Willett [1968].

The point of course is not that it isn't technically feasible to design a tight system of international control over international liquidity which would be economically workable as long as countries abided by the regulations. Rather it is that for a tight convertibility-based system to be workable over the long run, a very high degree of centralized regulation and ceding of traditional national prerogatives to international control would be required. While most of the major industrial countries were willing to agree in 1971 to limit new placements of reserves in the Eurocurrency market as a method of reducing this source of uncontrolled international liquidity creation, the developing countries have been for the most part quite adamant in their rejection of proposals to even partially limit their freedom to determine where and in what form to hold their international reserves.

There would seem to be little political support abroad for the degree of centralized control which would be required to make a new convertibility system workable. Nor would the United States be likely to favor such a system. Indeed during the C-20 negotiations, the United States steadfastly opposed proposals for mandatory asset settlement in favor of a looser system of general convertibility on demand with limitations on the convertibility rights of "excessive" accumulations by individual countries as defined by a reserve indicator system.

The stated reason for opposition to mandatory asset settlement was the need to provide elasticity in the system, although it was just this type of elasticity which the Europeans were trying to avoid. Conceptually, whatever elasticity was needed for financing unusual payments developments could be provided through discretionary lending facilities in the IMF. The real cause of U.S. opposition to mandatory asset settlement was that under this system the decisions on providing elasticity in particular cases would be made by the IMF. This would have required the United States to give up traditional national power to international authority which U.S. officials were no more prepared to do than the Europeans were willing to subject themselves to the formal rules for balance of payments adjustment proposed by the United States.

### *5. The Role of the SDR*

A similar situation holds with respect to the generally agreed objective of making the SDR the principle reserve asset of the international monetary system. The motivations behind this objective are basically the same as those discussed above for a highly centralized system in general. In a highly structured system with tight international controls, the SDR would be the obvious choice for the major reserve asset, and holdings of other reserves beyond working balances would best be phased out.

A good case can be made for making the SDR an asset which could also be held by private parties. This would allow official exchange rate intervention directly in SDR's. But such a vision of the international monetary system will come to pass, if ever, only in the distant future.<sup>74</sup> Within the likely political parameters of the next decade or two, there is little that can be expected from SDR management in terms of establishing better control over international liquidity.

This still does leave, however, the more explicitly political or prestige argument for using the SDR to cut down on the perceived hegemony and special privileges of the dollar. The creation of the SDR

<sup>74</sup> For analysis of SDR based international monetary systems, see Hirsch [1973], Cohen [1977, ch. 6] and Crystal [1978].



has probably served a quite socially useful purpose in increasing the perceived symbolic acceptability and political legitimacy of the current international monetary system. In this regard, we may expect continued lip service to strengthening the role of the SDR as the center of the system, but little likely action of major import.

While the SDR is unlikely to play a substantially stronger role in the international monetary system over the next several decades, a strong case can be made for the recent decisions to begin again to create new SDR's. Perhaps the major argument against SDR creation is the belief that the world is already awash with too much international liquidity and that such SDR creation will only further fuel the flames of world inflation. Such views, however, tend usually to rest on the type of international reserve monetarist views which were criticized in chapter 2.<sup>75</sup> The analysis in this paper suggests that we do not at present have a substantial excess of aggregate international liquidity. It seems unlikely to me that moderate rates of SDR expansion would force any substantial amount of imported inflation on countries.

Continued moderate rates of SDR creation would have several advantages beyond the not insubstantial, politically symbolic one of reducing the perceived special advantages and hegemony of the dollar and providing a less asymmetrical appearing international monetary system. SDR creation would reduce the degree to which reserve centers would need to run balance of payments deficits to provide increases in the reserves of nonreserve currency countries.

It has become clear that even with managed floating most countries desire to see some rate of increase in their average levels of gross reserve holdings over time.<sup>76</sup> Given recent concern both at home and abroad about the U.S. balance of payments deficits, it would seem generally beneficial that the dollar not be subjected to a secular overvaluation on private accounts due to official demands for dollar accumulations. The other major reserve currency countries have made it quite clear that they do not seek substantially increased reserve currency roles. Thus there is a strong case for allowing SDR expansions to be the main method of secular increases in the demand for owned reserves, rather than forcing such demands to be met by increased holdings of reserve currencies.

To enhance the acceptability of the SDR there may be a case for further increasing the rate of return on SDR's. While the original 1½ rate of interest on SDR's was much too low, it is not clear that substantial further increases in SDR interest rates would be of major importance. The analysis in chapter 2 suggests that over a fairly wide range the rate of return on international reserves is not likely to have large effects on the behavior of the central banks of the major countries. With respect to the behavior of many of the smaller countries, however, this could be of significance. I also do not see a need to

<sup>75</sup> See, also, however, the broader critique of further SDR creation offered by J. Carter Murphy (1979a and 1979b).

<sup>76</sup> As argued in chapter 2 the adoption of managed floating should cause a one time reduction in the level of reserves demanded. It would not mean, however, that reserve demands would not continue to grow over time from this new lower base. The initial generation of excess reserves would eliminate the need for reserve growth until these excess supplies were eliminated, but after that, the desirability of secular growth in reserves over time would reemerge.

consider changing the current method of valuing the SDR in terms of a weighted average of a basket of currencies.<sup>77</sup>

There is furthermore an important equity argument for continued SDR creation to reduce the degree of relative disadvantage of those countries which do not have effective access to borrowing from the private international financial markets. One could make a case on similar grounds for an SDR link which would substantially increase the portion of new SDR's allocated to the poorest developing countries. However, my own preference would be to continue instead the recent trend of increasing the access of these countries to special IMF lending facilities.

With respect to the link proposals, it should be said that there are a number of political and economic arguments both for and against various types of links which I shall not reiterate here.<sup>78</sup> The only point which I have to add to this long standing debate is that in my judgment both advocates and opponents have tended to greatly exaggerate the effects which a link scheme would have. Given the conservative IMF voting structure with its 85 percent weighted vote requirement on SDR creations, it is unlikely that in the foreseeable future even upper bound estimates on the possibilities of linked SDR creation would have the potential for the magnitude of lesser developed countries (LDC) benefits which many early advocates appeared to perceive, (nor for the inflationary effects which its opponents feared). The SDR link debate is likely to continue, but its outcome will be of only marginal significance for the operation of the international monetary system.

#### 6. *The Dollar Overhang and Potential Instability From Multiple Reserve Assets*

Another issue in which there continues to be a great deal of interest concerns the so-called dollar overhang and the potential instability of a system of multiple reserve assets. Discussion of the dollar overhang often suffers from confusion over a number of different concepts to which this term may refer.<sup>79</sup> In the most popular sense it often refers to the fact that there are huge quantities of dollars held abroad by both private and official parties. Concerns about these large magnitudes always rise when the outlook for the exchange value of the dollar weakens and funds are shifted out of the dollar into other currencies. Such concerns have given rise to many proposals to "soak up" some of this overhang through unilateral foreign currency denominated security issues by the United States or by the creation of some form

<sup>77</sup> See, also, however, the recent critical analysis of this valuation procedure by Chrystal [1978, pp. 20-22]. For further discussion of the interest rate and valuation of SDR's see Dreyer [1977], Polak [1974], Tower and Willett [1972], and Williamson [1973] and [1977, ch. 6]. I should note in this regard the incorrectness of Chrystal's [1978, pp. 19-20] recent argument that: The optimum quantity of money for paying full-market interest rates is irrelevant to SDR's because interest is not paid on the entire level of SDR holdings. Chrystal fails to distinguish between marginal and inframarginal considerations. The fact that interest is paid or received only on deviations between SDR allocations and holdings is an inframarginal consideration which would affect rational economic behavior only through wealth effects. Economically relevant marginal decisions on SDR usage face the opportunity cost of the SDR interest rate, and thus the optimum quantity of money arguments apply. However, as noted in chapter 2, the simple application of the optimum quantity of money approach should be broadened to take into account the public choice and externality considerations emphasized in Tower and Willett [1972].

<sup>78</sup> For recent discussion of the Link proposals and references to the vast literature on this subject, see Cline [1975] and Williamson [1973] and [1977, pp. 143-147].

<sup>79</sup> See Willett [1977, pp. 91-98].

of substitution facility by the International Monetary Fund. The latter would deal only with official dollar holdings while the former might be used to attack both sources of potential dollar selling.

While there are quite legitimate matters of concern here, advocates of such proposals have often been overly optimistic about the extent to which they could substantially reduce problems of international monetary instability. For example, with respect to the issuance of foreign currency denominated securities by the United States in exchange for foreign held dollars, newspaper reports of such proposals often characterized them as being designed to "skim off the speculative froth" against the dollar, but in fact in the face of substantially changed expectations about the outlook of the dollar, it seems quite unlikely that there would be a high degree of correspondence between those most anxious to sell dollars and those who would wish to purchase the new securities. In other words, such security sales would not be a mechanism for fine tuning the removal of pressures to sell dollars.<sup>80</sup>

Nor is there likely to be a terribly strong relationship between the size of the official or private dollar overhang in a gross sense and the size of the potential exchange-market pressures on the dollar. Such pressures result from changes in the outlook for the prospects of a currency combined with high international capital mobility. Whether the stock of foreign-held, dollar-denominated assets at any one point in time were \$200 billion or \$400 billion, the potential problem would be much the same. It must be remembered that exchange pressure on the dollar can come from U.S. funds moving abroad just as well as from selling by foreign dollar holdings. The problems in this area are of high capital mobility in general.

In such an environment, concern about the size of particular figures for various types of foreign-held, dollar-denominated balances and efforts to limit their growth are based on a misconception of the basic issues. The basic facts are that we must either come to terms with living in a world in which because of high capital mobility, shifts in expectations about the economic outlooks for various currencies may have a substantial impact on exchange rates, or we must attempt to establish a very tight and comprehensive system of international regulation and control of both private and official capital flows. In my own judgment, the latter approach is unlikely to be either feasible or desirable, but it is the only way to fully insulate reserve-currency countries and the international monetary system from possible, consequential effects from currency switching.<sup>81</sup>

Apart from the question of feasibility, the extent to which one favors continuance of a significant degree of freedom of capital mobility, versus a system of relatively tight control on economic merits, depends to a considerable degree on how economically rational international capital flows are viewed as being. The development of a

<sup>80</sup> It should be noted the the recent official sales of U.S. securities abroad were to purchase foreign currencies for potential use in exchange market intervention, not to soak up foreign dollar holdings. For further discussion, see Willett [1978c].

<sup>81</sup> The magnitude of such a task is further increased when it is remembered that a substantial portion of exchange market pressures often come from essentially defensive shifts in hedging and the timing of commercially related payments rather than either the offensive acts of professional currency speculators or the reserve switching of official currency holders.

relatively high degree of international capital mobility was one of the important factors which led to a breakdown of the Bretton Woods adjustable peg system. Its primary architects, Harry Dexter White of the United States and John Maynard Keynes of the United Kingdom had been quite skeptical of the economic desirability of relatively free international capital mobility, based in substantial part on views that such flows had had a strong tendency to be destabilizing during the economic chaos of the 1930's. They had assumed that the postwar international monetary system would be based on substantial control over capital flows. Subsequent developments and analysis, however, have strongly suggested that Keynes and White were overly optimistic about the extent to which financial capital flows could be controlled without impeding the real side of international economic activity and were unduly pessimistic about the degree of economic rationality on which speculative expectations and international capital flows are usually based.

Such shifts in speculative expectations and international capital flows have often appeared to be extremely disruptive under both the adjustable peg and, to a lesser extent, managed floating—yet, in the substantial majority of cases such reactions have been well founded. In other words, most of the time private speculations have been more correct than official defenders of exchange rates. It has been the inconsistencies between domestic economic and exchange-rate policies or the instabilities of domestic policies and other underlying economic fundamentals which most often have been the real causes of unsettling exchange market pressures. Capital flows are much like the bearers of bad tidings, who often find themselves blamed for the news that they bring.

This of course is not to say that international capital flows and currency switching actions are always based on perfectly rational evaluations of the best possible information and forecasts, or that there may not be times in which official intervention in the foreign exchange market is a desirable component of domestic macroeconomic stabilization policies—even when speculation is based on reasonable expectations.<sup>52</sup> In my judgment, however, the experiences of the postwar period suggest that economically justifiable cases of heavy official intervention in the exchange markets tend to be the exception rather than the general rule. As is clearly apparent, the adoption of floating exchange rates has not eliminated the problem of exchange market instability. Nevertheless, I believe that floating has gone a long way toward reducing the extent to which such instability is "artificially" created by international institution arrangements.

The best route toward achieving greater stability under floating rates is the evolution of more stable underlying economic policies and conditions (particularly in the United States) combined with prudent use of official-exchange-market intervention within a cooperative international framework; not a system of tight controls over international capital mobility and reserve switching. The latter is much too blunt an approach. It would likely be economically inefficient as well as politically infeasible.

<sup>52</sup> For further discussion on these points, see Willett [1977, ch. 2] and [1978b].

Such a conclusion, of course, does not imply that there may not be net gains possible from the creation of some type of IMF substitution facility to reduce problems of reserve switching; but the analysis in this paper strongly suggests that such a facility should be viewed as a potential marginal improvement—not something which will fill a glaring gap in current international institutional arrangements and make a major contribution to greater international monetary stability.

The traditional distinction between official and private confidence or stability problems was largely a result of the institutional arrangement of the convertibility of officially held currency balances into reserve assets. The abandonment of a general system of reserve-asset convertibility and adjustable-pegged-exchange rates has reduced both the incentives for currency switching in the face of a given economic environment and the degree of distinction between official and private currency holdings. Large exchange rate changes can still be uncomfortable even under flexible exchange rates. Thus the adoption of floating rates does not completely solve the broad Gresham's law type problem of the potential instability of multiple currencies. It should be remembered, however, that Gresham's law itself was developed in the context of multiple currencies temporarily pegged at disequilibrium exchange rates, an environment which characterizes the original Bretton Woods system much more than the current managed float.

Similarly, the types of factors discussed in chapter 2 which caused the reserve management behavior of the major industrial countries to be much more stabilizing than many expected while the dollar was convertible into gold, also suggest that a more general multiple-currency system is likely to be much less unstable than many have feared. In this respect, the actions of the many smaller official currency holders do not face the same types of restraining factors as those of the small number of large dollar holders. But it is on the behavior of the latter that the stability of the system really depends. They still have the collective power to offset most of the effects of the actions of the former group.

While the collective international financial power of the traditional large dollar holders has declined somewhat in the face of the huge OPEC accumulations, the effective loss of international financial power by this traditional group is much less than is often supposed. The main alternative outlets for investment still remain within this group of countries, so that currency switches by others will still be predominantly among the currencies of this group rather than into and out of this group of currencies as a whole. Furthermore the major OPEC currency holders have recognized that they have an increased stake in a relatively smoothly functioning international monetary system and have been relatively conservative with respect to currency switching. Most ditching of the dollar as a result of official portfolio switching has come from the small dollar holders and, in aggregate, diversification away from the dollar has not been nearly as great as many popular discussions would seem to imply.<sup>83</sup>

<sup>83</sup> For data and analysis on this point see Heller and Knight [1978], and Laney [1978]. The proportion of dollars in official currency holdings has fluctuated within a couple of points of 80 percent during the 1970's. For an interesting discussion of central bank practices, see "Why Central Banks are Ditching the Dollar," *Euromoney*, October 1978. See also Wilford and Putnam [1978].

### 7. *An IMF Substitution Facility*

If there were a substantial demand to diversify reserve holdings out of dollars into SDR's, a good case can be made for empowering the IMF to create a facility to issue SDR's in exchange for reserve currency holdings. The purpose would be to reduce the exchange market pressures resulting from official diversification. A good case can be made for gold substitution facilities as well.<sup>84</sup> Again it should be remembered that neither reserve currency nor gold substitution facilities would be adequate to generate substantially greater control over international reserve aggregates unless they were made mandatory and were coupled with requirements for asset settlement or some other stringent mechanism. Creation of a higher proportion of SDR's in international liquidity will not in itself do anything substantial to provide greater control of international liquidity.

It should further be recognized that there can be important differences among the types of substitution facilities which could be created and in the treatment of the reserve currencies which they received. One major factor influencing U.S. willingness to favor such a facility would be the obligations placed on IMF holdings of dollars acquired through substitution account operations. I shall not attempt here to go into all of the technical issues involved. These were investigated extensively during the C-20 negotiations and are again being investigated now in detail by the IMF. A few substantive points should briefly be discussed, however. The issues of convertibility and amortizations which figured heavily in the C-20 discussions are of much less relevance today. The question of the terms of U.S. obligation with respect to interest rates and exchange guarantees, if any, continue to be of significant interest, however.

U.S. financial authorities would of course prefer that such obligations would bear low-interest rates and no exchange guarantee, while the IMF interest would be just the reverse. A compromise between these extremes should be made. The two most obvious alternatives are that the IMF continue to invest the dollars they acquired in competitive financial instruments in the United States with no exchange rate guarantee, or that the United States issue to the IMF special SDR denominated securities carrying an interest rate approximately equal to the regular SDR interest rate. Given the current formula which sets SDR interest rates at roughly half of major national money market rates, either method would seem to be a reasonable compromise of U.S. and IMF financial interests.

The situation might become somewhat more complicated if SDR rates were raised to average market levels, as some have proposed. Then the United States would be in effect giving an exchange guarantee with little corresponding reduction in the interest rate. Still, with good will, working out mutually acceptable financial terms should not be a consequential stumbling block. While it would clearly be

<sup>84</sup> Based on the analysis in chapter 2, I am considerably less concerned than writers like Fand [1975], Machlup [1976], and Williamson [1977a, ch. 6] and [1977b] about the effects of the current ambiguous role of gold on the operation of the world economy and do not believe that there is an urgent need to do something about gold. Still the possibility of creation of a gold SDR substitution account is worthy of consideration. A strong argument against such a facility, however, is that to induce sales, gold conversions would probably have to be valued at close to market rates. There might be scope however for further use of the principles involved in profit sharing procedures used with current IMF gold sales, under which the profits are shared between the original owners and a Trust Fund which is used to lower the interest payments of the low income countries.

against U.S. narrow interests to offer an SDR exchange value guarantee on financial instruments which carry normal dollar interest rates, there is no presumption that offering SDR denominated financial instruments *per se* would be against U.S. longer term interests, even narrowly defined.<sup>85</sup>

#### POSSIBLE TYPES OF SUBSTITUTION FACILITIES

Such considerations do raise an important issue with respect to the flexibility of the substitution account, however. If the substitution account were freely reversible (that is, if SDR's could be converted back into currency) it could well contribute to reserve switching by increasing incentives for countries to switch out of the dollar when it looked weak and into the dollar when it looked strong. While the substitution account would minimize the exchange-rate effects of reserve switching, it would by this very result increase the incentives of national reserve managers to in effect play the market at the expense of the United States and/or the IMF depending on the particular financial arrangements concerning dollars acquired by the IMF through the substitution facility.

As a consequence, one suggestion would be that any IMF substitution facility not be freely reversible.<sup>86</sup> SDR's would not be convertible back into currencies except for balance of payments need. This would maintain the original philosophy that SDR's not be sold for the purpose of switching reserve composition. I see no objection, however, to allowing as an exception mutually agreeable transfer of SDR's and currencies among individual financial authorities.

A remaining question is whether a substitution account should be once-and-for-all or open ended. There are some merits on each side. An open-ended account would be likely to "subsidize" to some extent official speculation at the expense of the United States and/or the IMF, although not nearly to the degree of a reversible substitution account. On the other hand, a one time consolidation could satisfy only present and not future demands for diversification. It should also

<sup>85</sup> While I think that the United States should not be opposed to an exchange guarantee in principle, I believe that it would be better to have the United States take an above quota share of the cost of any future liquidation of the facility, rather than having a year-by-year arrangement for compensating for exchange gains and losses.

Payment of interest in dollars with the long-run liquidation commitment would allow one to duck the very tricky question of whether an appropriate SDR interest rate on year-by-year SDR guaranteed dollar holdings should equal the straight-weighted average of interest rates for the major SDR currencies or whether a diversification adjustment should be deducted from this average. Good arguments can be made both for and against such a diversification adjustment (depending largely on whether the relevant alternative is considered to be diversified or only partially diversified official currency holdings), so that it might be better to avoid having to take a stand on this with respect to substitution-facility dollar holdings. Of course this issue cannot be entirely ducked as it is relevant to the general SDR interest rate, but I think negotiators would be open to less criticism for having made a bad deal *ex post* on the general interest rate for SDR's than would be the case with SDR guaranteed dollars.

I would favor having the substitution SDR's be fully rather than only partially guaranteed in the case of liquidation, with the guarantee being split between the general IMF membership and the United States. With a roughly 20 percent quota, the United States might offer to bear say 30 or 40 percent of the guarantee, with the rest being distributed among all other IMF members in proportion to quotas.

For further discussion of the these and other substitution-account issues such as acceptance limits and designation procedures, see Morgan Guaranty [1979b] and Sobol [1979].

<sup>86</sup> This conception of a new IMF facility would make it like the mechanism for consolidation discussed during the C-20 negotiations, rather than the substitution facilities which were often envisioned as mandatory and which in some versions had one objective of providing a buffer for asset convertibility with respect to the United States (i.e., countries would be required to convert dollar accumulations into SDR's, but under some circumstances the IMF would not convert these dollars into U.S.-owned reserve assets, thus providing a form of elasticity alternative to the U.S. reserve indicator proposals.) For further discussion, see Williamson [1977]. Following recent convention, however, I shall continue to refer to the whole set of possible new facilities as substitution accounts. For further discussion, see Fellner [1972], Kenen [1973] and Williamson [1977].

be recognized that since the SDR is not the only asset countries might want to diversify into, the total reduction in the desire to diversify out of dollars would be expected to be less than the demand to diversify into SDR's. Such a facility could not eliminate, even for a particular point in time, all potential desires to diversify from one currency to another.

To the extent that the creation of a new SDR facility would make new dollar accumulations more onerous to the United States (for instance, because of conversion into SDR's on unfavorable financial terms to the United States or because of potentially more stringent convertibility obligations if some of the old C-20 proposals were adopted in some future round of international monetary negotiations) and more advantageous to the holders, there should be assurances that such accumulations took place with the blessing of the United States and/or within an internationally agreed framework. It would hardly be equitable or efficient to in effect provide a "subsidy" through an IMF facility to a country accumulating dollars as a result of maintaining an undervalued currency against the wishes of the United States and the IMF.

#### LINKING ACCESS TO THE SUBSTITUTION FACILITY TO INTERNATIONAL SURVEILLANCE OF THE ADJUSTMENT PROCESS

Perhaps the most desirable approach would be the establishment of an open ended but nonreversible substitution facility combined with a strengthening of the arrangements for IMF surveillance of the adjustment process in a manner such that only currencies accumulated by actions sanctioned by (or at a minimum not discouraged by the IMF for surveillance would be eligible for substitution. Probably the best way to structure such an approach would be to allow access to the substitution facility only to countries judged to be meeting the IMF guidelines. While this leaves the problem of how to treat a country which has violated the guidelines but come back into compliance, this seems a more feasible approach than attempting to distinguish between the portions of a country's currency holdings which were and were not eligible for substitution. Further more prohibitions on conversions of the latter would not begin to have any real effect until all eligible currency holdings had already been converted.

One possibility would be to bar a country's access to the facility while it was in violation of the guidelines and for some specified time period after it again met the guidelines, with the length of additional ineligibility perhaps varying with the severity of the violation. This could be combined with limitations on the total amount of currency which could be converted, calculated in such a way, that the total amount a country could convert could not be increased by accumulations taking place outside of the guidelines. There would be a number of technical complications involved in such an approach which would need careful study, but it might well offer an attractive method of improving both international surveillance of the adjustment process and of reducing some of the strains which would be caused by increased desires for currency diversification over time.

By requiring judgments on the consistency of countries' behavior with the IMF guidelines for exchange-rate and balance-of-payments



surveillance, this approach might add a useful degree of formalism and importance to the international surveillance process (without the disadvantage of the old scarce currency clause provisions for trade sanctions which were so severe that they were never used). It is similar in spirit to earlier proposals for graduated financial penalties on countries violating agreed adjustment standards. Such an idea was included among Keynes' original proposals at Bretton Woods, and was discussed during the C-20 negotiations. While the direct economic cost implied by the types of penalties discussed (for example, reduction in interest paid on SDR holdings) would not be great, such prospective penalties might be an important component of international moral suasion.

It can be argued that given the difficulties of determining good behavior precisely, it would be inadvisable to deal with surveillance and SDR conversion issues in a highly formal manner with the periodic public classification of all countries into those which are and those which are not deemed to be behaving in conformity with the guidelines. Acceptance of such a view (to which I am quite sympathetic) does not undercut the case for linking surveillance to SDR conversion, however. These could be linked in a looser fashion along the following lines. There would be an unlimited initial conversion open to all. After this initial round of conversions, future use of the facility would require IMF approval, with the approval depending in part on reasonable conformity with the surveillance rules. In questionable cases, a country could informally seek a view as to whether it was in conformity or not. It could be given an initial view which could indicate whether there would be likely to be problems. The country could then decide whether it wished to run the risk of a turndown of a formal proposal.

While there would be numerous practical issues to be addressed in implementing this approach, it would allow a much more effective facility than alternatives which would rely only on periodic open days, say once a year, for conversions after the initial round.

In the absence of some linkage to international surveillance of exchange rate policies and the adjustment process, perhaps only a one time consolidation is all that would be justified.

Of course, neither a one-time nor an open-ended, nonreversible substitution facility would solve the problem of potential currency instability. To accomplish this objective, the major requirements are sound domestic economic policies and the wise use of official intervention in exchange markets in particular instances. As long as there is substantial international capital mobility, the potential for large exchange-rate fluctuations will exist. Properly designed, however, an SDR substitution facility could make a useful marginal contribution by reducing the exchange-market pressures resulting from official desires to achieve greater diversification of reserve holdings.

### *8. Strengthening the Role of the IMF*

No international monetary system will work well if the underlying economic and financial conditions in the major countries are not relatively stable. International monetary institutions and operating principles are important, however, as the adverse consequences of the breakdown of Bretton Woods system clearly indicated. While I have

argued that the resulting international liquidity explosion did not contribute as much to the subsequent world-wide inflation as many have assumed, these adverse effects were certainly not trivial.

The effects of international liquidity increases depend importantly on their causes, however, and the shift to more flexible exchange rates has done a great deal to shield countries from undesired international liquidity creation. This paper suggests that our new international monetary system is likely to be much more durable than many critics have feared. Regardless, exchange-rate flexibility is not a complete solution to international monetary problems. While countries can now much better shield themselves from inflationary developments abroad, there is still considerable scope under managed floating for countries to export inflationary or deflationary pressures to others.

There are likewise times in which official financing of payments deficits may be in the interests of the international community. There is no clear-cut set of quantitative criteria, however, which can determine when official balance-of-payments financing is desirable and when it is not. While the use of many types of technical quantitative analysis can be extremely useful, we must ultimately rely on careful case-by-case, judgmental determination of when financing is desirable. Given my belief that flexible exchange rates have worked relatively well, this suggests that the International Monetary Fund should be given a much stronger role in deciding when heavy official intervention and balance of payments financing is internationally acceptable.

This should include surveillance over official borrowing from the private international financial markets. At the same time, the IMF should have substantial ability to provide discretionary financing as needed to offset or reduce the effects of international monetary instabilities which may occur and to sanction and finance the international component of internationally approved, national stabilization policies.

As was noted above, I believe that there is a good case for continued SDR allocations under the present system of managed exchange-rates flexibility. With *greater* exchange-rate flexibility, however, there is a much weaker case for automatically financing incipient payments deficits. Much more discretion should be utilized for reserve use under managed floating. Furthermore, there should be much closer international surveillance over the early stages of reserve use under managed floating than under the adjustable-peg system. In such circumstances, it would seem wise to tilt the mix of owned reserves and conditionally available credit in the direction of the latter. This would help secure international agreement that instances of substantial official intervention were justified, or at least were not of the beggar-thy-neighbor variety.

It is the strengthening of the surveillance and conditional liquidity operations of the IMF rather than grand designs to return to asset settlement and quantitative control of international liquidity aggregates, which represents the most feasible and effective way of providing better management of international liquidity and of the operation of the international monetary system. In the process it could prove desirable to create a new IMF substitution facility, but such a facility would need to be carefully designed, and should be linked to the international surveillance of exchange-rate policies and the adjustment process.

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# MULTINATIONAL CORPORATIONS: CURRENT TRENDS AND FUTURE PROSPECTS

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## I. INTRODUCTION

Perhaps the fastest growing form of international commerce in the postwar period has been the foreign activities of national companies. Multinational corporations (MNC's) provide a "bundle" of services to host countries, including capital, technology, skilled manpower, and managerial know-how, for a return that may take several different forms. Foreign production of national companies has grown considerably faster than either world trade or world output. As its share of world production has risen, there have been growing concerns in home and host countries alike.

By the 1970's, these concerns were being translated into proposals for action to control the growth of MNC's. In the United States, the Hartke-Burke bill, which partly addressed this issue, was introduced in 1971. The New International Economic Order proposals in the Lima Declaration of the Group of 77 developing countries calls for a radically different treatment for involvement of MNC's in the Third World. The Commission and Centre on Transnational Corporations

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were created by the U.N. Economic and Social Council to deal with the issue. Codes of conduct for MNC's were adopted by the Organization for Economic Cooperation and Development (OECD) and have been sought by the United Nations Conference on Trade and Development (UNCTAD) and the Transnational Centre, among others. And many host countries have adjusted their policies toward foreign companies.<sup>1</sup> The regulatory environment remains in a state of flux, yet the foreign activities of MNC's continue to grow.

The present state and future prospects of MNC's and their regulation are of major importance for the U.S. economy. The United States has traditionally been the home-base for the majority of the world's multinationals, and by 1976 still accounted for an estimated 47.6 percent of total foreign direct investment—even though the share has been shrinking. The performance of most large U.S. companies, several major American industries, and balance-of-payments considerations are affected by the operation of MNC's. At the same time, the United States has become the single most important host country for foreign firms, as measured by the stock of foreign investment here. While the share of total domestic economic activity accounted for by foreign-based MNC's remains relatively small, it has been growing very rapidly, and in some sectors the share is already quite significant.

Future U.S. government policy must be increasingly concerned with MNC's, both from the perspective of a home (or base) country and as a host country for MNC's. This paper attempts to identify and survey current and prospective trends in MNC activities and the economic and political environment in which MNC's operate. The following section presents a brief review of the extent and trends of recent MNC activity, as measured by foreign direct investment, with a special focus on the United States. It also examines some evidence on shifting forms of foreign activity by MNC's, and the reasons for those changes.<sup>2</sup> We then proceed to review the policies of home countries with respect to outward investment by their multinationals, and attempt to identify economic and political pressures which may bring about changes in those policies. Next, we undertake a similar analysis for policies of host countries, with an implicit focus on the developing countries where the policy environment has been most subject to frequent and dramatic change. The final section attempts to summarize the future prospects of the growth of MNC's and the outlook for policy and the regulatory setting, with special attention to likely policy issues and options facing the United States.

## II. TRENDS IN MNC ACTIVITY

Multinational corporate activity has become a major component of world economic activity. It has been estimated that offshore production of MNC's accounts for as much as 20 percent of world output of goods and services and that the foreign trade of U.S. MNC's repre-

<sup>1</sup> For convenience, MNC's will be used here to denote companies which produce or apply their skills or services in one or more foreign locations. This definition thus includes international companies in the service and engineering, as well as extractive and manufacturing sectors. MNC's are given several alternative names by scholars and organizations, such as "transnational corporations" or "international companies." For our purposes, MNC activity is most closely approximated in official statistics by "foreign direct investment," although these are by no means perfect indicators of their diverse foreign activities.

<sup>2</sup> These issues and initiatives are examined in more detail in Raymond Vernon, *Storm Over the Multinationals: The Real Issues* (Cambridge, Mass.: Harvard University Press, 1977).

sents up to one-quarter of total American merchandise trade. Over half the total earnings of such companies as IBM or Citicorp can be attributed to their foreign operations. But, extensive foreign involvement by U.S. companies is not confined to such obvious examples. In 1976, the 13 largest U.S. advertising firms all had over 25 percent of their worldwide billings abroad, and three had over 50 percent abroad. Foreign-owned companies account for over 50 percent of Canadian manufacturing output and capital formation, with U.S. companies alone accounting for approximately 45 percent. Almost one-third of U.S. chemical production is by foreign companies, and almost 40 percent of U.S. pharmaceuticals are produced by foreign-based MNC's.<sup>3</sup>

There is no single most appropriate indicator of the trends and structure of MNC operations. The most commonly used indicators are the stocks and flows of foreign direct investment, which capture the book values of—and new capital investment in—foreign affiliates of national companies. This, however, is inadequate because equity investment data do not fully reflect nonequity forms of MNC activities such as management contracts, technology-sharing agreements, and other increasingly popular types of foreign involvement by companies which fit the MNC definition.

### *Patterns of Foreign Direct Investment*

In the late 1960's and 1970's, foreign direct investment continued to expand faster than world trade and production, and the United States retained its preeminence as a source country for MNC activity, although its share was shrinking. This is evident from table 1, which shows the book value of the stock for foreign investment by the developed market economy countries (which account for well over 90 percent of the world total), and the shares of the major home countries of MNC's.

TABLE 1.—ESTIMATED STOCK OF FOREIGN DIRECT INVESTMENT BY DEVELOPED MARKET ECONOMIES, SELECTED YEARS

	[Dollar amounts in billions]			
	1967	1971	1976	1978
Grand total.....	\$105.1	\$158.2	\$287.2	NA
United States.....	56.6	82.2	137.2	\$168.1
Percent share of total:				
United States.....	54	52	48	NA
United Kingdom.....	17	15	11	NA
West Germany.....	3	5	7	NA
Japan.....	1	3	7	NA
Switzerland.....	5	6	7	NA
All other.....	20	19	20	NA

Source: U.N. Centre on Transnational Corporations, "Transnational Corporations in World Development: A Reexamination" (New York: United Nations, 1978) and "Survey of Current Business" (August 1979).

Over the period 1967-76, the nominal book value of foreign direct investment by all countries represented grew at an average annual rate of 11.8 percent per year. The stock of U.S. investment grew at

<sup>3</sup> These statistics are taken from the estimates of the U.N. Transnational Centre, as reported in Transnational Corporations in World Development: A Reexamination (United Nations, 1978).

10.3 percent per year—the average rate of growth was 13.7 percent in 1977 and 1978, reflecting partly the effect of inflation on new capital investment.

The share of world foreign direct investment accounted for by the United States declined from 54 percent in 1967 to 52 percent in 1971, and to 48 percent in 1976. Nevertheless, the United States remains the dominant base country for MNC activity, accounting for four times as much foreign direct investment in 1976 as the next largest investor, the United Kingdom, which had 11 percent of the world total. And the U.K. share of world foreign direct investment has fallen consistently, and even more rapidly than that of the United States over the period since 1967. The countries with the fastest growth in foreign direct investment activities on the part of their national companies are clearly Japan and West Germany, but Switzerland has also increased its share modestly over the period. Japan, with a rather trivial amount of foreign investment in 1967, had moved into a tie for third place among international investors in 1976 and may have progressed to second place by 1979.

One important point that is implicit in table 1 is that a small number of countries dominate the source countries for foreign investment and MNC activity. The five countries shown accounted for approximately 80 percent of the foreign direct investment activity over the entire period, although the relative shares have shifted a good deal among them. It is likely that this continues to be the case, although the countries not shown in table 1—included in “all other”—may have modestly increased their share, as companies in South Korea, Brazil, India, and Spain have expanded foreign operations dramatically since 1976. All the same, this recent growth is small compared to the existing stock in 1976.

While there have been rather significant and sustained shifts in the distribution of foreign investment among source countries, shifts in the broad industry-sector mix have been more modest. These data, for the period 1971–78 are shown in table 2. The “major investing countries” group shown at the top of the table accounted for over 80 percent of total world-wide investment in 1976, and thus can be used as adequate proxies for all source countries.

As expected, given nationalization and “indigenization” in the extractive sector by several governments, the share of total foreign direct investment in the extractive sector declined from 29 percent to 26 percent between 1971 and 1974, and has continued to shrink since. This decline has been made up by an increased share for manufacturing, which already in 1971 accounted for the largest single share of foreign investment, but by 1974 reached 47 percent of the total book value of foreign direct investment. Services (including trade, finance, and insurance) had a 1 percentage-point growth in share during this period.

The lower panel of table 2 shows that the United States—as might be expected, given the fact that it accounts for almost 50 percent of the total book value of foreign direct investment—has an industry composition very similar to that for the group as a whole. In 1971, the United States had a slightly higher share in the extractive sector (31 percent versus 29 percent), but its share in that sector has fallen relatively rapidly, reflecting takeovers and investments in the petroleum sector, where U.S. investment was heavily concentrated.

The share of U.S. investment in manufacturing has remained almost constant throughout the period. But, reflecting the growing orientation of the U.S. economy toward the services sector, American foreign direct investment saw the share of services increase from 26 percent in 1971 to 32 percent in 1978. This is about equal to the decline of the extractive sector share.

TABLE 2.—SECTOR DISTRIBUTION OF THE STOCK OF FOREIGN DIRECT INVESTMENT, MAJOR INVESTING COUNTRIES AND THE UNITED STATES

	1971	1974	1978
Major investing countries: <sup>1</sup>			
Extractive.....	29	26	NA
Manufacturing.....	45	47	NA
Services.....	26	27	NA
United States:			
Extractive.....	31	27	24
Manufacturing.....	44	45	44
Services.....	26	29	32

<sup>1</sup> Includes United States, United Kingdom, West Germany, Japan, Canada, and Italy.

Source: Compiled from Centre on Transnational Corporations, "Transnational Corporations in World Development: A Re-examination" (New York: United Nations, 1978) and U.S. Department of Commerce, "Survey of Current Business" (August 1979).

The geographic foreign direct investment patterns are shown in table 3. One of its striking features is the relatively constant split in both U.S. and total foreign direct investment between the industrial countries (top panel) and the developing countries (lower panel). Overall, about 70 percent of total foreign direct investment is in industrial countries, and this share rose slightly from 1967 to 1975. The same is generally true for United States foreign direct investment pattern.

The decline in the share of the developing countries, especially from 1971 to 1975, appears to be based on a combination of factors. One is a widely held perception that the policy environment in many developing countries was becoming more hostile. A second and perhaps more important reason is that several oil-producing developing countries nationalized a substantial number of affiliates of foreign-based petroleum companies, thus reducing the observed stock of foreign direct investment in developing countries. This factor is particularly important in accounting for the reduction in the developing-country share of U.S. foreign direct investment from 1971 to 1975, and had a proportional impact on the total as well. A third factor operating to raise the share of the industrial countries as targets for foreign company operations is the emergence of the United States as a major recipient of direct investment from abroad. As table 3 shows, this occurred after 1971.

Although the data extend only to 1975, they suggest that both the oil-exporting countries and the oil-importing developing countries experienced a decline in their shares of global foreign direct investment. Among the developed countries, the major host countries have consistently been Canada, the United States, the United Kingdom, and West Germany, accounting for approximately 40 percent of the total from 1967 to 1975. Within the group, the United States and West Germany shares have grown, and the share of Canada has declined.

TABLE 3.—GEOGRAPHIC DISTRIBUTION OF THE STOCK OF FOREIGN DIRECT INVESTMENT, BY HOST REGION, FOR INVESTMENT BY DEVELOPED MARKET ECONOMIES AND THE UNITED STATES

[Percent of total]

Host region	1967		1971		1975		1978, United States
	All MNC's	United States	All MNC's	United States	All MNC's	United States	
Developed market economies.....	69	71	72	70	74	74	72
Canada.....	18	30	17	28	15	25	23
United States.....	9	9	9	9	11	11	12
United Kingdom.....	8	11	9	10	9	11	7
West Germany.....	3	6	5	6	6	8	7
Other.....	30	24	32	26	33	30	30
Developing countries.....	31	29	28	30	26	26	28
OPEC countries.....	9	NA	7	NA	6	NA	NA
Other.....	22	NA	21	NA	20	NA	NA

Source: See table 2.

Even so, Canada remained the world's single most important host for foreign companies in 1975, a result mainly of U.S. company operations there—representing 25 percent of total U.S. foreign direct investment. But by 1979, the United States has probably drawn even (or perhaps surpassed) Canada as the world's largest recipient of direct investment from abroad. This is indicated by the fact that foreign direct investment in the United States grew by almost 20 percent per year from 1972 to 1978, while the Canadian share of U.S. direct investment abroad continued to decline after 1975.

### *The U.S. Foreign Investment Position*

The data presented here suggest that the United States remains the world's largest foreign direct investor—although its share of the total is declining—and is emerging as the world's largest host for foreign MNC activities. The balance, however, remains heavily in favor of the U.S. role as a source of country. In 1978, the book value of U.S. investment abroad was still over four times that for foreign investment in the United States.<sup>4</sup> And new foreign direct investment by U.S. companies (through new capital outflows and reinvestment of earnings abroad) in 1977 and 1978 amounted to 2.9 times the value of new investment in the United States. Although the stock of U.S. direct investment abroad may be large and rising in absolute terms, that in formation by itself offers little insight into its relationship to the American economy as a whole. As we have already suggested, several U.S. companies depend heavily on foreign facilities for production, sales volume, and profits—it has been estimated that U.S. multinationals account for about 20 percent of total U.S. merchandise imports, and 25 percent of U.S. exports.<sup>5</sup>

<sup>4</sup> This was true in all major industry sectors of foreign investment except one. That is, the ratio of outward investment to inward investment for the United States exceeded 4.0 for petroleum, other extractive, and finance and other. But for "trade," the ratio was less than 2, again illustrating the relatively heavy investment in wholesale and retail establishments in the United States in the 1970's.

<sup>5</sup> See Transnational Corporations in World Development: A Reexamination, op. cit. for a compilation of such indicative data. An earlier major source, with emphasis on U.S. investment, is U.S. Tariff Commission, Implications of Multinational Firms for World Trade and Investment, and for U.S. Trade and Labor, Report to the Committee on Finance of the U.S. Senate (Washington, GPO, 1973).

TABLE 4.—FOREIGN INVOLVEMENT OF U.S. COMPANIES RELATIVE TO FIXED CAPITAL FORMATION IN THE UNITED STATES, 1960-78

[Dollar amounts in billions]

Annual average	Foreign direct investment flow <sup>1</sup>	Fixed capital expenditure by majority-owned foreign affiliates of United States companies	Domestic fixed capital formation in United States <sup>2</sup>	(1) as percent of (3)	(2) as percent of (3)
	(1)	(2)	(3)	(4)	(5)
1960-62.....	\$2.8	\$4.0	\$48.7	5.7	8.6
1966-68.....	5.3	9.1	84.3	6.3	10.8
1970-72.....	7.9	15.0	107.1	7.1	11.7
1973-75.....	14.2	24.5	144.4	9.9	16.9
1977.....	13.0	29.1	189.4	6.9	15.4
1978.....	18.2	* 33.2	221.1	8.2	15.0

<sup>1</sup> Includes net capital outflows and reinvested earnings of foreign affiliates.<sup>2</sup> Nonresidential construction and producers durable equipment.

\* Projected.

Source: U.S. Department of Commerce, "Survey of Current Business," various issues.

Foreign direct investment by U.S. companies is compared to aggregate capital formation in the United States in table 4. Two measures of foreign direct investment are shown. One is the change in the U.S. equity position, consisting of net capital outflows and reinvested earnings. The second is total capital spending by foreign affiliates, which includes local borrowing (non-U.S.) and changes in foreign equity positions. By either measure, there was a pronounced and consistent upward trend in the foreign investment activity of U.S. companies in relation to business plant and equipment in the United States from 1960 to 1975. By 1975, capital spending by U.S. foreign affiliates amounted to 17 percent of domestic capital spending, and even with the fallback to 15 percent in 1978 still represented a significant relative magnitude. A similar pattern exists in the relationship of foreign to domestic investment abroad, rising consistently to about 10 percent in 1973-75, with a decline in 1977, but returning to 8.2 percent in 1978.

For both of these measures, which may be taken as crude indicators of the importance of foreign affiliate activity by U.S. companies, there has been a distinct upward trend during the 1960's and into the mid-1970's. Since that time, the growth in investment at home has about paralleled growth abroad, and perhaps exceeded it. Whether this represents a lasting departure from the previous 20-year trend remains to be seen.

While the role of the United States as a source of direct foreign investment still dominates its role as a host to foreign-based multinationals, the book value of foreign investment in the United States grew from \$14 billion in 1972 to almost \$41 billion in 1978, or 19.2 percent per year on average, as table 5 shows. Inflows of new equity capital in 1977-78 averaged over \$5 billion. But at the same time, they did not represent a major share of total U.S. business investment, amounting to only about 2.5 percent of total plant and equipment spending in the two years.

TABLE 5.—FOREIGN DIRECT INVESTMENT IN THE UNITED STATES, STOCKS AND FLOWS, SELECTED YEARS

	Stock, end of year, 1972	Average annual inflows, 1977-78 <sup>1</sup>	Stock, end of year, 1978
Total (billions).....	\$14.26	\$5.03	\$40.83
Composition by major investing foreign countries (percent of total):			
Netherlands.....	17	NA	24
United Kingdom.....	32	NA	18
Other Europe.....	25	NA	26
Canada.....	24	NA	15
Japan.....	( <sup>2</sup> )	NA	7
All other.....	2	NA	10
Composition by industrial sector (percent of total):			
Petroleum.....	23	20	19
Manufacturing.....	51	36	40
Trade.....	4	27	22
Insurance and finance.....	17	11	16
Other.....	6	6	3

<sup>1</sup> Including net capital inflows and reinvested earnings of U.S. affiliates.

<sup>2</sup> Negligible.

Source: U.S. Department of Commerce, "Survey of Current Business" (various issues).

The source and industry composition of foreign direct investment in the U.S. are also shown in table 5. The Netherlands was the single largest national source of foreign direct investment in the United States from abroad, no doubt reflecting the sizable capital commitments of Royal Dutch Shell and Philips N.V. in the United States. Historically, the United Kingdom and Canada have been the most important source countries, but their relative positions slipped significantly between 1972 and 1978 as the Netherlands, Japan, and other (non-European) countries increased their shares. Indeed, the growth of Japanese direct investment in the U.S., and the major countries in the "other" category (mainly Asian and Latin American sources) explain much of the increase in the role of the United States as a host country for multinationals.

The sectoral structure of foreign ownership of facilities in the United States changed significantly in the mid-1970's. The share in manufacturing and petroleum have both declined, the former rather dramatically. This has been offset by an increase in the share of trade and distribution, from 4 percent to 22 percent of the total; largely explained by several acquisitions of retailing chains by foreign interests in the mid-1970's and by the expansion of major marketing-service outlets by foreign companies (especially Japanese) whose exports to the United States expanded rapidly in the 1960's and 1970's.

To summarize the trends in multinational firm activity, as indicated by foreign direct investment data: (a) Foreign direct investment world wide has continued to rise faster than world output in the 1970's; (b) the share of U.S. companies in that world total still is very large (about 45 percent) but shrinking consistently; (c) the advance host countries still account for the lion's share of foreign company activities (about 70 percent) and the mix between advanced and developing countries as hosts has remained fairly steady through time; (d) the industry mix of world (and U.S.) foreign investment has seen the share of petroleum shrinking, manufacturing holding a steady position of about 50 percent, and the share of services—especially trade and dis-



tribution—rising; (e) the United States has experienced a very rapid growth of inward investment in the 1970's, especially in the trade and distribution sector, and has become one of the two largest host countries for operations of foreign firms; and (f) all the same, the United States is still a major net investor abroad with the stock of U.S. foreign investment being four times that of foreign direct investment in the United States, and the ratio on new direct investment about 2.9 outward to 1 inward investment.

These data are clearly imperfect indications of the trends in MNC activity. However, there is no systematic evidence concerning the other dimensions of multinational firm operations. We must, therefore, rely on more qualitative evidence.

### *Forms of Involvement*

MNC production abroad may occur by opening a new facility<sup>6</sup> expanding an old one, or buying an equity position in an existing foreign firm. Whether there is a definite trend in the relative importance of these three approaches is difficult to establish. But it is clear that by far the most important element in overall MNC growth abroad occurs through the expansion of existing facilities. In 1977 and 1978 well over 90 percent of U.S. company expansion abroad occurred in this way.<sup>6</sup>

There has also been considerable attention given in the financial press to the fact that U.S. companies were selling off or liquidating many of their European affiliates in the later 1970's. Indeed, the number and value of new affiliates sold to foreign owners in 1978 exceeded the number of new affiliates formed. This was an isolated case true only for Western Europe however, presumably reflecting the rising competition in the European market, a weak dollar relative to several of the European currencies, and slower income growth in Europe than in the United States. But the more important point is that, even with the net sell-off of presumably unprofitable foreign affiliates in 1978, U.S. companies expanded their capital stake in existing retained affiliates by much more than the investments involved in those that were sold off. This trend is unlikely to be reversed in the near future.

Foreign MNC's entering the U.S. market are, on average, more likely to do so by the acquisition of a U.S. company, or a part of the company, than are U.S. MNC's expanding abroad. Again, there are several reasons for this, including the relative size and complexity of the U.S. market (especially its marketing and distribution system), the advanced state of U.S. technology in many industries, and the relatively depressed equity prices in the United States that coincided with a depreciated dollar in the mid and late 1970's.<sup>7</sup> Despite a higher proclivity for take-overs or mergers by foreign-based MNC's, especially in the U.S. market, it remains true that the vast bulk of foreign direct investment in the United States involves the expansion of foreign companies already operating here.

<sup>6</sup> Survey of Current Business, August 1979.

<sup>7</sup> On these points, the Conference Board collects relatively systematic data, and reports them periodically in news releases and in *The Record* (New York: The Conference Board, monthly).

*Concentration and Monopolization of Industry*

One potential result of a slight upward trend in take-overs as an avenue of foreign expansion might be a tendency for the degree of concentration in industries and markets to rise correspondingly, reducing competition in national and international markets. On the other hand, it might be argued that production in a local market by foreign-based MNC's provides more effective competition for local firms than does competition from imports. This would obviously be the case if local industry receives protection from imports. However, the available evidence makes a convincing case that the rapid expansion of MNC activity in the 1960's and 1970's has not in fact led to growing concentration in world or U.S. industry.<sup>8</sup> Indeed, for most industries, the indices of world (and U.S.) market concentration have declined modestly in the 1960's and early 1970's, as U.S. companies which earlier enjoyed broad-based technological leadership have faced increasing competition and market penetration from European and Japanese firms in a broad spectrum of industry. These range from autos to electronics, and increasingly to highly sophisticated products such as computers and commercial aircraft.

These trends may be viewed as part of more general adjustments underway in the world economy, in which certain technologies are becoming more homogeneous and spread more rapidly, and technology gaps (and U.S. technology leadership) are narrowing through time. Multinational corporations, utilizing the fruits of the postwar technological revolutions in transportation and communications, are an important part of these broader trends which thus far have resulted in more competition for U.S. industry. Some of this increased competition is now showing up in foreign companies expanding production operations in the U.S. market, a process which has extended a trend toward reduced concentration in most industries.

*"Unbundling"*

In principle, a company may serve a foreign market by exporting, investing and producing locally, licensing its product or process to local producers, or contracting to build and equip a plant, manage it, and/or market the product. Multinational firms are typically viewed as potential suppliers to a host country of a "package" of services including financial capital, production technology, specialized manpower and material inputs, and managerial know-how. Historically, large U.S. MNC's tended to serve foreign markets either by export or by local production in wholly owned and controlled affiliates. The package of services were supplied in a complete bundle, which the companies viewed as minimizing their risk and ensuring their capabilities to produce efficiently.

<sup>8</sup> For some relevant studies, all pointing toward the same conclusions, see: Raymond Vernon, "Competition Policy Toward Multinational Corporations," *American Economic Review*, May 1974; and John H. Dunning and R. B. Pearce, *Profitability and Performance of the World's Largest Companies* (London: Financial Times, 1975). The evidence is reviewed in more detail in R. Hawkins, "Are Multinationals Depriving the United States of Its Economic Diversity and Independence?" in C. Madden, *The Case for the Multinational Corporation* (New York: Praeger, 1977).

By the late 1960's, and extending into the 1970's, several economic and political forces had combined to reduce the dominance of the wholly owned subsidiary as a form of MNC operations, and to increase relatively the importance of doing foreign business which involves less equity and managerial control. First, the developing countries escalated their resistance to wholly owned subsidiaries and radically reduced this type of involvement in the extractive, telecommunication, banking, and other sectors through nationalization and forced sales. The political climate was conducive for such actions, and most have been implemented successfully. Yet such nationalizations normally have not removed MNC's from major involvement in host countries. Often the same companies provide certain managerial functions, marketing services, and technical expertise on a continuing contractual basis, without equity participation, or sometimes with minority ownership. The MNC package of services has been partially "unbundled" in such cases.

A second factor conducive to unbundling has been a reduction of the relative superiority or competitive advantage of the MNC in supplying financial risk capital. In the earlier postwar period, the financial advantages of multinationals, especially American MNC's, was quite large. With the recovery of Europe and Japan, the development of alternative financial sources, including the Euromarkets, and the vast transfer of financial resources attributed to OPEC, the relative financial advantages of MNC's especially in extractive industries in developing countries have been radically reduced.

Third, we have already noted that technology has become more homogeneous across the advanced countries, and effective multinational competition exists among firms in most product lines. This intense competition has produced two results. It has reduced the bargaining power of the typical MNC vis-a-vis the host country, since host countries can play-off more MNC's against one another to secure better terms for MNC involvement. Second, MNC's responding to higher levels of technological and market competition tend to perceive higher risks in wholly owned subsidiaries as a form of doing business, and may well seek alternative forms of "industrial cooperation" or "technology sharing" arrangements. As we shall note, these increasingly involve arrangements with actual or potential competitors.

The factors which have tended to lower the capability of MNC's to utilize the wholly owned subsidiary as the preeminent form of foreign involvement appear to be long term in nature. For one thing, the countries now considered as "developing" by and large have been growing faster than the developed countries, and a rising share of world markets will reside in those countries. Their focus on national "independence" and "self-determination" is not likely to disappear soon, implying that most lesser developed countries (LDC's) will be hostile to the wholly owned subsidiary form of MNC involvement in those activities in which they have the bargaining power and local capabilities to avoid it. Yet MNC's will continue to be major suppliers of other (nonequity) aspects of their package of services. Nor is there likely to be a major reversal in technological convergence and competition trends among countries. Indeed, as technology in many industries becomes standardized, the number of suppliers tends to grow,

and the large MNC's face intensified competition from specialized engineering and design firms, diversified construction companies, and international consulting firms specializing in the management and marketing functions of particular industries. Such developments are quite apparent in petroleum refining and synthetic fibers, for example, and are occurring with greater frequency in other industries as well.

The trend toward unbundling, and a growing share of MNC foreign involvement in the form of "turnkey" plant design and construction, management contracts, long-term supply and marketing agreements, and other types of "technology sharing" arrangements—as opposed to wholly owned manufacturing subsidiaries—is thus likely to be a lasting trend. It suggests that the specialized service functions of the traditional MNC's, and of multinational engineering and management service companies, will have a growing share of international business activity.

#### *Transactions With Communist Countries*

A further factor contributing to a shift in MNC forms of foreign involvement away from wholly owned subsidiaries is the rising volume of transactions with centrally-planned and other socialist economies.<sup>9</sup> First detente with the USSR, and then the changes in Western attitudes toward the Peoples Republic of China (PRC) have led to a marked increase in commercial transactions with these countries. While the potential for such exchanges has been surprisingly slow in being realized, there appears to be little likelihood that the relaxation of controls by the major MNC home countries on business deals with the Soviet bloc and the PRC will be reversed. To do so effectively would require a coordinated effort on controls by all of the major countries. Given the heightened competition for foreign markets among firms of several nationalities and their governments, pressures are likely to remain for even further liberalization of such controls.

Should this occur, it is likely that the share of world-wide and U.S. MNC activity involving Communist countries will increase, perhaps slowly, but with continuing prospects for sizable change. As long as the view persists among the Soviet Bloc and the PRC that Western technology—mainly possessed by MNC's—is needed for their own economic goals, multinationals are likely to seek to accommodate these demands, largely on a nonequity basis. Thus, turnkey plants, technology-sharing arrangements, licensing, and industrial cooperation agreements may rise in overall importance in MNC activities. One possible result is that the economic interests of Western MNC's and centrally-planned economies will become more interlocked.

#### *Joint Ventures and Inter-MNC Cooperation*

One of the more recent changes in the nature of MNC foreign activities involves a growing element of cooperation, including joint projects, in the supply of products or services in which two or more of the cooperating companies are actual or potential competitors in

<sup>9</sup> A detailed examination of past and current trends and policies is found in Josef Brada, "Technology Transfer Between the West and Communist Countries," (Arizona State University, mimeographed, 1979).

some markets.<sup>10</sup> This may involve equity investments of one company in another—it almost always involves some sharing (or “pooling”) of MNC’s technologies, and sometimes marketing and supply agreements as well. Several of these instances involve western MNC’s and state enterprises in Communist countries, such as agreement between BLIMAR of Poland and International Harvester. Others involve state enterprises in Western countries and private MNC’s (e.g. Renault’s proposed acquisition of equity in and agreement with American Motors). But the majority are among private MNC’s themselves (e.g., Fiat and Allis Chalmers).

The recent increase in such combinations and cooperation agreements may present an important dilemma for U.S. policy. Heretofore, U.S. antitrust and competition policy has reflected a philosophy of avoiding anticompetitive infractions in the U.S. market, as well as practices abroad that would reduce competition in the U.S. market. Yet foreign-based MNC’s (both private and public enterprises) are permitted to form combinations with U.S. MNC’s, in the same industry, for servicing foreign markets and, in several cases, U.S. markets as well. In a substantial number of examples, the products supplied are in lines which both companies produced earlier. While most other major home countries for MNC’s are more comfortable with the anticompetitive aspects of such cooperative arrangements and often actively encourage them as part of their “industrial strategy and policy,” such arrangements run counter to U.S. competition philosophy and practice. If such cooperative arrangements increase in relative importance, as they seem likely to, the United States may be required to reexamine its approach on competition policy towards American MNC’s.

While actual mergers between United States and foreign MNC’s for production in the United States are subject to review (by the Federal Trade Commission (FTC) and the Antitrust Division of the Justice Department), such reviews are not needed for most cooperation agreements to produce abroad. Yet, through a series of agreements for crosslicensing of patents, distribution, technology pooling and development, or other forms of cooperation, results similar to a merger may develop. Surely the competitive attitude of one company vis-a-vis the market is affected by such agreements. And, with the growing extent of interdependence among national markets, competition in the United States must eventually be affected. Such competitive shifts may be harmful, inter-firm rivalry leading to “back door cartelization” of the industry. Or they may be beneficial, by permitting the rationalization of production facilities and R. & D. efforts among companies: By permitting effective competition to exist through combinations of the resources of weaker companies (e.g., American Motors) against stronger competitors (General Motors); and by combining enough financial resources to undertake projects which would otherwise go undone.

Whatever the case, U.S. policy is likely to be forced into a re-examination. The trend toward such international cooperation ventures by MNC’s and the fact that governments in other major MNC

<sup>10</sup> While hard data on the number (frequency) of such cooperative ventures have not been developed, a casual perusal of *The Financial Times*, *World Business Weekly*, or *The Economist* (London) suggest that they are not uncommon and indeed, are growing in importance. Autos, computers, airframes, petrochemicals, commercial banking, investment banking, and oil refining are all industries within which two or more agreements among the oligopolistic firms in the industry have been announced recently.

home countries and most host countries do not share the zealous U.S. antitrust philosophy and policy, places the United States in a possibly untenable position of being out of step with its major competitors. This problem is likely to be greatly intensified if new constraints based on noneconomic criteria, like the Kennedy antimerger bill and its variants, become law.

### III. HOME-COUNTRY POLICIES TOWARD FOREIGN INVESTMENT

The data cited above indicate that the United States, United Kingdom, West Germany, Japan, and Switzerland accounted for 80 percent of the stock of direct foreign investment in 1975. The other 20 percent is scattered among several, mainly advanced, countries. While the foreign investments of developing countries have been increasingly rapidly in percentage terms, their share remains quite small, and is not likely to become very significant in the foreseeable future. Isolated exceptions exist for the companies of a few advanced developing countries such as Brazil, India, and South Korea. The discussion of policies toward investment by source countries will thus continue to be confined to the major industrial nations.

Every home country attempts to set its national policy toward foreign activities of its firms so as to optimize its perceived national advantage. There are costs and benefits to foreign activities of national firms, and national policy involves a trade-off of benefits and costs, as examined through the political and regulatory process. The benefits of foreign direct investment may be higher national income, a higher level of international economic (or political) stability, improvement in the balance of payments, and similar aspects. The costs may be "adverse" income redistribution shifts in the home economy, adjustment costs, economic dislocation and the erosion of technological and/or strategic advantages where military-related technology transfers are involved, or a loss in the capacity to influence foreign governmental behavior for national political or other objectives. National policies tend to reflect these several considerations, with greater emphasis given to some and less to others by individual countries.<sup>11</sup>

The actual policies toward outward investment may take several forms. These include the tax treatment of foreign-source income; prohibitions, limitations or restrictions on investment in certain countries or regions of the world or in certain lines of activity; or minimum criteria concerning domestic economic effects which must be satisfied by an investing MNC.

Historically, the United States and most other advanced industrial host countries have adhered to a general policy favoring the free flow of investment and technology among countries, including outward investment by their companies. The only serious exceptions for the United States have involved balance of payments considerations in the 1960's and "national security" matters, and the sanctity of "industrial property rights."<sup>12</sup> In conformity with this liberal and nondiscriminatory policy posture, the United States now maintains no separate explicit controls or regulations over foreign direct investment

<sup>11</sup> For a more detailed discussion, see Thomas Gladwin and Robert Hawkins, "Conflicts in the International Transfer of Technology: A U.S. Home Country View" (New York University Working Paper, 1979).

<sup>12</sup> See U.S. Department of State, "The Views of the United States Government Governing the Report of the Group of Eminent Persons on 'The Impact of Multinational Corporations on the Development Process and on International Relations'" (Washington, mimeographed, 1974).

by U.S. firms. Indeed, some view U.S. policies as having the effect of favoring foreign investment over investment in the United States.

### *Taxation*

Most of the advanced countries give equal, or even preferential tax treatment, to profits arising from foreign activities of their MNCs. The U.S. Internal Revenue Code contains two major provisions relating to the U.S. taxation of income earned by foreign subsidiaries of U.S. companies: The tax credit provision and the tax deferral provision. The tax credit provision permits the U.S. parent company to take a credit against U.S. taxes owed for any taxes levied by the foreign (host) government against the foreign subsidiary on profits, dividends repatriated, royalties or fees. The tax credit is extended up to the full amount of taxes which would be due if all of the income were earned in the United States.

The economic principle, upon which the provision granting credit for foreign taxes paid, is based on "capital export neutrality" between domestic investment versus investment abroad by the home country's firms. Given two projects, one in the home country and one abroad with equal capital costs and expected net earnings streams, the expected after-tax rates of return also would be identical, as long as the foreign tax rate did not exceed the U.S. tax rate. Thus, the tax treatment would not influence the location of investment by the nation's companies—it would be neutral from a capital-export point of view.

The second major element in U.S. tax policy, under substantial attack in recent congressional hearings on foreign source income, is the deferral provision, which postpones U.S. tax liability on foreign subsidiary earnings until they are repatriated. The legal rationale for the deferral provision is that subsidiaries, being legally incorporated entities subject to the law of the host country, should face no U.S. tax liability until dividends are paid to its U.S. parent-owner. This treatment is consistent with taxation of dividend payouts by U.S. companies to their stockholders. An economic justification is that if the United States taxed foreign affiliate profits when earned, U.S. subsidiaries operating in countries with lower tax rates than the United States would be placed at a disadvantage in competition with local or third-country firms.

There is considerable controversy over whether the net result of U.S. taxation of its direct investment abroad stimulates MNC overseas activity or provides a net advantage for investment at home. The tax deferral provision together with the tax credit for foreign (national, state, and local) taxes probably tend to provide a net after-tax incentive for foreign investment. But the fact that U.S. companies cannot claim the U.S. investment-tax credit or accelerated depreciation for their operations abroad probably provides a net incentive for investment in the United States. It has been estimated that the combined effects of these opposing factors, contrary to popular belief, is to tax foreign earnings of MNC's at a somewhat higher rate than strict capital-export neutrality would dictate.<sup>13</sup> Yet this tax burden is far

<sup>13</sup> See: G. C. Hufbauer et al., "U.S. Taxation of American Business Abroad" (Washington, D.C.: American Enterprise Institute, 1975) and Peggy B. Musgrave, "Direct Investment and the Multinationals: Effects on the United States Economy," Committee Print of U.S. Senate Committee on Foreign Relations (Washington, D.C.: 1975), pp. 53ff.

lower than it would be under the "national neutrality" principle which is sought by many, especially organized labor. Under this principle, taxes paid to state, local or foreign governments would be a deduction in computing taxable income as opposed to a credit against the home-country tax.

The other major advanced countries that are the home-base for most non-U.S. MNC's have similar, and in most cases more liberal tax treatment of the foreign earnings of their national companies than does the United States. France, Belgium, the United Kingdom, and several other countries have essentially no home taxes on income earned on foreign direct investments. In the recent past, there have apparently not been any major changes in tax treatment in the major home countries of MNC activity.

### *Risk Reduction*

Another aspect of policy toward foreign direct investment concerns measures to reduce or insure the risk to the investor from loss due to nationalization or policy change in the host country, and to transfer part of that risk to the public. Most directly pertinent in the United States is the insurance provided by the Overseas Private Investment Corporation (OPIC). This mixed government/private corporation underwrites insurance for overseas private investors against losses due to expropriation and natural or commercial disasters. It also guarantees certain qualified credits to foreign investment enterprises, thereby reducing their effective borrowing costs. Government involvement in ownership and OPIC's ability to call on Treasury funds in the case of need provides an effective subsidy for the insurance and guarantees involved.

The original rationale for OPIC was to encourage the growth of private enterprise and use of private sources of capital in developing countries as a supplement to, and substitute for, official development assistance. As a peripheral effect, it directly involves the U.S. Government as an interested party in nationalizations or other investment disputes in host countries for insured investments.

Some, but by no means all, other major MNC home countries provide some type of risk spreading and insurance for their foreign direct investors in developing countries. There is not, however, any visible movement either to eliminate or to intensify such schemes for transferring risk.

Another aspect of policy in reducing the risk associated with foreign investment is the triggering of retaliatory government action in cases of expropriation of property by foreign governments. U.S. policy explicitly recognizes the right of expropriation. However, it equally explicitly requires the payment of "prompt, adequate, and effective compensation" to the expropriated owner. Certain sanctions required by law for failure to do so include the elimination of bilateral economic assistance (the Hickenlooper Amendment to the Foreign Assistance Act), a provision of the Sugar Act requiring negative votes by U.S. directors of multilateral lending agencies (the World Bank and International Finance Corporation (IFC)) on loans to expropriating countries, and the withdrawal of the U.S. Generalized System of Preferences for tariffs on imports from developing countries, as pro-



vided in the Trade Act of 1974. Each sanction is designed to provide a disincentive to foreign governments to take over U.S. property without adequate compensation. To the extent that companies perceive these measures as being effective in dissuading such takeovers by foreign governments, they become a means of encouraging foreign investment by U.S. MNC's.

Aside from these quite explicit dimensions of American policy which align the U.S. government with its MNC's, U.S. policy essentially rejects the extreme version of the "Calvo Doctrine" which would deny the foreign investor any right to seek the protection of the home government, regardless of circumstances. Official U.S. policy favors the submission of investment disputes, including those over the valuation of expropriated property, to arbitration by impartial international bodies. Other home country governments clearly also become involved in investment disputes involving nationalizations and other actions by host countries. Whether this proclivity is rising or falling, or higher or lower in other home countries than in the United States, is impossible to say. This does not, however, seem to be a major area of concern with respect to home country policy in most countries.

#### *Restrictions on MNC Activities*

Every home country denies, by law or regulation; certain foreign activities to its MNC's. These may include expansion of production activities abroad, capital outflows from the home country, or transfer of scientific or technical information and know-how. The objectives of such restrictions may be to protect the strategic military or technological position of the home country, to avoid adverse domestic economic impacts of MNC operations, or to improve the balance of payments. This despite the fact that most of the major home countries have general policies not to restrict foreign investment or technology transfer by MNC's. There are two types of restrictions that apply in the United States.

First, some types of technology, such as nuclear or military, require government licensing and approval to be transferred to any foreign country or entity. The restrictions over technology transfer with strategic and military implications cover the export of products and technical data from the United States. In some instances, it may involve restrictions over the travel of scientific or technical personnel. Control is exercised over the export (and import) and use of nuclear materials, technical information, reactors and related equipment. Although considerable exports have occurred, such actions are always subject to review and approval.

The second, and perhaps more controversial, area of control involves the transfer of industrial technology to Communist countries. The Export Control Act, administered by the Department of Commerce, limits the sale of certain goods and related technical data to Communist countries. In the late 1950's and 1960's, these regulations required "validated licenses" for the export of any item of technology which would enhance the economic or military power of Soviet Bloc countries. Restricted (denied) items extended well beyond the COCOM list agreed upon by the NATO countries. In the early 1970's, the Amended Act reduced the list of restricted items to those of "military

significance." The list was further reduced in 1973 when U.S. Soviet Bloc trade and technology transfer restrictions were essentially brought into line with the COCOM list. Also, trade in a new list of products was permitted for the Peoples Republic of China. The policy was further liberalized for the Soviet Bloc in the Trade Act of 1974, which also created an East-West Foreign Trade Board for monitoring trade in technology.

Under these regulations, a U.S. MNC must obtain approval for activities in or with a Communist country involving a transfer of technology. The main criterion for granting such approval is the absence of strategic or military implications. One extension of this "Export Control" requirement, which has been a matter of considerable controversy, is the requirement that foreign affiliates of U.S. MNC's also secure a validated license to export technology or goods to Communist countries specified under the legislation. This has been a source of occasional conflict between the United States and several host governments concerning the export of products made by foreign subsidiaries of U.S. MNC's which were banned by U.S. policy but permitted by host country policy.

Over the past five years, U.S. policy to control or limit industrial cooperation agreements or technology transfers in the area of military, nuclear, and East-West trade has been significantly relaxed. This has occurred due to the changed attitude toward China and the Soviet Bloc, and increasing competition for U.S. companies in those markets and product lines. The latter has made U.S. policies, which were traditionally more restrictive than those of the other Western industrial countries, even more ineffective for U.S. objectives, since viable alternatives for similar products and technology exist elsewhere. As a result, U.S. policies have become more similar to those of the other major MNC home countries.

In general, U.S. policy does not restrict or control MNC investment or technology transfer except in a narrow range of technologies and with certain specified countries. Similar types of restrictions exist in other MNC home countries, although they tend to be less rigorous in fact and administration than U.S. regulations.

### *Domestic Economic Objectives*

While the United States has not directly interceded in foreign investment activities of its firms except as noted above, other MNC home countries are not always so liberal. Some economic objectives of countries may come into conflict with the activities of MNC's. These may be employment stability, limited domestic structural adjustment, or balance of payments goals. Although "moral suasion" by local authorities, and occasionally by federal officials, has been used with some American MNC's to retain operations and jobs in the United States instead of investing abroad, these actions have had no authoritative basis in law or regulation. In addition, there have been occasional cases of tax concessions or relief at the state and municipal levels to add to the attractiveness of local sites and to discourage foreign investment by U.S. firms. Broadly speaking, however, the U.S. policy has been permissive for MNC's foreign expansion, for all practical purposes ignoring the domestic employment and adjustment implications.

Other home countries have been, on a selective basis, less liberal. In several such countries—for example, Sweden and Germany—through “worker participation” mechanisms or direct government involvement in foreign investment decisions, expansion of MNC’s abroad has been made conditional on minimal (or no) local job losses, or on causing minimal structural adjustment in the home economy.

In other countries, such as Japan and France, domestic economic goals are more likely to be forced into investment decisions of their MNC’s by government involvement in the “indicative planning” process, by “administrative guidance,” or by government/business cooperation in planning the domestic capital spending of the nation’s companies. This provides a direct mechanism by which domestic employment objectives may be reflected in individual company decisions. Other home countries have less formal mechanisms for influencing decisions about foreign activities of their MNC’s so as to reflect domestic economic goals, but many do so in various ways. Several have limited foreign direct investment activities of their firms for balance-of-payments purposes. Most often such actions have taken the form of temporary controls on capital outflows during and after foreign exchange crises. They have become much less frequent since the advent of floating exchange rates in 1973.

The United States, with one major departure, has eschewed balance-of-payments controls over foreign direct investment. From 1968 to 1974, however, there were balance-of-payments limitations on U.S. MNC’s under the Office of Foreign Direct Investment (OFDI) program. Even this policy, however, excluded from the controls investments in developing countries. Also, it was directed specifically at reducing financial flows from the United States and placed no controls over activities of U.S. MNC’s as long as net capital outflows did not occur.

Two further aspects of U.S. regulation of its MNC’s for domestic economic objectives deserve mention. First, the U.S. courts have held that activities by U.S. firms abroad which affect the competitive condition in U.S. markets fall under the jurisdiction of U.S. antitrust laws.<sup>14</sup> This has led to complaints from U.S. MNC’s that such treatment places American firms at a competitive disadvantage with foreign MNC’s and, therefore, that it may be viewed as a disincentive to U.S. foreign direct investment. As noted above, this has not prevented a rising number of international cooperative agreements between U.S. MNC’s and foreign companies.

A second, perhaps tangential, aspect is that U.S. banks, through Edge Act subsidiaries, are permitted to engage in investment banking and other activities abroad which are not permitted under U.S. law. Likewise, investment banks can enter commercial banking abroad, outside the limits set by the Glass-Steagall Act at home. Thus, U.S. policies toward American financial institutions’ foreign involvement may well have encouraged the internationalization of their activities.

### *Trends*

The foregoing discussion suggests that the major home countries of MNC’s continue to take a fairly permissive view of their companies’

<sup>14</sup> See: U.S. Tariff Commission, op. cit., pp. 181ff.

foreign activities in the areas of capital investment, foreign production and technology transfer. Most advanced nations do not discriminate against foreign activities of their companies in any major way in the areas of tax treatment, exchange or capital controls, or direct screening of foreign investment decisions. Countries do retain limitations or prohibitions on activities in certain industries and/or certain countries on the basis of military, strategic, or political grounds. But the typical, nonsensitive foreign activity of a national company may actually receive more liberal treatment now than in the past, as a growing number of countries have phased out or reduced capital controls, and as the incidence of "unbundling" of MNC technology and management services has increased.

One current and prospective future exception to this generalization involves a growing willingness on the part of governments, sometimes in collaboration with labor organizations, to exercise surveillance over foreign activities as they affect structural adjustment in the national economy, and in particular the number and types of domestic jobs. Action is already entrenched in several major host countries, perhaps most strongly in Japan, but also Germany, Sweden, and others, and will no doubt become more prevalent. In the United States, organized labor's efforts to introduce such policies has to date been unsuccessful. But the debate continues.

#### IV. HOST-COUNTRY POLICIES TOWARD FOREIGN INVESTMENT

While the policies of MNC home governments will be an important determinant of the growth and shape of multinationals in the future, equally significant are the policies and strategies of the host countries. This is particularly important for developing countries as hosts to MNC's, where policies are highly varied from country to country, and have changed in major ways over time. These can be separated into policies toward ownership and policies toward control. Both represent rapidly evolving phenomena among host countries, but each tends to originate in a more or less distinct set of underlying pressures.

Ownership policies reflect principally political pressures in host countries. Apart from questions of public versus private ownership that almost always are subjects of debate in host countries, the issue of foreign ownership of productive facilities tends to raise fears of foreign "domination" of the economy and society through the MNC's parent-affiliate relationship. In this view, fundamental decisions that affect the host economy are made from afar—at corporate headquarters by people not directly concerned with local conditions. And there is the parallel fear that home-country governments will try to influence the behavior of "their" multinationals on domestic or foreign policy issues in the host country. Such considerations, in a climate of nationalism, can generate pressures for local ownership, especially in "sensitive" sectors like mining, telecommunications and banking.

Control policies primarily reflect economic considerations, aimed at improving the relationship of benefits to costs in the involvement of multinational companies in host-country economies. Often ownership and control issues are intertwined, especially when governments decide (often erroneously) that the latter cannot be achieved without the former. Politically, governments cannot and will not allow multina-

tionals totally free reign in their local operations—laissez faire in an era of giant firms and giant governments is simply no longer feasible, even in an age of “deregulation.”

From the point of view of a nation, the purpose of host-country controls and pressures for national ownership is to achieve a closer correspondence between the effects of MNC activities and national policy objectives than would exist in their absence. This often means that the host-country tries to obtain for itself a greater share of the benefits to economic efficiency and growth which MNC's bring about. It may attempt to obtain greater tax revenue, more local production and employment, or less repatriation of profits, relative to what it would get in an uncontrolled situation. But a major problem for host-country policy and regulations toward MNC's is that the results often are not clear in prospect or even in retrospect.<sup>15</sup> It is not easy to predict how MNC management will react to a given government policy initiative, whether or not it will bring about the desired result or whether, indeed, the opposite might occur.<sup>16</sup> This illustrates the critical importance of policymakers' understanding of how MNC's behave in terms of their own goal structures, how they react to external pressures when achievement of those goals may be compromised, and what alternatives may be open to MNC's.

Host country policies toward the MNC may be constrained by the relative bargaining leverage of the country itself and by the ability of the firm to “escape” or “avoid” the effects of restrictions imposed upon it. The greater the leverage of the individual MNC relative to the host country in which it is operating, the less likely it is that effective controls can be established covering aspects of the firm's operations where actual or potential conflict exists. The host country's bargaining power will be higher. (a) the larger the internal market and the more rapid its rate of growth; (b) the more valuable to the firm the indigenous resources such as a stable, inexpensive and well-trained labor force or desirable natural resources; (c) the more favorable to foreign-owned firms the domestic political conditions—i.e., the lower the perceived level of “country risk”; (d) the lower the economic and managerial costs of doing business locally, encompassing economic and social infrastructure (especially communications and transport), bribery, corruption, political meddling, and bureaucratic red tape; (e) the healthier the country's balance of payments outlook, promising adequate foreign exchange availability for imports and profit remittances; (f) the more stable its external political relations, promising freedom from war, insurgency, or other externally imposed violence; and (g) the larger the number of options available to the country for obtaining the “package” of services that the MNC in question promises, whether from one or more competing multinationals or from alternative independent sources, such as foreign technical assistance.

From this we can infer that a country with a large, dynamic, resource-rich economy, a stable and capable government with a high-quality infrastructure and low transactions costs, will be highly attractive to multinationals and other types of foreign business ven-

<sup>15</sup> For a general discussion, see R. G. Hawkins (ed.), *The Economic Effects of Multinational Corporations* (Greenwich, Conn.: JAI Press, 1979).

<sup>16</sup> This discussion is based on T. N. Gladwin and Ingo Walter, *Multinationals Under Fire: Lessons in the Management of Conflict* (New York: John Wiley, 1980), Chapter 8.

tures. It can thus avail itself of a wide variety of control devices and relatively restrictive policies. On the other hand, for a country that is uninteresting from a market or resources standpoint, that has a corrupt, inefficient, complex or hostile environment, or is threatened with internal or external political instability, policies to control foreign MNC's become largely hypothetical, since few MNC's will be interested in investing. Each host country will have a distinct "leverage profile" comprising the various characteristics just mentioned. It is perhaps an indication of the complexity of this profile that governments' ability to take stock of their own assets and liabilities in a bargaining context often seems limited, resulting either in excessive or inadequate control and failure to successfully come to grips with basic regulatory problems affecting MNC's.

On the company's side, its bargaining position for limiting controls or achieving favorable treatment from a host government will be greater: (a) the greater its "packaged" technology, marketing and management inputs, and the degree of monopoly or uniqueness in that package; (b) the greater its prospective contribution to national employment, income, balance of payments, human-resource development, and related economic variables, as well as the more extensive its linkages to the remainder of the host economy; (c) the greater the coincidence of the firm's prospective economic contributions and the direction of national political and economic planning; (d) the more impressive its activities in other host-countries as "showcases" for its prospective activities in the country concerned; and (e) the larger the number of options available to the firm in terms of investment opportunities and alternative ventures. Again, each firm will have a particular profile in terms of its own sources of bargaining strength, and their accurate perception on the part of management will determine its reactions to the imposition or prospects of host-country controls.

The sources of country and company leverage are arrayed opposite each other, both in a general and specific context. That is, they figure into a country's overall ability to set terms and conditions for MNC operations more or less closely aligned with its own objectives. They also figure into its negotiating stance on a given MNC project, and whether the general policy measures will be applied in that particular case strictly, or not at all. For example, the overall policy may be that no foreign ownership of telecommunications facilities is allowed, yet a satellite communications firm may be allowed in on an equity basis.<sup>17</sup> Or a commercial bank proposing a new branch may be told of an overall prohibition against foreign investment in that sector, but may be encouraged to enter into a consortium banking venture with local interests. Some host-countries may also set explicit policy differentials among groups of projects. For example, a firm may under certain conditions apply for especially favorable or "pioneer industry" status, involving tax concessions, guaranteed profit repatriation, and the like. Or it may fall into a "normal" category, or even an "undesirable" category where adequate local firms already exist and foreign firms are perceived to offer minimal net benefits—so they are either kept out, admitted only on a joint-venture basis with local firms, or subjected to several restrictive operating criteria.

<sup>17</sup> Ibid.

*Policy Options for Host Countries*

It is convenient to consider host-country policies toward foreign direct investment in terms of when in the "project life-cycle" of that investment such controls are applied. There are four more or less distinct (but not mutually exclusive) "pressure points" that suggest themselves for the application of host-country policies: (a) Control on entry, before a proposed project has gotten underway or an MNC commitment has been made; (b) controls on the operations of the foreign affiliate once it has gotten off the ground and is operating successfully; (c) financial controls on MNC affiliates, especially on earnings remittances, affecting their profitability from the standpoint of the parent; and (d) terminal controls which ultimately bring about a phaseout of foreign participation in the local venture.

*Entry control.*—Under this option, the host-country sets the specific terms and conditions whereby the MNC may operate within its national borders. It will normally establish some type of "gatekeeper" mechanism, such as registration and screening procedures. Foreign firms interested in entering a particular line of economic activity must first register with a "board of investments" or similar institution set up for that purpose. To obtain permission, the investing firm may be asked to disclose the nature of the investment, the source of financing, whether it is a new project or the takeover of an existing firm, whether it will be wholly-owned or a joint venture, whether raw materials and intermediate inputs will be imported or procured locally, and similar details. If the country offers special incentives for certain types of investments, the firm will apply for them at this point.

The proposal is then examined by the screening agency for its fit into the national economic plan, its prospective effects on employment, competition, the balance of payments, and other important variables in order to determine the desirability of the project from a host-country point of view. It will then set the terms for entry, ranging from "permission denied," to non-discriminatory "national treatment," to major incentives for highly desirable projects. The response may include restrictions on location, financing, ownership, technology, local sourcing of inputs, earnings repatriation, and the like. The critical point is, however, that the terms and conditions are set before the commitment to a project by the multinational firm, and there is at least the implicit assumption that these will remain relatively constant over the life of the project.

Entry control has the advantage of minimum uncertainty and maximum freedom to negotiate on both sides. The country can determine how a particular venture fits into its objectives, and may be able to select from among competing foreign firms. The company can weigh the host-country's offer in the light of its own alternatives and, once committed, be reasonably sure of the rules of the game for the foreseeable future—at least within the limits of sovereign risk. So it can afford to be content with a relatively lower rate of return on invested capital, which in turn benefits the host-country. Within the entry bargaining context, the firm may benefit from maximum negotiating leverage, since it is not yet committed and still has its options open.

*Operating controls.*—An alternative approach to host-country policies toward foreign investment is to pursue a relatively liberal

entry policy, perhaps without careful screening at the outset but with controls on various facets of the affiliate's operations once it is a going concern. The MNC may be asked to reduce its equity holdings from a majority to a minority position, for example. Or it may be required to source a minimum percentage of a product's total value locally, or to export a certain percentage of its production. Sometimes various tie-in schemes are devised, as when firms are permitted \$1 worth of imports every \$2 worth of exports—the foreign exchange can be used for needed inputs or capital equipment, or the firm might go into the business of importing and distributing goods not otherwise obtainable in the host-country. Other operating controls include maximum price limits (e.g., on products like drugs and gasoline), minimum price limits to protect locally-owned competitors, wage and credit controls, quantitative limits on the number of foreign workers or managers who may be hired, tax policies, environmental and plant safety restrictions, product quality controls and market restrictions, fringe benefit requirements, and many more.

Presumably the firm should be able to assess the host-country environment in terms of operating controls *ex ante*, so it knows the rules of the game before it makes a commitment. But rules have a way of changing, and host-countries that rely heavily on operating controls are particularly subject to conflict with multinational companies as a result of revisions of those controls over the life of investment projects. Operating controls thus may be more prone to conflict than entry controls, and more subject to change. The greater uncertainty may require a higher return on investment in order to justify a particular foreign investment. At the same time, the multinational firm itself is committed, and so it is more vulnerable to external pressure and has less bargaining power than in an entry-type situation. On the other hand, the host country has to make sure that the pressure of operating controls does not drive the firm out. If the marginal cost to the firm of compliance is perceived to be higher than the losses associated with pulling out, it is likely to do so.

Operating controls may well be inefficient from the host-country's own point of view. Price and wage controls, rationing and related measures tend to distort resource allocation, and can thus be costly—possibly serious enough to eat into the benefits the controls are supposed to achieve or nullify them altogether. The adverse effects of operating controls are often difficult to identify and measure, especially before the fact, and this can lead to the imposition of self-defeating measures that the host-country could better do without. Extensive and especially unstable operating controls have a way of souring a country's reputation as a place to invest, thus eroding its bargaining leverage for future investment projects by foreign-owned firms. On the other hand, operating controls are not cast in concrete, and can be altered over time as circumstances change, thus avoiding the rigidities that are often inherent in entry controls.

*Financial controls.*—A third option for host-countries is to permit relatively liberal entry and impose minimal operating controls, thus giving foreign MNC's a fairly free hand in the activities they undertake and how they carry them out, and then to apply a single set of controls on the "bottom line"—remittances of earnings. The firm may be able to set prices and incur costs according to market conditions,



and its proffers in local currency may likewise tend to be largely market-determined. But at the point payments are to be made abroad, controls are imposed. These might involve, for example, a maximum percentage of registered capital repatriated as profit per year (that) would be granted, but no more. The necessary foreign exchange to make the permitted earnings remittances would be set accordingly.

Financial controls of this type have both advantages and disadvantages. They are comparatively simple, and avoid the array of bureaucrats and the economic inefficiencies and complexities associated with operating controls. They also avoid some of the conflicts that entry and operating controls are subject to. And they share with entry controls the relative certainty of the rules of the game, which can be assessed and acted upon by MNC's prior to making a commitment. On the negative side, financial controls lend themselves to avoidance and evasion. For example, the registered capital of the MNC affiliate may be inflated through excessive valuation of equipment in order to boost the base upon which the remittance limit will be calculated. Firms may also repatriate funds via charges for technology, management fees, and other services, or they may achieve *de facto* repatriation through transfer pricing on imports and exports. Since the allocation of costs and revenues within a large MNC must, to a certain extent, be arbitrary and respond to international differences in tax rates, exchange controls, and other policies, the policing of financial controls is difficult and may involve major monitoring costs. As one observer notes, ". . . the ability of MNC's to shift funds and profits internally represents a constraint on national policies, a constraint which must be observed if governments do not wish to encourage the growth of MNC's beyond levels justified by national conditions in goods and factor markets."<sup>18</sup>

The point is that financial controls set up powerful incentives to avoid them, which itself leads to pressures for more comprehensive controls, or erodes the effectiveness of the measures themselves. Most importantly, financial controls relate to only a single facet of MNC operations of concern to the host country. They have no effect on employment, ownership, technology, and other dimensions that the host country may wish to influence from a policy perspective.

*Terminal controls.*—A fourth way of executing policies toward foreign direct investment on the part of host countries is at the very end of their involvement, whether such disengagement is voluntary or not. At the one is expropriation with compensation, where the foreign-owned enterprise is taken over by the host-country government. Compensation to foreign owners may be in full, by means of cash payments in hard currencies, in local currency with guaranteed convertibility, in government bonds, in products, or some combination of these. Compensation, like the act of expropriation itself, may be instantaneous or phased-in over a period of months or years. The "fullness" of the compensation is, of course, in the eye of the beholder, and so the terms and conditions are generally the product of extended negotiations and often the source of serious conflict.

At the other extreme is expropriation without compensation, or confiscation, undertaken unilaterally by the host-country government.

<sup>18</sup> Donald R. Lessard, "Transfer Prices, Taxes and Financial Markets: Implications of Internal Financial Transfers Within the Multinational Corporations," in R. G. Hawkins (ed.), *op. cit.*, p. 103.

Often the case for no compensation is based on past "excess profits" remitted by the firm, which generally equals or exceeds the book value of the firm's assets—so that, it is argued, adequate and full compensation has already occurred.

Expropriation without compensation clearly involves a situation where national sovereignty is the determining variable and where the MNC has very little power to avoid it. The defenses against uncompensated expropriation are both specific and general. There is the loss of the link between the multinational and its expropriated affiliate which, depending on the value of the "package" of services the MNC was providing at the time, will be served after the expropriation. If market access, management skills or technologies are important enough, then the cost to the host country can be high, and the incentive to expropriate small. This does not necessarily mean that expropriation will not occur, since host countries have sometimes overestimated their own capabilities to provide the needed resources and operate the enterprise.

More common than expropriation is nationalization or indigenization, where the host country may require the MNC to sell off its affiliates' assets, either to the government or to local investors. Nationalization may be phased in under gradual "fadeout" formulas, or it may be quite abrupt. It may require total divestiture of assets, or only partial divestiture ending, for example, in minority participation in a joint venture. While perhaps somewhat milder than expropriation, there remain several areas of potential conflict. Adequate compensation is one, especially when the buyer is a government entity; another involves the terms under which the parent company will collaborate with the divested successor firm. Responses to divestiture pressures by multinational firms will of course vary, and views may change over time. Firms that previously would not consider joint ventures may now be ready to do so, perhaps because it is a good way to spread risk and reduce conflict, or more likely because their perceived alternatives are less than before.

MNC's may attempt to protect themselves against terminal controls in a variety of ways. One is to subdivide the production process so that only a very small part is carried out in any single host country. Expropriation then gives the host country no capacity to produce a final product that is competitive in the marketplace. Sources of supply or export markets may be controlled by the firm with much the same result. Or an MNC may enter a cooperative consortium with others, not only to spread the risk but also to increase the cost of precipitous host-country action in terms of its relations with various foreign nations. Or it may include, on a joint basis, host-country firms or governmental agencies in such cooperative arrangement, in order to reduce the likelihood of terminal-type actions. As indicated above, such cooperative arrangements are increasing. The best shield, though, still remains a unique competitive advantage that cannot be replaced by the host country after expropriation or indigenization.

#### *Policy Trends in Host Countries*

How have the four available host-country conduits for exerting control over foreign direct investment been used in the recent past,

and what are the prospects for the future? The first point that arises is diversity. The four strategies are not, of course, mutually exclusive—they can be and are used both simultaneously and sequentially. Yet different host countries have tended to rely on individual control techniques to a greater or lesser extent than others.<sup>19</sup> The Philippines, for example, has appeared to prefer entry controls, and the country has a rather well-developed institutional framework for this purpose. India has traditionally used a complex of operating controls, with government interference in virtually all facets of day-to-day corporate activities. Brazil has in the past seemed to prefer greater freedom and reliance on market mechanisms in MNC entry and operations, yet has maintained strict limits on earnings repatriation. Sri Lanka, under its previous socialist government, opted for terminal controls in nationalizing and expropriating foreign-owned tea plantations, with very little new investment coming in. Selective terminal controls have been used from time to time in specific sectors by countries as diverse as Chile, Venezuela, France, and Peru—not to mention Cuba, Angola, Mozambique, and similar countries undergoing drastic change in economic and political systems.

There is little doubt that developing countries on average apply more controls over inward MNC activity than do advanced industrial countries. The advanced countries which are members of the OECD have accepted, in principle, "national treatment" of inward direct investment, as evidenced by the OECD "Guidelines for Multinational Corporations." This policy presumes that foreign-owned businesses should not be treated differently than domestically-owned business in the same activity. Each country, however, reserves certain "strategic" activities for local ownership. The United States, for example, does not permit foreign ownership in defense contracting, nuclear, and communications industries. Other countries (e.g., France) defines "Strategic" more broadly. Japan is perhaps the most restrictive industrial country with respect to inward direct investment. In the United States, several (over 20) State governments have limited or banned foreign purchase of agricultural land. Such departures from the "right of establishment" by foreign companies under nondiscriminatory "national treatment" are still relatively rare, but they are increasing.

All the same, since 70 percent of world MNC activities are in advanced industrial countries, they have been accorded relatively liberal treatment by host countries. The 30 percent is developing countries exists under a more significant complex of controls over entry, operation, and financial transfers. As this group of nations and the communist countries become more important in worldwide MNC activities, the share of foreign direct investment under significant government controls will increase. At the same time, the trend in several industrial countries is to introduce selectively additional controls over certain activities by foreign enterprises.

*The use of entry controls.*—Argentina, Chile, Colombia, Cyprus, India, Indonesia, South Korea, and Yugoslavia, among many other developing countries, all require government approval before an investment can be made by a foreign firm. Restrictions on foreign ownership at the entry level vary widely. Most host countries restrict

<sup>19</sup> See T. N. Gladwin and Ingo Walter, *op. cit.*

foreign investments in defense, public utilities and the media. Argentina requires that, in the automobile industry, at least 51 percent of the capital of firms be owned by nationals, and a minimum of 80 percent of the directors and 90 percent of the professional and technical staff must be nationals living in Argentina. Spain generally requires prior approval for all projects where foreign ownership exceeds 50 percent except that no such approval is required in the high-priority iron and steel, cement, food processing, and textile sectors. Spain also will not approve any project that proposes to restrict exports or that impedes access to technology. India's Foreign Exchange Regulation Act of 1974 (FERA) requires all foreign affiliates to be 60 percent Indian-owned unless they produce exclusively for export—although there is a very restricted but constantly-changing group of industries at the top of the priority list where the general rule against majority participation by foreign firms can be waived—and industrial licenses granted to foreign firms are predicated upon raising at least part of the equity capital within India. The 1972 Mexican law on foreign investment reserves petroleum, petrochemicals, nuclear energy, electricity, railroads, telecommunications and part of the mining sector exclusively for the government, and ownership of the media, road and air transport, forestry and gas distribution is confined to Mexican citizens. In other sectors maximum percentages of foreign ownership are specified, all under the control of the National Commission on Foreign Investment and requiring all foreign participations in business to be recorded in a National Registry of Foreign Investments.

Entry controls to force more of the financing of MNC affiliate operations offshore—and increase the net balance of payments capital inflow—are used by various developing countries. One recent study claims that only 17 percent of the capital invested by U.S. firms in Latin America during the 1957–65 period actually represented inflows from abroad, the rest being raised locally.<sup>20</sup> Tariff policy is another instrument to control MNC's at the entry level on the part of developing countries, and the promise of tariff protection can be used as an inducement for investments to serve the host-country market. Similarly, foreign investment projects may be accorded duty-free treatment for capital equipment and inputs, provided that local raw materials are used in the production process. When production is for export, free-trade zone treatment or tariff drawbacks (the rebating of tariffs on inputs when the final product is exported) are sometimes provided. Even more narrowly, Singapore, which has rather liberal entry requirements, evaluates investment applications in part on the proportion of scientific and technical personnel to be included in the work force.

Entry controls of several kinds also exist in some industrial countries.<sup>21</sup> For example in Italy, the Libyan purchase of 10 percent of Fiat stock for \$415 million at the end of 1976 triggered Communist and other demands for a parliamentary debate on the issue and prompted Fiat's chairman Giovanni Agnelli to inform Italy's President Giovanni Leone well in advance of announcing the transaction.

<sup>20</sup> Ronald E. Muller, "Poverty is the Product," *Foreign Policy*, Winter 1973-74.

<sup>21</sup> See A. E. Safarian and J. Bell, "Issues Raised by National Control of the Multinational Corporation," *Columbia Journal of World Business*, December 1973.

Especially controversial was the Soviet Union's alleged role in bringing the two sides together with a view to strengthening Fiat's ability to expand its Russian automobile activities.

In 1967, the Japanese Ministry of International Trade and Industry informally announced "ten commandments" for foreign investors: (1) Invest in industries where a fifty percent equity is automatically approved, rather than in industries where 100 percent is possible; (2) avoid industries in which goods are produced mainly by medium to small factories; (3) avoid restrictive arrangements with overseas parent companies or affiliates; (4) cooperate with Japanese producers in the same industry in order to avoid "excessive competition"; (5) contribute to the development of Japanese technology; (6) help promote Japanese exports; (7) ensure that in a joint venture the number of Japanese directors reflects the percentage of Japanese equity participation; (8) avoid layoffs and plant closures that might disrupt the Japanese labor market; (9) cooperate in maintaining Japan's industrial harmony and help in the achievement of her economic goals; and (10) avoid concentrating investments in any particular industry or industries. In 1973, Japan for the first time permitted 100 percent-owned foreign investments after decades of fiercely protecting domestic industry from foreign-owned competition on its home turf—a policy that caused growing criticism with Japan's expanding penetration of foreign markets and its own investment ventures in all parts of the world. The entry regulations do, however, block foreign takeovers of Japanese firms or require modifications of investments thought to have a "harmful" effect on Japanese industries. Dow Chemical, for example, in the early 1970s proposed construction of a chlorine plant, yet was blocked by the Ministry of International Trade and Industry under pressure from domestic chlorine producers on the grounds that their older-style plants would be unable to compete. However, Dow did receive permission to go ahead with several other plants.<sup>22</sup>

New investments in France must be approved by the Comité Interministeriel des Investissements Etrangers (CIIE), after an assessment of their prospective impact on the French economy. Regions where the new investment might be located are proposed. Subsidies or other aids are considered. Not more than 50 percent of the needed capital can be raised locally, and the approval of the Ministry of Foreign Affairs is required for any project where over 20 percent of the equity is foreign-owned. In Sweden, a law backed by trade unions governs acquisition of domestic firms by foreign-based companies. Swedish industrialists have been concerned that such control would most likely be based on short term political considerations, and not the basic competitive factors affecting the Swedish economy.<sup>23</sup>

The Canadian Foreign Investment Review Act (FIRA) and the screening agency it created represent the most explicit example of entry control among the industrial countries. This is significant because Canada is one of the two most important host-countries for all foreign investments and the major recipient of U.S. foreign direct

<sup>22</sup> T. N. Gladwin and J. Walter, *op. cit.*

<sup>23</sup> See "Sweden: A Lid on Expansion of Multinationals," *Business Week*, 2 March 1974.

investment. The Act is intended to ensure that foreign investment projects benefit Canada. It is in part intended to discourage foreign takeovers of Canadian enterprises; help ensure Canadian control of "future growth industries" like telecommunications, computer software, aerospace, electronics, and pharmaceuticals; and closely monitor foreign involvement in resource-extractive industries. Accordingly, purchase of at least 5 percent of the outstanding voting shares of a traded company or 20 percent of the equity in a privately held firm is defined as a takeover unless the purchaser can prove otherwise—acquisitions of over 50 percent are automatically considered takeovers. Any foreign investor proposing a takeover of an existing firm or establishing a business unrelated to his existing business in Canada is required to register with the agency, which applies ten "tests" to the proposal including: (a) compatibility with domestic economic policies; (b) increased employment; (c) improved productivity; (d) improved industrial efficiency; (e) increased use of Canadian resources, parts or services; (f) Canadian equity participation; (g) improved product variety; (h) enhanced technological merits; (i) expanded exports; and (j) new net investment. During a three-month period early in FIRA's existence, 36 projects were submitted. Two had positive marks on all ten points, and most were favorable on 5-7 points. Thirty were approved, although one of those approved scored positively on only one point.<sup>24</sup>

Three sets of benefits were expected to derive from Canada's screening procedures applied at the entry level to foreign investments. First was the psychological benefit of knowing that decisions which affect the Canadian economy fundamentally would be made by Canadians. Second was the expectation of greater effectiveness of Canadian policy derived from increased domestic ownership of industry and national control over foreign investment. Third was the possibility that a greater proportion of the joint gains from foreign investment would go to Canada, including the enhancement of domestic entrepreneurial activities.

The Canadian policy was criticized heavily in political circles as well as in the media as not being sufficiently rigorous—a charge rebutted by government officials. Nationalists pointed out that foreign takeovers of Canadian firms were running at a rate of 170 per year and that 60 percent of Canadian manufacturing was foreign-controlled (over 90 percent in many industries). So there was some question whether this relatively mild form of entry control was the last word from Canada.<sup>25</sup> On the other hand, by 1979 the policies of the Foreign Investment Review Agency had become even more lenient, in response to sluggish Canadian economic performance and more than \$1 billion drop-off in U.S. net investment in Canada. FIRA had, in the view of some foreign firms, become a source of substantial irritation to foreign investors due to its lengthy deliberations and the resulting delays in getting projects underway. The change in the Canadian national government in 1979 has, perhaps, strengthened the liberalization trend.

<sup>24</sup> A. E. Safarian and J. Bell, *op. cit.*

<sup>25</sup> John Ughart, "Canadians Are Questioning the Usefulness of Screening Investments by Foreigners," *The Wall Street Journal*, 6 March 1979.

*Use of operating and financial controls.*—Like entry controls, operating and financial controls are employed in many developing countries and a few developed countries. Although the advanced countries, employ a wide variety of controls that bear on domestic and foreign firms alike, these are not to be confused with specific measures to control foreign direct investment. Because advanced host-countries are likely to have their own multinationals operating abroad, they are much more sensitive to reciprocity and retaliation against discriminatory measures aimed at foreign investment.

Manning controls are one example of operating restrictions. Countries as diverse as Nigeria and Morocco have limits on foreign workers employed by MNC's, and in Indonesia three-fourths of all employees must be local nationals within 5-8 years of start-up. In Argentina, 85 percent of the combined scientific, technical, administrative, and managerial personnel must be local nationals. India and Turkey require periodic reports from foreign-owned firms about the number of nationals employed and progress made in the replacement of foreign managerial and technical staff.<sup>26</sup>

Frequently, operating controls are used to encourage extension of linkages between the MNC and the local economy in order to improve the developmental benefits from foreign investment. Escalating local-content targets, which set the minimum percentage of total product cost that must be of local origin, have been used effectively by Mexico and other countries over the years. This is often backed up by measures to cut off imports of parts and components after the "adjustment period" has passed, although there is usually an escape valve in case local sourcing is impossible within the time available.

Banking is one industry that has increasingly come under tight national operating controls in many developing countries, presumably because the costs of such policies are relatively small and because close regulation of the financial sector by national authorities is considered essential. Mexico, for example, in 1972 considerably tightened regulations on foreign banks in part to limit foreign indebtedness by Mexican firms. Representative offices of foreign banks were placed on the same regulatory basis as domestic banks, and continued to be barred from commercial banking operations in Mexico. Foreign-owned financial institutions may not accept Mexican funds for placement abroad, must restrict domestic loans to those permitted by Mexican credit policies, and must provide the government with detailed monthly reports of operations. In addition, they must operate strictly within the confines of Mexican law, rather than their home-country regulations, and the government reserves the right to revoke the registration of foreign credit institutions at any time, at its own discretion.<sup>27</sup> Similar restrictions on foreign company activities in the financial sector exist in many developing countries and several industrial countries.

<sup>26</sup> T. N. Gladwin and I. Walter, *op. cit.*

<sup>27</sup> See "Mexico Issues Rules Tightening Controls on Foreign Financing," *The Wall Street Journal*, 26 April 1972.

With respect to outright financial controls, the specifics of remittance policies vary widely from one country to the next.<sup>28</sup> Colombia places an annual ceiling of 14 percent of invested capital. Greece limits repatriation in previous years. Greece also permits firms engaged in exports to make larger remittances than firms that are not, up to a limit of 70 percent of export sales. Pakistan permits repatriation of foreign exchange costs that can be shown to have been incurred in introducing a new investment project. Chile allows companies to revalue local assets in accordance with exchange-rate changes. and permitted remittances are based on the revised asset values. Brazil limits profit repatriation to 12 percent of registered capital, subject to a 25 percent withholding tax. Thereafter, profit remittances are subject to taxes of 40–60 percent. Argentina likewise has a 12 percent limit, with excess profit remissions subject to taxes of 15–25 percent. Chile's ceiling is 14 percent, with no additional remissions allowed, and the investment itself must have been subject to prior government approval. Colombia and Peru likewise have a 14 percent limit. In some countries there are extensive delays in the approval of permitted profit remittances.

*Use of terminal controls.*—Terminal measures involving expropriation and indigenization have been a significant part of policies toward foreign direct investment, particularly in developing host countries. Table 6 lists the various identifiable terminal controls aimed at U.S. companies during the 15-year period 1962–77. These include a number of well-known expropriation cases involving U.S. affiliates in Latin America. For example, the revolutionary government of Peru in 1968 seized the oil properties of International Petroleum (Exxon), which began a process of takeovers of foreign firms including Cerro (mining), W.R. Grace (chemicals and paper), and Utah International (iron ore). The Allende government of Chile in 1971–73 completed the takeover of the copper mining properties of Anaconda, Kennecott and Cerro and then proceeded to expropriate ITT and Bosie-Cascade assets (utilities), as well as manufacturing facilities operated by Ford, DuPont, Dow, and Ralston-Purina. The Venezuelan Government in 1974 nationalized both the iron ore and petroleum industries, including properties owned by U.S. Steel, Bethlehem Steel, Exxon, Mobil, and Texaco.

In Africa and the Middle East, the petroleum industry has been the principal target of expropriation actions. The governments of Nigeria, Algeria, Iran, Kuwait, Libya, Morocco, Saudi Arabia, and Syria have nationalized the production and distribution of facilities of such prominent petroleum MNC's as Exxon, Gulf, Mobil, Socal, and Texaco, as well as the holdings of French, Dutch, and British oil companies.

<sup>28</sup> Cf. Don Lessard, *op. cit.*



TABLE 6.—TAKEOVERS OF U.S. FOREIGN DIRECT INVESTMENT BY TYPE AND BY COUNTRIES, 1962-1977

	Takeover type							Other, DC8 <sup>8</sup>	Total
	Settled		Unsettled						
	SA1 <sup>1</sup>	SA2 <sup>2</sup>	UA3 <sup>3</sup>	UB4 <sup>4</sup>	UC5 <sup>5</sup>	UD6 <sup>6</sup>	UE7 <sup>7</sup>		
<b>OECD:</b>									
Australia.....		2						2	4
Canada.....		2			1		1	4	8
France.....		2					1	3	6
Italy.....		1					1		2
Japan.....								2	2
Netherlands.....		1							1
Spain.....								1	1
Switzerland.....		1							1
Turkey.....					1				1
United Kingdom.....							2	2	4
<b>Total.....</b>		<b>9</b>			<b>2</b>		<b>5</b>	<b>14</b>	<b>30</b>
<b>Africa:</b>									
Benin.....	1		1						2
Central African Republic.....			2						2
Congo (Brazzaville).....			2						2
Dahomey.....		1	2						3
Ethiopia.....			2						2
Ghana.....		1			1				2
Guinea.....		1							1
Liberia.....	1	1			2				4
Madagascar.....	1		1						2
Mauritania.....	1								1
Nigeria.....	1	5							6
Somalia.....	1		1		1				3
Sudan.....	2								2
Togo.....	1								1
Uganda.....	3								3
Zambia.....	1	1				1			3
<b>Total.....</b>	<b>13</b>	<b>10</b>	<b>11</b>		<b>4</b>	<b>1</b>			<b>39</b>
<b>Asia:</b>									
Bangladesh.....			2	1					3
Cambodia.....		2							2
Ceylon.....		2							2
India.....		4					1		5
Indonesia.....	5	1							6
Iran.....	1							1	2
Malaysia.....		1							1
Pakistan.....		1							1
Sri Lanka.....	1								1
Thailand.....							1		1
<b>Total.....</b>	<b>7</b>	<b>11</b>	<b>2</b>	<b>1</b>			<b>2</b>	<b>1</b>	<b>24</b>
<b>Latin America:</b>									
Antigua.....		1							1
Argentina.....	7	2	2					2	13
Bolivia.....	2	1							3
Brazil.....		1						2	3
Chile.....	17	12	1		1	5	1		37
Costa Rica.....	2								2
Ecuador.....	1	1			2		1		5
Guatemala.....		2							2
Guyana.....	1	1							2
Honduras.....			2						2
Jamaica.....		3			5				8
Mexico.....	5	2						1	8
Panama.....	1	1							2
Peru.....	7	3	1						11
Puerto Rico.....		1							1
Surinam.....		1							1
Trinidad and Tobago.....	( <sup>9</sup> )	1							1
Venezuela.....	3		1		1	1	7		13
<b>Total.....</b>	<b>46</b>	<b>33</b>	<b>7</b>		<b>9</b>	<b>6</b>	<b>9</b>	<b>5</b>	<b>115</b>

See footnotes at end of table.

TABLE 6.—TAKEOVERS OF U.S. FOREIGN DIRECT INVESTMENT BY TYPE AND BY COUNTRIES, 1962-77—Con.

	Takeover type							Total
	Settled		Unsettled				Other, DC8 <sup>8</sup>	
	SA1 <sup>1</sup>	SA2 <sup>2</sup>	UA3 <sup>3</sup>	UB4 <sup>4</sup>	UC5 <sup>5</sup>	UD6 <sup>6</sup>		
<b>Near East:</b>								
Abu Dhabi.....		1						1
Algeria.....	8							8
Egypt.....	1						1	2
Iraq.....	2							2
Kuwait.....	1	1						2
Lebanon.....						1		1
Libya.....	7	1	3		1			12
Morocco.....		4				1		5
Qatar.....		1						1
Saudi Arabia.....		2					1	3
South Yemen.....			2					2
Syria.....	1		2	1	2			6
<b>Total.....</b>	<b>20</b>	<b>10</b>	<b>7</b>	<b>1</b>	<b>3</b>	<b>2</b>	<b>2</b>	<b>45</b>
<b>Grand total.....</b>	<b>86</b>	<b>73</b>	<b>27</b>	<b>2</b>	<b>18</b>	<b>9</b>	<b>16</b>	<b>253</b>

<sup>1</sup> Companies with majority or minority U.S. ownership which were formally expropriated or nationalized.

<sup>2</sup> Companies with majority or minority U.S. ownership whose contracts or concessions were canceled or renegotiated or whose equity was bought out in part or in whole by public or private local interests.

<sup>3</sup> Companies with majority U.S. ownership which have been formally expropriated or nationalized.

<sup>4</sup> Companies with minority U.S. ownership interest which have been formally expropriated or nationalized.

<sup>5</sup> Companies with majority or minority U.S. ownership interest whose contracts or concessions have been canceled or are under renegotiation or which are being required to sell a part of their equity to local interests.

<sup>6</sup> Companies with majority or minority U.S. ownership interest which have been intervened or requisitioned.

<sup>7</sup> Miscellaneous unsettled takeovers involving companies with majority or minority U.S. ownership interest.

<sup>8</sup> Proposed bids/investments delayed or canceled due to government action.

<sup>9</sup> 21 oil companies nationalized in 1974.

Source: Thomas N. Gladwin and Ingo Walter, "Multinationals Under Fire: Lessons in the Management of Conflict" (New York: John Wiley, 1980).

In addition, foreign-owned assets in such diverse fields as banking, insurance, trade, and manufacturing have been brought under national control in Ethiopia, Sudan, Tanzania, Uganda, and Zambia.

Affiliates of U.S. multinationals in Asia, although less subjected to explicit expropriation actions, have encountered broad nationalization programs and a hardening of host government attitudes toward foreign investment. The insurance industry in India, the jute industry in Bangladesh, and petroleum and plantation properties in Indonesia are examples of broad nationalization programs instituted by Asian nations. Burma, Indonesia, Malaysia, and Singapore have enacted laws which prohibit or severely restrict foreign involvement in certain sectors of the economy, resulting in MNC withdrawal. Other governments, such as India, Pakistan, the Philippines, Sri Lanka, and Thailand have adopted strict policies limiting foreign investors to minority participation in business ventures involving such firms as Coca-Cola, IBM, Goodyear, NCR, Singer, and Union Carbide.

Over half of all take over cases in table 6 involved formal expropriation. Others have centered on forced sales, extra-legal interventions and contract renegotiations. Formal expropriation was the dominant form of takeover during the entire period covered. In many of these cases, the U.S. Government was subsequently directly involved in compensation negotiations with the host government. In

addition, some of the properties expropriated by the Allende (Chile) and Sukarno (Indonesia) governments have been restored to their private ownership since the overthrow of those regimes. Final settlement terms, compensation arrangements and legal actions in many of the cases cited, however, have not yet been resolved.

Examination of the exercise of terminal controls by host-country governments reveals that they are not random occurrences, but reflect distinct trends related to combinations of certain MNC and host country characteristics. Takeover cases have often resulted in political conflict between host- and home-countries. The history of terminal controls in the 1960's and 1970's also holds a number of lessons: (1) The incidence of takeovers has risen markedly since the early 1960's; (2) a few high-incidence countries like Algeria, Chile, Indonesia, Libya, Peru, Tanzania, Uganda, and Zambia, undergoing radical transformations in economic and social policy, accounted for a disproportionate share of the takeovers; (3) the extractive sector is clearly the most vulnerable, followed by manufacturing, financial services and utilities; (4) affiliates of large MNC's seem to be more susceptible to takeovers than smaller firms; (5) wholly owned affiliates appear to be more vulnerable than joint ventures with host-country firms; (6) both very high and very low technology firms tend to be more susceptible to takeovers than firms which fall into the middle range; (7) multi-nationals with a higher degree of vertical integration on the supply and/or market side seem to be less vulnerable to takeovers than less integrated operations; and (8) takeovers of all firms in an industry and those specifically targeted on a particular MNC remain important. Sectors like mining and banking are especially susceptible by industry-wide actions, while manufacturing is more subject to firm-specific actions.

Many host countries have provided guarantees against expropriation, either for foreign-owned assets specifically or as part of a more general assurance that private industry will not be nationalized. Cyprus, Greece, Israel, Malta, Singapore, and Spain are among the countries providing such guarantees, sometimes as part of a package of incentives that contains tax holidays, tariff exemptions, and occasionally "most favored enterprise" provisions which assure investors parity in the event that foreign firms are given more favorable treatment in the future. Nor can expropriation be undertaken lightly. It signals to other firms that the same thing might happen to them, particularly, if there is systemic political change away from a market system or private ownership of productive facilities. Despite governmental assurances to the contrary, sovereign risk rises, and to compensate for it, firms require higher expected profits or forms of risk-offsets. This reduces the net benefits to the host country, and may in turn bring on pressures for additional MNC expropriations in the same or other sectors of the economy. The application of such measures as the U.S. Hickenlooper Amendment and other national measures in various MNC home countries can further increase the cost of uncompensated expropriations to the host country, and shift the focus of the conflict from the MNC alone to its home government. Certainly uncompensated or inadequately compensated expropriation is deserving of careful consideration by host countries.

*Prospective Future Policy Directions*

The foregoing suggests certain plausible future trends with respect to policies toward inward foreign investment. As an industrial nation which has been and continues to be the preeminent home country for MNC's, considerations of reciprocity and possible retaliation suggest that the United States will continue to follow relatively liberal policies toward inward foreign direct investment. The fact that such investment tends to create jobs, supports capital formation and productivity at a time when both are lagging domestically, and may make positive balance of payments contributions further reduces the likelihood of controls. At the same time, there is some sensitivity to foreign ownership by various groups in the United States, including organized labor. As we have noted, sensitivities exist with respect to foreign ownership of farmland, defense-related industries including transportation, and financial institutions. With the possible exception of additional restrictions on foreign ownership or control of the traditionally restricted sectors of banking and real estate (applied largely at the state local level) there is unlikely to be any trend toward restrictive policies on inward foreign investment applied by the United States.

One possible exception may be worthy of note. The fact that affiliates of foreign firms operating in the United States are usually not subject to as many SEC disclosure requirements as publicly owned U.S. companies may give rise to pressures for greater "transparency." This could involve some sort of "registration" procedure for existing and new foreign ventures, coupled to disclosure requirements for operating and financial information similar to those contained in the OECD Guidelines and comparable to U.S. SEC public company requirements. This would not involve "screening" as such, and may be viewed as being consistent with parity in the treatment of foreign-owned and domestically-owned firms.

As noted earlier, policies toward inward foreign investment differ somewhat among other developed market-economy countries, and will continue to do so, broadly in accordance with national policies toward domestically owned firms. The fact the countries of Western Europe, and to a lesser extent Japan, have been following the U.S. lead in liberal policies toward inward direct investment means that they are increasingly aware of the need for reciprocity in the treatment of MNC's. Moreover, greatly liberalized trade barriers, including free trade within the EEC, has circumscribed the ability of these countries to pursue restrictive policies toward inward foreign direct investment without running the risk of losing the affected projects altogether. Much more likely is an intensification of "competitive laxity" and "subsidy wars" host-countries competing for foreign investment along neo-mercantilist lines. Carried to extremes, such policies can be as wasteful of productive resources, and as distortive of allocative efficiency as restrictive policies toward foreign investment. As this realization gains currency among policymakers, it is likely that some initiatives will emerge to set international or multi-country rules of the game that will inhibit future "investment wars" among the industrial nations.

As in the case of the United States, a few sectors in the other developed market economy countries will continue to be considered "sensitive" with respect to foreign ownership or control, including agriculture, minerals and fuels, financial institutions, defense-related industries and selected high-technology industries. Preoccupation with policies toward inward foreign investment will continue to be concentrated primarily in Canada, Australia and Japan, although the last will increasingly be forced to liberalize inward investment policy as it rises in the hierarchy of home countries of MNC's. If Japanese MNC's are to continue to be afforded liberal treatment in other industrial countries, the quid pro quo for Japan will increasingly require liberal treatment of inward investment.

Among the developing countries the focus will continue to involve several types of ownership and control issues. Despite attempts to devise common policy frameworks at the regional level, as in the Andean Pact or ASEAN, or at the global level through the United Nations, the focus of such policies will continue to be primarily at the national level. This is because the needs and priorities of individual countries, subject to highly variegated political systems and economic endowments, are so different as to virtually preclude extensive harmonization in the foreseeable future. Hence common policy pronouncements are likely to be violated as often as they are observed, and there will continue to be a wide gap between the rhetoric in international organizations and the reality as practiced by policymakers "on the ground" at the national level.

It follows that pressures for nationalization, expropriation, confiscation, indigenization, and the like will also reflect primarily national determinants, although there may be cross-national demonstration-effects as well. Countries will go through "waves" of indigenization based on domestic political currents. Many have already done so, like India, Nigeria, Malaysia, Venezuela, and Libya. Indigenization may be either universal or sectoral, but most likely some version of the latter, with "sensitive" sectors such as banking, insurance, energy, telecommunications, transport, agriculture, and real estate being vulnerable, followed by wholesale and retail trade, import-export services, food and beverages, and consumer goods industries. Manufacture of capital goods, industrial intermediates and high-technology industries appear less vulnerable, but even here countries like Brazil have pushed hard to indigenize foreign company activities so as to force the internal diffusion of know-how. MNC's that fill a demonstrated need, generally by virtue of persistently superior technology and access to markets or imports, will continue to face fewer pressures as long as their contributions continue to be valued, and alternative sources on more favorable terms remain unavailable.

Because of the continued value of MNC involvement, and the facts that MNC's hold access to much of the world's commercial technology companies will find profitable opportunities even among those developing countries that have gone farthest down the road toward restrictions on foreign investment. This is clear from the receptivity to MNC initiatives shown by the socialist countries of Eastern Europe and Asia. Their desire to close technological gaps with the West, and their awareness of MNC capabilities, will present profitable opportunities for MNC involvement on a non-equity basis in both the capital-goods

and consumer-goods sectors in Communist countries. Such opportunities for "industrial cooperation" projects will continue to expand, and no doubt be used as patterns for policymaking toward MNC's by some developing countries.

## V. THE OUTLOOK

We have identified several broad trends concerning multinational firm activities and national policies toward them. Foreign production of national companies has risen faster than world trade and output for 20 years. It is likely to continue to do so. U.S. companies still account for over 40 percent of international direct investment. That share is slipping, but not rapidly. The United States, given trends since 1972, is also rapidly surpassing Canada as the most important single host country for foreign multinationals, a trend which is likely to persist into the 1980's as well.

While the 1960's and 1970's were the decades of expansion in offshore manufacturing activities, the 1980's—while likely to see continued expansion of international manufacturing—will see a continued rapid increase in the share of total MNC activity in the services sector. This has been the most rapidly growing component of foreign direct investment in the United States, and is likely to remain so well into the 1980's. This is complemented by the trend away from equity ownership on the part of foreign companies in many developing countries, and the growing volume of East-West economic exchanges. Both of these tend to utilize more heavily turnkey plants, design and management contracts, and other technology-sharing arrangements rather than the direct investment in, and ownership of, production facilities.

International competition among MNC's has intensified over the past 20 years, and seems likely to continue in the 1980's as more Japanese, European, and firms from newly industrializing developing countries (e.g., South Korea and Brazil) compete in many industries. This has placed the host countries with substantial markets, resources, and stability in an even more favorable position to capture an increasing share of the benefits from inward foreign investment.

The share of MNC activity in developing countries has remained relatively stable, but may rise somewhat in the future, as their natural resource endowments become more critical and competing MNC's are willing to accommodate more of the major host countries' objectives. The MNC's retain much of the world's commercial technology, as well as marketing and management expertise. Replacements for MNC involvement in the Third World are not visible on the horizon, so the uncomfortable union of LDC's and MNC's is likely to continue and intensify. This discomfort of the LDC's will increasingly be ameliorated by the spread of comparable technologies across countries, and the growing involvement of specialized service and design firms, so that heavy reliance on equity investments by foreign companies can become less important.

The trends in policies toward MNC's has been toward pragmatism, but with growing national control, in both advanced and developing host countries. Dramatic changes, either toward more or less controls, seem rather unlikely. The advanced countries will continue to take a relatively liberal position toward inward MNC activities. Japan, which

undertakes to control inward investment by regulation and "administrative guidance," will be pushed (reluctantly) to relax its restrictions somewhat. The developing countries will remain highly disparate in their policies toward foreign investment, but with selective relaxation of policies that retard inward MNC activities under a general posture of limiting direct equity investment. For the successful, high income LDC's with MNC's of their own, this policy configuration will become increasingly untenable and subject to challenge or selective retaliation.

### *Future Scenarios*

The future importance of MNC activities, and their effects, will obviously depend on the economic and political context within which those activities are played out. The possible scenarios and combinations of events are too numerous to handle. We shall limit ourselves to one plausible combination of trends which will be used to assess the future role of MNC's and the U.S. policy options which would appear to suggest themselves.

We consider the following broad trends to be realistic. *Détente* and the initiative toward normalization of relations with the People's Republic of China will continue. The successful developing countries, such as Taiwan, Brazil, Mexico, South Korea, and others, will develop as industrial states, and their share of world output will rise. The United States, and a few other advanced countries, will evidence somewhat lower growth rates than Japan and several Western European industrial countries. The advanced home countries for MNC's will see growing pressures for reviewing outward direct investment decisions on the part of their companies, but will retain a generally liberal policy stance toward foreign MNC activity.

These conclusions seem to follow for several reasons. First, a growing share of foreign activities by source-country MNC's will be on a non-equity basis; or involve design, equipment, and service contracts from engineering and management consulting firms not usually viewed as MNC's. Second, most advanced countries will find closer symmetry between activities abroad by their companies and inward activities by foreign companies. Thus, the dependence of company performance and home country stockholders on foreign operations will increase, while domestic economic performance will be increasingly dependent on foreign companies. This interdependence is already becoming more balanced for the United States, and will no doubt continue in that direction under the assumptions we have made about the course of future events.

But this increasing interdependence, in a world of national policies and local interests, will make for more frictions and conflicts, both among countries and between groups within countries. Foreign investment in the United States under permissive U.S. policies, whether by Japanese companies or Arab investors, will create conflicts, given the restrictive Japanese policies toward inward investment and OPEC policies on oil prices. The frictions associated with this growing interdependence are likely to have—and have already had—important results. One is a search for an international code of conduct on national policies toward MNC activities. Pressures for a General Agreement on Tariffs and Trade (GATT)—like mechanism covering

national MNC policies will grow, and the need for it will become more obvious. A second result is the recognition of the direct linkage between international trade policy and policies on MNC activities. This linkage has always been conceptually obvious, but in practice could be ignored. As interdependence becomes more intense regarding both trade and transnational MNC activities, it can no longer be avoided. National leverage in trade policy may depend upon the nation's willingness to use access to its resources or markets by other nation's firms, and vice versa. The 1980's will see more use made of these policy connections if our scenario proves even reasonably close to the mark.

Within this overall view of a growing, but more conflictive, position of MNC's in the international economy, what will be their role in the U.S. economy? This clearly depends on future trends in the U.S. economy, its current and future policies toward MNC's, as well as public policies that affect the American economic environment. U.S. policy obviously cannot be made in a vacuum, and should reflect the realities of the international economy. Multinational firms not only influence these international economic developments, but also respond to national policies in relatively predictable ways.

The future rule of MNC's in the U.S. economy will depend on a confluence of pressures. One is the macro-economic performance of the U.S. economy compared with other national economies. A second concerns the more microeconomic influences affecting individual industries and firms, and the competitive environment in each. A third is the future trend in national regulation of MNC activities, by both the United States and major host countries. The latter, in turn, will be influenced by international strategic and political considerations, especially involving relations with centrally planned and developing countries. And it will be influenced in less dramatic ways by international codes of conduct or negotiated agreements covering MNC and/or governmental behavior.

### *Macroeconomic Considerations*

Economic growth depends simultaneously on demand and supply elements. The demand side involves trying to influence consumption, investment, government, and net foreign-sector expenditures in such a way that they come as close as possible to (but not exceed) the capacity of the economy to produce. On the supply side, the problem is to expand productive capacity by increasing inputs and efficiency, including technological progress. The economic outlook for a country or region, and its implications for the future role of multinational enterprise, can be assessed by a look at each of these elements. The role of MNC's mainly affects the supply side, on which we shall concentrate here.

*Capital formation.*—A major input into the growth process is capital formation. One of the characteristics of recent growth patterns among the developed market-economy countries has been the comparatively low U.S. savings and investment rate. Recent high U.S. rates of inflation, coupled to a tax system that encourages consumption and discourages saving, have resulted in very low or negative after-tax real rates of interest facing savers in the United States. Without easy



access to after-tax inflation hedges, households have opted for immediate consumption rather than savings, or for allocating their savings to nonproductive investments such as real estate or art, rather than productive investments. Coupled to a highly uncertain investment climate and poor performance of equity markets, the result has been a lacklustre capital formation record in the United States that contrasts sharply with those of Germany, Japan and other industrial countries.

A continuation of past macroeconomic trends would suggest that the United States could reverse its role as a net supplier of investment to the rest of the world and become a net capital importer. One implication of such a longrun development is that foreign MNC activity in the United States would continue to rise, while U.S. MNC operations abroad, utilizing foreign savings and market access, would become more important in their total activities. Recent and prospective exchange rate movements and factor costs are attracting capital to the U.S. through the foreign-based MNC and encouraging U.S. companies to expand at home rather than abroad. Hence, foreign MNC's may play a major role in bolstering capital formation in the United States in the 1980's. This is supported by favorable conditions of political stability and reliance on markets in the United States.

*Labor force.*—Relative to other countries, the United States has had a "segmented" labor force. There is plentiful highly-skilled labor, which is constantly reinforced by the output of an enormous educational establishment. At the same time, institutions for the development of skilled manual labor are not nearly so advanced, and there are recurring scarcities that fundamentally affect the structure of the economy. Lastly, there is a large group of low-skilled people in the labor force, some of whom are employed in low-productivity jobs while others are unemployed and some are unemployable. On top of this, the United States faces a major demographic shift in the 1980's and 1990's that will significantly affect the future contributions of labor to economic growth.

In the first segment, the basic U.S. strength is its variegated open-access educational system, which contrasts sharply with much more closed systems abroad, where the educational die is cast at an early age—most of the time irrevocably. The existence of this system, together with the high value placed on education among the people, is supported by a growing emphasis on continuing education (reinforcement and update of human capital) and is unequalled in competitor countries. It represents a major source of potential competitive strength for the U.S. economy that should not be underestimated. Meanwhile, the sources of human capital growth through immigration have slowed with economic prosperity and often superior career opportunities in Europe.

In the skilled manual labor segment, the traditional U.S. weakness continues with successive failures of governmental programs to upgrade the low-skilled and unemployed. In part, this is undoubtedly due to continued racial and ethnic barriers, attitudinal problems related to workmanship and pride in manual labor, and institutional factors that prevent access to highly-paid, skilled trades. At the same time, restricted access to higher education in Europe and Japan has

resulted in plentiful high-skilled manual labor—individuals, who in the United States would be university graduates, in other industrial countries make their mark in the skilled trades. This is directly reflected in the design and execution of products entering international trade and relative performance of affected industries in the world marketplace. By and large, the U.S. competitive advantage seems to fall at the design-planning-marketing-management end of the spectrum, while that of our main industrial competitors falls at the manufacturing-quality control-service end of the range. The United States uses intensively both high-quality and low-quality labor, in relation to foreign concentration on the middle-range of skilled craftsmen.

The implications are several. U.S. companies will continue to find it economical to locate skill- and craftsmanship-intensive activities abroad, while retaining R. & D., managerial, and communications-intensive activities at home. Foreign companies will continue to expand R. & D., marketing, and low-skill operations in the U.S. market, to take advantage of low U.S. costs in these fields.

One final point on this issue is worthy of note. No competitor country is plagued with as large a low-skill component of the labor force, or with as much structural unemployment as in the United States. This problem appears to be a permanent feature of the U.S. economy, and is reinforced by government policies such as high minimum wages and unemployment/welfare benefits that reduce both the supply of and demand for low-skilled workers. The large low-skill segment of the work force breeds protection of "senile" industrial segments such as garments and leather goods. This, in turn, prevents both labor and capital from moving out of low-productivity employments into higher productivity jobs, and suppresses economic growth. One school of thought argues that the peculiar nature of the U.S. labor force represents a permanent sociocultural fact of life, and that the resulting senile-industry protection is simply a price we have to pay for our inability to come to grips with the underlying social and economic issues. While the U.S. economy has the stability to attract foreign capital into a market-oriented economy, the social problem of marginal workers without the incentives, initiative, or training to enter the labor mainstream may become a source of concern which neutralizes that possible advantage. Foreign companies have, however, made significant contributions to labor demand in low-skill categories in the South and other regions of high structural unemployment in the country. In the foreseeable future, MNC's are likely to make a net positive contribution, both quantitatively and qualitatively, to economic growth in the United States by employing underutilized human resources.

*Technology base.*—As a form of economic organization highly dependent on proprietary technology for its success in the international competitive environment, and given its clear preference (with some exceptions) for concentrating R. & D. activities close to corporate headquarters, the MNC is closely tied to the technological base in its home-country. This means that technological progress in the United States, Europe and Japan will be an important factor in determining the future performance of their respective multinationals.

It has been argued that among these countries the United States has lagged in the production of new technology in recent years. Among other things, government support of private R. & D. has declined, overall R. & D. expenditures as a percent of GDP and per capita income has slipped badly, major public-sector R. & D. efforts with significant commercial spinoffs have virtually halted, and institutional and attitudinal changes have discouraged the search for new knowledge. The last includes a dysfunctional tax system, rampant inflation, new concepts of corporate liability under consumer protection and environmental regulations, greatly expanded political power of single-issue interest groups biased against technological change, and an almost pathological aversion to risk among policymakers and perhaps the general public. These factors, if continued, would make the U.S. into a major importer of technology from Europe and Japan in the 1980s and 1990s in much the same way as it has been a major technology exporter during the past several decades.

Multinationals, both United States and foreign, would play the same role as conduits for technology transfer under these conditions that they have played in the past. The United States does, however, have a pool of technically trained people, research institutes, universities, and an open system of technology exchange unavailable in any other country. This technological infrastructure gives the United States a major advantage over other countries—in terms of availability and cost of technological resources. It is an advantage that will continue to encourage United States and foreign MNC's to locate R. & D. and know-how intensive facilities in the United States.

*Externalities and infrastructure.*—Besides the usual forms of capital, labor and technology that go into comparative economic performance, an important role is played by public-sector policies concerning externalities and infrastructure. Externalities are social costs or benefits like environmental pollution or attractive landscaping that arise from consumption and production activities, but are not accounted for in the private costs and benefits of producers and consumers. Since the early 1970's, the United States has engaged in massive and enormously costly programs of environmental, consumer, and worker protection, which were bound eventually to affect United States international economic performance. Resources, in other words, have been diverted away from production of the kinds of goods and services that determine international competitiveness, which in turn has led to pressures in the form of increased prices, reduced profitability, reduced levels of investment, research and development expenditure, and the like. Countries that have gone about this task more slowly, perhaps more rationally and less forcefully, have gained at the expense of the United States. All of this was foreseeable. It hardly means that United States concerns with such problems were wrong. Rather, it simply means that there was a price that had to be paid in terms of economic performance.

In view of heavy public-sector commitments to these new priorities, and to defense, welfare, education, and related areas—together with obsolescent regulatory approaches—U.S. economic infrastructure has been allowed to deteriorate. The problems of rail transport are well known, and in comparison with our main competitors, amount to a

national scandal. Road transport is likewise beginning to feel pressure, particularly at the state/local level as streets, highways and bridges fall into disrepair. Water, sewage, ports and other infrastructure systems have shown specific instances of decay. Only in air transport and telecommunications does the United States remain preeminent. It seems clear that unless coherent public policies to maintain and develop economic infrastructure are undertaken, U.S. economic performance will suffer seriously in the decades ahead.

*Material resources and energy.*—A final set of elements to be considered in attempting to forecast future U.S. economic performance are “material inputs.” This includes renewable resources such as food and fibers, and nonrenewable resources such as minerals and fossil fuels. Relative to its major industrial competitors, the United States is in a superb position with respect to renewables, and although this is a major source of international competitive strength the full exercise of that advantage is chronically inhibited by protectionist policies at the sectoral level (especially in agriculture) abroad. In nonrenewables, the United States has become increasingly import-dependent for such materials as chromium, tungsten, bauxite, nickel, and copper. Import dependence by itself is not bad for growth—as the case of the EEC or Japan shows—but it requires careful management and contingency planning by government. As the chromium experience shows, with the exception of defense-related contingencies, little thought appears to have been given to this problem.<sup>29</sup> One thing seems clear; from the standpoint of nonrenewable inputs alone, isolationist policy options in the future will represent little more than self-delusion for the United States.

Energy is the most obvious and dramatic example. For the 1980's and 1990's energy will continue to be a critical determinant of relative economic performance. In the absence of major U.S. initiatives that make sense in the long run—and precluding certain options such as fast-breeder reactors from the start—countries like France that have made a fundamental commitment to advanced nuclear power could well end up with a decisive competitive edge if other options prove unfeasible. Having followed a dead end policy for a decade or so, the United States could by then have forfeited, for the indefinite future, leadership in practical energy technologies and become as import-dependent for know-how as it now is for petroleum.

There are, of course, many energy scenarios that could be mapped out, all of which have been debated at length. We shall simply note here that, in our view, comparative economic performance in the decades ahead will depend fundamentally on solving the energy equation. Conservation alone addresses only a small part of that problem, and a massive effort will be required to tap all energy alternatives and to deal with their inevitable social, environmental and safety problems. To date the United States clearly has the worst record of any industrial country in this regard, and it may well be that substantially more “fat”—in terms of reduced absolute and relative levels of prosperity—has to be squeezed out of the U.S. economy before the political prerequisites are established for a coherent strategy on energy.

<sup>29</sup> See National Academy of Sciences, *Contingency Planning for Chromium Utilization* (Washington D.C., NAS, 1978).

If this rather pessimistic view is close to the mark, the current attractiveness of the United States as a site for MNC operations could be significantly eroded in the 1980's. Particularly energy-intensive production by both United States and foreign MNC's—which is often associated as well with the high value-added and high skill-intensity end of the production spectrum—would increasingly locate outside the United States, and the competitive and growth benefits associated with these sectors would be lost. Particularly MNC activities that are sensitive to the kinds of intermittent shortages, rationing and supply disruptions that accompany inadequate energy supplies would be vulnerable to international relocation to the detriment of the United States. None of this is particularly a result of the OPEC phenomenon, which is basically a transitory phase in a more fundamental story of global resource-depletion, and which is relatively symmetrical in its effects on economic performance as compared with the failure to deal with the more fundamental issues.

*Political factors.*—From the foregoing, it seems clear to us that the United States, Japan, and the countries of Western Europe each has its own strengths and weaknesses in terms of the sources of economic growth—capital formation, human resources, technology, externalities/infrastructure, and material resources and energy. These underlying strengths and weaknesses are the same ones that will determine future involvement of MNC's in particular home and host countries. The MNC's can be viewed as simply catalysts which accelerate, facilitate and perhaps amplify the international economic adjustments that inevitably follow from these underlying assets and liabilities. Not to be forgotten in this schema are the “newly industrializing countries” (NIC's)—including South Korea, Taiwan, Hong Kong, Singapore, Mexico, and Brazil—where the phenomenal economic performance of the 1970's promises to be carried into more advanced stages of economic activity in the 1980's and beyond. Several political underpinnings of economic growth suggest themselves as potential determinants of economic performance in general, and MNC contributions in particular.

The first might be called “economic sclerosis,” literally an institutional hardening of the economic arteries that prevents countries from adjusting to the winds of change. In many countries labor has become a fixed cost. With layoffs not possible in recessions, basic corporate strategies have become far more conservative and less innovative. Small and medium-size firms fail instead of being able to “slim down” for the duration, wasting valuable resources and concentrating production in larger firms that are better capitalized or have access to interim government support. Obsolescent industries and firms—such as British Steel and Chrysler—are robbed of the “right to fail” by politically-driven government bailouts as international competitive conditions shift. The result is bloated, “senile,” uncompetitive sectors in virtually all of the industrial countries variously including textiles, leather goods, aircraft, computers, and agriculture, with massive misallocation of resources and longer-term inability to “churn” those resources continually into higher-productivity pursuits and potentially serious consequences for growth. And environmental and other social effects of economic activity in some countries has bred interest-groups that can fight long term delaying

actions on new ventures through legal or administrative means with little or no accountability for the benefits foregone.

The economic sclerosis brought about by socialization of national economies will clearly affect future growth. It is tempting to suggest that the U.S. and the newly industrializing countries will do better on this score in the 1980's and 1990's than Western Europe and Japan, because in relative terms the rigidities have not progressed as far. The problem is basically one of institutional lag—designing the kinds of institutions that will deliver a politically acceptable degree of socialization without destroying the carrots and sticks that drive the market economy—and it is unclear at this stage which countries will be better able to meet this challenge.

A second not unrelated factor concerns the political underpinnings of economic growth and the formation of economic policy. Whether it is labor unions, environmental groups, consumerists, farm groups, welfare interests, or industry associations, the political freedom to form coalitions with the explicit purpose of redistributing national income and output (pie-slicers) may seriously interfere with the broader forces (pie-augmenters) that we have identified with economic growth.<sup>30</sup> The British experience during the past two decades shows how devastating this battle over income shares can be for economic growth, and how it intensifies as the negative growth effects make themselves felt (increasingly vehement battles over slices of a shrinking pie). Whereas the political power of zero-growth enthusiasts seems to have waned with the realization that the dynamics of the steady-state in the face of rising expectations leads to strains that can be severely dysfunctional for society, it nevertheless appears that in the United States the political power of the "pie-slicers" continues to be on the rise, with possibly serious implications for future national economic performance in the world economy.

The kinds of politico-economic phenomena outlined here can obviously have serious international consequences. For example, there is ample evidence that Japanese steel firms dumped large amounts of carbon steel in the American market during the mid-1970's recession, using the United States as a "shock absorber" to avoid cyclical adjustment costs at home, and transferring those burdens abroad. At the level of the individual MNC, restrictions on layoffs in one country can force management to make staffing cuts in plants elsewhere—some recent cases have involved U.S. multinationals particularly in Europe.

In our view, the comparative economic performance of national economies in the years ahead will present myriad threats and opportunities for MNC's, which will react in ways that reinforce the underlying growth elements. We expect Japan to continue to perform well economically despite serious energy and resource problems. It is likely that its growth will continue to be export-driven, with as much market penetration by exports and restricted domestic market-access for imports as the country can get away with. Such mercantilism will also be reflected on the investment side, with Japanese MNC's moving heavily into the United States and the developing countries, but with access to Japan for foreign MNC's still carefully "managed"

<sup>30</sup> Cf. Mancur Olson, "The Political Economy of Comparative Growth Rates," University of Maryland (mimeo.), 1978.

to shield domestic firms. It seems clear that such policies on trade and investment will not be changed without application of powerful economic leverage—including retaliatory policy action—on the part of other countries. As in the past, reciprocity will continue to be the keystone of international economic relations.

We expect mixed economic performance in Europe, with the U.K. growing somewhat below potential, despite improvements brought about by the oil bonanza and the application of more sensible economic policies. West Germany will continue to be the economic powerhouse of Europe based on a functioning "social market economy," but with marginal weaknesses in the energy sector and institutional rigidities in economic adjustment. France should do better in the 1980's than in the past decade as a result of improvements in economic and resources policy. The EEC as a whole will continue to be constrained by an extortionately expensive agricultural policy and creeping cartelization in such sectors as steel and chemicals—but the overall level of income and rate of growth should be sufficient to cushion the impact of the economic waste involved.

On trade and investment aspects, the EEC will retain its role as the world's prime importer and exporter, and as the Common Market external tariff declines following the Tokyo Round of trade negotiations, market access for outside suppliers should improve further. At the same time, the EEC will further consolidate its relationships with associated developing countries in Africa, the Caribbean and the Pacific (ACP) for reasons of market access, raw materials, and development assistance. Europe will remain a relatively open area for U.S. multinationals, although instances of discrimination are likely to continue—e.g., favoritism toward domestic computer firms, government procurement, allocation of credit by nationalized banks, and competition policy. At the same time, economic socialization and loss of management prerogatives could seriously threaten those foreign-based firms that find it difficult to adapt.

For the United States, we see 1980's growth performance falling in the lowest third among the industrial countries based on energy problems, lagging capital formation and productivity growth, a relative decline in the contribution of technical change, and continued drain of resources into defense and consumption-related activities. Within this context, MNC's should represent one of the stronger elements. Foreign direct investment in the U.S. is likely to increasingly provide needed capital, technology, entrepreneurship and other elements of the growth-augmenting "package" usually associated with host-country effects of MNC's. Meantime, U.S. direct investment abroad will provide export strength, access to raw materials, and return-flows of earnings. In other words, by being plugged into the higher growth parts of the world via the MNC, the United States stands to benefit significantly in a period of otherwise unsatisfactory economic performance.

Finally, the more advanced developing countries are likely to enjoy the highest growth rates in the world. With ample supplies of human resources, low-cost imported technology, domestic and foreign capital, they are poised for a "catch-up" phase of economic growth not dissimilar to the experience of the war-devastated economies of Europe and Japan in the 1950s. Like them, the NIC's will rapidly penetrate

world markets for industrial goods, causing serious adjustment problems for the older industries in the advanced countries but at the same time, providing burgeoning markets for their more competitive exports. For multinationals, the NIC's will represent a source of both strength and conflict in the years ahead. While their outward-oriented growth will provide outstanding opportunities, they may work to increase host-country controls over foreign investment, and attempt, to "disengage" from traditional MNC involvements via links with new, smaller foreign countries, MNC's from different home-countries, and non-equity forms of involvement. Yet as their economies develop toward maturity, their confidence in dealing with MNC's rises, and they become more interlocked with other countries through foreign activities of their own firms, a more liberal policy toward inward foreign investment may be expected.

For the United States, inward MNC activities will gradually move toward greater parity with outward MNC activities. This will be one result of the combined U.S. political stability and rapid economic growth abroad, which will produce growing numbers of large foreign companies seeking a relatively attractive policy environment in a large market. U.S. companies will also continue to be attractive targets for minority equity participation by foreign investors which, because of OPEC oil pricing and other reasons, have an abundance of liquid dollars. U.S. firms, for reasons stated earlier, will offer attractive opportunities for foreign takeovers and investments, as their earnings performance, and share prices, and asset book-values suffer because of lagging domestic economic performance. The U.S. role in international direct investment will thus be increasingly a two-way dependence: Foreign companies and investors will be a growing source of equity capital for American companies, and the foreign operations of U.S. companies will to continue to grow as a major source and determinant of their economic performance and returns to U.S. owners.

### *U.S. Policy Needs and Options*

We are clearly suggesting that the national interest requires a liberal policy posture toward foreign direct investment and its role as a contributor to economic efficiency and growth in the United States. Particularly as the U.S. lags in a number of the underlying sources of growth, MNC's will become more valuable in closing bottlenecks that emerge. Several policy conclusions emerge from our discussion:

(1) Liberal policies toward outward foreign direct investment have served the United States well in the past, and will continue to do so. There is no clear reason for the imposition of additional controls over capital exports or technology transfer. Such measures would, as they did in the 1960's, distort resource allocation and inhibit U.S. and foreign economic growth without necessarily achieving their intended policy objectives. This will increasingly be the case as U.S. companies lose their technology-based advantages to foreign companies in their respective industries. Effective non-U.S. alternatives exist in most fields, and a restrictive policy on U.S. MNC's is ever more likely to lead simply to a decline in U.S. market shares.



(2) The United States should continue to provide liberal conditions for inward foreign direct investment, as its contribution to future U.S. economic growth is likely to greatly exceed its role in the past. Inward direct investment serves as a means of rechanneling dollars spent on energy back to the U.S. economy. It also serves as a growing source of technological stimulus.

(3) Within the framework of liberal international investment policy, the U.S. should press for an internationally accepted set of rules for foreign activities of MNC's similar to the role of GATT in international trade. Signatories could commit themselves to full reciprocity and non-discrimination on foreign direct investment, with established procedures for complaints and adjudication under, perhaps, a regime of clearly defined economic sanctions in response to departures from agreed rules. The need for reciprocity would compel most developed market economy countries to sign such an agreement, as well as some advanced developing countries. An unwillingness to accept the symmetry in rights and obligations of companies and countries in foreign direct investment questions would, no doubt, prevent most developing countries from accession, but this should not be a reason for postponing such an initiative. The United States, as the world's single most important home for MNC's, and in the 1980's its most important host country as well, should take a leadership role in promotion of such an international investment agreement. It is only within a broader framework of rules for reciprocity and "fair" investment policies that the United States can confront issues such as foreign investment by foreign state-owned enterprises, or subsidization of foreign companies operating in the United States by their home governments.

(4) The United States should follow the recently completed Tokyo Round of trade liberalization with a major new initiative on trade policy in the early 1980's. This would be to prevent a "commercial vacuum" from developing, as it did in the late 1960's and early 1970's, that can be particularly conducive to retrogression into protectionism. This new initiative should tackle head-on the problems of structural adjustment to import competition, sectoral protection and senile industries, and international trade in services. It should also place heavy emphasis on agriculture, a sector in which the United States has made virtually no progress in achieving improved market access over the past twenty years. In such an initiative, the United States should explicitly link the issues of international investment and market access for exports. For too long, U.S. policies on foreign trade and foreign investment have proceeded along separate tracks. This has generally resulted in a diffusion of U.S. bargaining power in negotiations with other major countries, such as Japan. It suggests, also, that the mechanism for "fair and reciprocal foreign investment" negotiations suggested above should be linked to evolving GATT negotiations on trade rules.

(5) The United States should resist policies that hamper the competitiveness of its MNC's through the international extension of domestic social policies. This would include the Foreign Corrupt Practices Act, the National Environmental Policy Act, antitrust and boycott legislation, human rights initiatives, restrictions on foreign subsidiaries in East-West trade, and the like. Fundamental is the realization that

the U.S. simply no longer calls the shots in the international economy. No matter how worthy the goals, they are unlikely to be achieved without full cooperation from abroad—foreign alternatives to U.S. MNC involvement are almost always available. Other home-countries have been consistently supportive of their MNC's, while the U.S. has burdened its firms in ways that seriously impede their economic performance and ability to compete. While the U.S. considers the Kennedy antimerger bill and how it might affect U.S. companies' foreign operations, Europe and Japan are seeking ways to still further support the international competitiveness of their MNC's. In the future, a basic issue will be how U.S. private enterprise can effectively compete with state-owned and state-supported foreign-based firms.

(6) Along with a liberal trade and investment policy, the United States should continue its generally liberal policy on technology transfer and international data and information flows. The United States has benefited significantly from both inward and outward flows of useful knowledge. If indeed U.S. technological progress continues to lag, we have more to gain in the future than in the past. And efforts to control and limit the international transfer of data and information would be not only extremely costly, but likely to be ineffective in achieving other objectives, such as protecting individual privacy. In the process, it would inhibit the United States as a home and host country for international firms to the economic detriment of all.

(7) While we recognize the distinct protectionist dangers inherent in centralization of international economic policymaking, the lack of coordination, confusion and weaknesses of the existing system requires an institutional arrangement attuned to international economic interdependence and interdependence among trade, investment, and technology transfer policies. Subordinating international economic policy to domestic considerations is simply no longer appropriate for a country that is as increasingly dependent on international developments as is the United States. We would therefore favor a new approach that would centralize executive-branch authority in international economic affairs, with careful attention to balance among interest groups and coordination with existing agencies. This would facilitate the explicit linkage of international negotiations on policies toward MNC's and international trade. It would also provide a single focal point for U.S. interaction with the several international bodies, such as the GATT, OECD, and any new body to deal with international investment rules and negotiations.

(8) The United States must reassess its philosophy toward regulation and anti-trust policy, and its policy toward business-government interaction and support. To a large extent, the United States is out of step with the rest of the world in which a doctrinaire policy toward international trade and investment is increasingly difficult to sustain. American policy has eschewed indicative planning or "administrative guidance." At the same time, it has taken the hardest line in the world on antitrust/antimonopoly matters, coupled with a rapid rise in costly regulation. Yet the major competitors of U.S. business are often directly supported by home governmental involvement, and only mildly hampered by foreign anticartel policies. This leads to an incongruous situation when viewed against a liberal policy toward trade

and MNC operations. Foreign companies can compete in the U.S. market and abroad with their home governments' active support and often sheltered competition and cartelized markets at home. American companies must not only avoid potentially anticompetitive agreements at home, but cannot enter them abroad either if the home market is affected, all the while, receiving little or no support or aid from the U.S. Government. These incongruities are very clear when foreign state enterprises build production facilities here or buy shares of U.S. companies. They are less obvious but certainly extant when U.S. firms enter agreements with foreign competitors in joint ventures in third markets. American policy must confront this growing inconsistency of its view of competition and regulation with that of the other major industrial countries.

(9) More generally, dramatic policy initiatives are required to prepare the United States to compete effectively in the rough environment of the 1980's and 1990's. The United States simply must develop a national long term energy policy that makes sense. It must replace incentives to consume with incentives to save. It must replace its fixation on demand management with effective policies to augment incentives to supply goods and services. It must overcome its fear of risk and become bolder in technological initiatives at the firm as well as government levels. Without such fundamental changes in policy the United States will hardly face economic disaster in the decades ahead—but the brightest future will lie elsewhere.

# THE MULTINATIONALIZATION OF U.S. BUSINESS: SOME BASIC POLICY IMPLICATIONS

By Raymond Vernon\*

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## THE PRINCIPAL FACTS

Since 1945, the structure of the manufacturing, banking and service enterprises in the United States has been transformed. Among the 300 largest manufacturing firms in the United States, there are scarcely a dozen today that do not have substantial producing or servicing facilities in foreign countries. The same can be said for the large banks of the United States as well as the leading construction firms, management consulting and accounting firms, and advertising agencies of the country.

As a result, something like two-thirds of the goods and services produced in the U.S. economy are generated by firms that have substantial interests elsewhere. Firms of this sort also account for the larger part of the flows of goods, services, and money that cross U.S. borders; over 40 percent of the goods imported into the United States, for example, represents transfers between the affiliated units of such multinational firms, and over 80 percent of U.S. earnings from foreign licenses and royalties represents payments between affiliates.

Practically all countries are experiencing a similar growth in the importance of multinational enterprises in their respective economies. To be sure, the establishment of new foreign subsidiaries by U.S.-based firms has slowed up a little from the phenomenal pace of the 1960's; but the existing subsidiaries continue to expand at a rapid pace within their present structure by taking on increasing numbers of product lines. Moreover, other countries have been building up their overseas networks at a sustained rate. The new crop of multinationals is coming not only from the obvious countries such as Japan and Germany, but also from some countries not ordinarily associated with the multinationalizing trend, such as Spain, Brazil, and India.

Despite the difficulties that the foreign subsidiaries of many firms have experienced—difficulties that run the gamut from harassment to expropriation—the prospect is that multinational firms will con-

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tinue to account for a large and increasing share of the United States and other economies. The underlying drives that have stimulated the international spread of enterprises are extraordinarily powerful, being based on the vastly increased efficiency of international communication and international transportation. And despite the increased cost of international transport brought about by higher oil prices, there is no serious reason to suppose that these developments are losing their force.

#### THE PRINCIPAL IMPLICATIONS

In the U.S. debate over the implications of the multinationalizing trend, it has often been assumed that the United States has a real option to discourage the trend and to compel "our" enterprises to devote their energies more exclusively to U.S. territory. I doubt that this is any longer a serious alternative for any country, unless it is a totalitarian society; it is especially unrealistic as an alternative for the United States. Governments can still place obstacles in the movement of capital; but, under modern technological conditions, not very effectively and not for very long. They can still inhibit the movement of technological information and managerial advice; but again their powers are greatly circumscribed. It is no longer very useful, therefore, to ask whether multinational structures are good or bad for the United States. It is much more realistic to assume that they will continue to occupy a prominent place in world society and to consider what U.S. policies are appropriate in the circumstances.

From the viewpoint of U.S. interests, then, what are the problems associated with the multinationalization trend? I think of them in three rather distinct groups. *First*, there is the fact that enterprises with a multinational structure are thought to have greater mobility in shifting the location of their operations than national enterprises; multinational manufacturing firms can move their labor-intensive operations to Taiwan or Singapore; banks can move tax-exposed or regulation-exposed transactions to the Grand Caymans or Bermuda. That mobility is seen as limiting the power of governments, labor unions, environmentalists, and others that are eager to influence the behavior of the multinational firms. *Second*, the network of affiliates that make up every multinational firm are seen as inescapably exposed to the coercive influences not only of their home governments but also of every government in whose jurisdiction an affiliate is located. Whenever a government attempts to exercise its jurisdictional influence over any unit in the network, there is a considerable likelihood that the reverberations will be felt in all the other units. When a government directs a unit in its jurisdiction to export more, for instance, the chances are very high that a unit in another jurisdiction will export less. And when a government directs a unit not to engage in an objectionable international transaction, its command is likely to affect the business behavior of other units in the network. In the end, no government can be free of the influence of other governments transmitted through the network of the multinational firm. Finally, the United States and other home countries of multinational enterprises have had great difficulty in deciding to what extent the overseas subsidiaries of their firms were entitled to be identified with and

protected by the home government; and the ambivalence and inconsistency of the United States in defining that relationship appears at times to generate considerable costs.

Elsewhere, I have weighed the merits of all of these concerns in some considerable detail. (See my *Storm over the Multinationals: The Real Issues*, Harvard University Press, 1977.) On a careful reading of the evidence, I conclude that some of these concerns are justified. There is not much doubt, for instance, that some firms have responded to U.S. Government measures which increase the cost of unskilled labor in this country by shifting some of their labor-intensive production processes to other countries. Neither is there any serious doubt that multinational firms have sometimes responded to the pressures and inducements of other governments at times by reducing their production in the United States. Nor can anyone deny that the presence of U.S. firms doing business abroad at times has posed difficult political problems for the United States. But there is also substance in the countervailing arguments: for instance, that the operations of our foreign subsidiaries producing raw materials abroad do somewhat increase the probability that such materials will be available to the U.S. economy in times of shortage; that the operations of our subsidiaries in foreign markets do at times increase the export of goods and services, including high-priced managerial services, from the United States; that the existence of multinational enterprises in some cases generate economies of scale and operating efficiencies, whose rewards are shared by all countries; and so on. Because the argument on the two sides are so difficult to weigh, any overall judgment about the social utility of multinational enterprises to the United States must be ambiguous.

That conclusion alone has powerful policy implications. It means that programs such as the Overseas Private Investment Corporation (OPIC)—programs based on the premise that most foreign subsidiaries of U.S. firms make a positive contribution to the U.S. economy—have not yet proved their worth; they have yet to justify any net expenditure on the part of the U.S. Government, whether in money, management, or political goodwill. But it means also that those who would aggressively discourage the creation of most foreign subsidiaries by U.S. firms, whether through taxation or other measures, are on equally tenuous ground. What the facts suggest is that the U.S. Government should make its judgments on a highly selective case-by-case basis or that it should remain neutral. As a practical matter, the highly selective approach is nightmarish; this leaves the neutrality option as my preferred alternative. That is also the ostensible preference of this administration, which thinks of itself as neutral with regard to the establishment and operation of such subsidiaries. (But as I shall show below, the actual position of the administration is not neutral at all, and ought to be brought into line with its asserted position.)

What I have suggested so far are two things: That there is no real basis for an overall choice between encouraging multinational enterprises and restraining them; and that, in any event, the possibility of any really substantial restraint does not practicably exist. The only realistic question is how to ensure that the multinational enterprises

operate with the greatest advantage to U.S. interests. To explore that question, it is necessary to break down the problem by parts, and to consider each separate piece as a candidate for appropriate policy changes.

### THE MOBILE MULTINATIONAL

The first set of problems, it will be remembered, stems from the mobility of multinational enterprises, that is, their capacity to avoid the pressures of U.S. governmental bodies, U.S. labor unions, and other U.S. interests by moving their activities beyond the reach of those bodies. This problem arises in a dozen different forms.

In the field of taxation, for example, the problem gets expressed in the form of debates over appropriate transfer prices and the appropriate allocation of central office charges. The policy response of the United States in this field has contained two elements: We have promulgated national regulations which deal with the problem on lines that seem to protect U.S. interests (such as sec. 482 of the Internal Revenue Code); and, wherever it has been possible to negotiate an agreement with other interested governments, we have waived the unilateral application of our rules in favor of an agreed international rule. Under that policy, the United States has negotiated a considerable number of bilateral tax treaties with like-minded governments, having the effect of law. The two principles strike me as fundamentally sound; and I shall be proposing their application in other contexts in the pages below.

Another area in which this problem arises is in the use of subsidies and tax exemptions by governments to attract foreign industries to their shores. Other governments make extensive use of such inducements; in the U.S. case, the inducements are also considerable, but are largely embodied in State and local programs. Once again, the incipient U.S. policy on this subject contains the two desired elements. It entails a set of U.S. standards and procedures that the U.S. Government applies universally; but these are modified by a set of standards embodied in an international agreement that has been negotiated under the General Agreements on Tariffs and Trade (GATT).

The new agreement applies to certain types of direct subsidies to industry, specifying the procedures and standards for keeping them under control. In this special instance, the agreement has been incorporated in U.S. law. Accordingly, countries that adhere to the agreement will be entitled to rely on U.S. adherence to its provisions.

The formula embodied in this new agreement could conceivably work. But under the U.S. system of jurisprudence, one can never be sure. The independent interpretations of the courts and the traditional unwillingness of States and localities to tailor their programs to the agreement's requirements can always create difficulties; but at least a start has been made. If the approach does succeed, then we should be attempting to expand it as rapidly as possible to the many other devices that governments use to secure a greater share of the production and exports of multinational firms. To make much progress, however, my guess is that there will have to be a greater willingness on the part of the Congress to encourage the negotiation of international standards, and to accept the primacy of international standards as they develop. In the end, that shift in attitude may not prove suffi-

cient to bring other governments to the negotiating table; but it will surely help.

Some problems created by the mobility of the multinational lend themselves more readily to this approach than others. In some cases, the intransigence of other countries or the difficulty of defining a workable set of international rules and procedures may rule out an international approach. In that case, the United States ought not to feel that it is prevented in principle from enunciating its own unilateral rules where they seem to promote U.S. interests. Take the practices of U.S. banks that book their business through overseas branches in order to avoid the regulations and taxes that would apply to transactions booked in the United States; if that practice were thought contrary to U.S. interests, there ought to be no bar in principle to restricting the practice—provided always that the U.S. Government were ready to tailor its restrictions in accordance with an international agreement that was subsequently developed.

But even if the United States were agreeable in principle to negotiate for international agreements to take precedence over its unilateral actions, some kinds of unilateral action would entail considerable risk. The risk is particularly high when any country unilaterally imposes trade restrictions as a way of responding to the subsidies, tax concessions and other devices of governments engaged in the new beggar-thy-neighbor game. In order to add to its policy options in such cases, the United States should amend the provisions of the Trade Act so that the trade adjustment provisions of the act could be applied more widely, embracing cases in which a direct link exists between a loss of jobs in the United States and a foreign subsidy or tax concession. Otherwise, we may find ourselves using countervailing duties and other import restrictions to an inordinate degree to counter such foreign measures, with disconcerting international consequences.

There are other situations as well in which the United States should be slow to impose unilateral restrictions on multinationals that were trying to escape its jurisdiction. The case of drug testing is in point; as a way of escaping from onerous U.S. regulations, U.S. firms do a great deal more of their research in the United Kingdom than they would otherwise. In such cases, international agreements may not offer a way out; the United Kingdom and other countries evidently regard their existing standards as perfectly adequate to serve their needs, and presumably would see no good reason to develop an international agreement on the subject. In that case, where no direct harmful repercussions occur in the United States, we would be unwise to try to intrude our standards upon dissenting countries.

The temptation to take such intrusive action is particularly strong when a U.S. firm escapes from U.S. jurisdiction in order to take up some objectionable activity in a developing country; pollution havens are a case in point. Well-meaning Americans sometimes picture the developing country as too stupid or too venal to be able to protect its own interests. That stereotype is grossly overdone, however, and does not begin to reflect either the interests or the capabilities of most developing countries. In such cases, the U.S. Government may wish to deal with the problem of conscience by requiring notification from U.S. firms and by putting the receiving countries on some sort of notice about the prospective action; we may be particularly forthcoming



with technical assistance in such cases, if a country seems to want such assistance. But the idea that we can define and protect the interests of other countries better than themselves is a dangerous and arrogant position.

### THE PROBLEM OF MULTIPLE JURISDICTION

It is difficult for Americans to confront one ineluctable fact that applies to international transactions and international investments: such undertakings are by their nature subject to more than one national jurisdiction. Inescapably, either side in the transaction can condition or kill the international relationship. The growth of multinational enterprises has elevated that truism to a problem of considerable proportions.

The problem finds its focus in many contexts: In antitrust policy, for instance, whenever one government tries to influence the behavior of a foreign subsidiary in ways that are objectionable to other governments; in trading-with-the-enemy policies whenever the object is to influence an overseas facility in ways to which other governments object; in bank-solvency policies whenever a foreign branch is involved; and so on. For a long time, the United States chose to ignore such problems, coasting on the fact that its economy was so powerful in international affairs, and the added fact that the conflict usually represented a reaching out by the U.S. Government rather than the "opposing" government. But that era is ending. The coercive power of the United States has declined, as we have become more needful of foreign raw materials and foreign markets. And the problems of governmental outreach now run in both directions—into the U.S. economy as well as out. The guidance of the French *tutelle* ministries to French enterprises and the pressures of the Ministry of International Trade and Industry (MITI) on Japanese enterprises, for instance, are now of heightened interest to the United States, wherever such enterprises have subsidiaries in this country.

To deal with these problems of overlapping and conflicting jurisdiction, the same fundamental principles would apply as have been suggested earlier; the United States is entitled to enunciate the principles and practices that it thinks are in its interest; but it should subordinate those principles and practices to international standards, wherever agreements on such standards can be reached.

In the case of antitrust matters, the application of these standards would require major changes in U.S. policy. Suppose that the United States were able to reach an international agreement with a group of countries—presumably some subset of the Organization for Economic Cooperation and Development (OECD) countries—dealing with the problems of international restrictive business practices and international cartels. (For an indication of the kind of agreement that might feasibly be reached, one need only turn back to chapter 5 of the Charter for an International Trade Organization, negotiated in 1948, an approach which still remains valid and which might well command the support of a considerable number of countries today.) In that case, U.S. antitrust authorities who were in pursuit of information in the jurisdiction of other signatory governments, or in pursuit of some remedy that involved an enterprise in such a jurisdiction, would be obliged to operate under the terms of the international agreement.

In principle, the subordination of U.S. antitrust procedures to international agreement is a drastic step; in practice, it is much less so. Over the past decade or two, U.S. efforts unilaterally to assert jurisdiction over foreign evidence and foreign respondents has so aroused other countries as to make the effective prosecution of such cases impractical; Britain, the Netherlands, and Canada, for instance, have enacted laws or issued court orders that have prohibited their nationals from complying with U.S. demands. Accordingly, the United States has gradually pulled in its horns in the prosecution of international antitrust cases. As a result, the United States has had the worst of two worlds: It has been saddled with the onus of insisting that its jurisdictional reach extends into various friendly countries; and it has failed to deal effectively with harmful restrictive business practices that affect the U.S. economy. The international approach stands a chance of doing better on both scores.

In the field of security controls, the story is very much the same. In this case, the U.S. Government has more or less followed the approach that I have urged in my comments above—but, at times, rather less than more. The U.S. Government has formulated its own policies under various trading-with-the-enemy statutes and regulations, while it has attempted to develop international standards mainly through the so-called Coordinating Committee (COCOM) in Paris. In practical terms, the willing cooperation of other countries has usually been indispensable for getting effective action; a U.S. decision to move ahead unilaterally, therefore, has rarely had much practical effect. Nevertheless, the United States at times has been unwilling to accept COCOM's decisions; in some cases, that unwillingness has stemmed from genuine disagreement over the strategic implications of some given transaction, but just as often it has stemmed from a fear on the part of the U.S. negotiators in the executive branch that they would be castigated by some congressional committee. Once again, therefore, part of the problem seems to stem from the reluctance of Congress to bind itself to policies and procedures developed in some international agency.

#### U.S. POLICY TOWARD ITS OVERSEA SUBSIDIARIES

I said earlier that U.S. policy toward the foreign subsidiaries of its multinational enterprises, although professedly "neutral," is in fact nothing of the sort. Although the declaration of neutrality is made in total good faith by this administration, the actual policies and practices applied on a day-to-day basis add up to a very different position.

For the past 10 years, the United States has been going through a trying period during which other governments have sometimes blatantly confiscated the properties and violated the rights of U.S. enterprises and U.S. nationals operating in foreign countries. These past 10 years would have been a painful period in any case, whatever U.S. policies had been toward such cases. But in my opinion the harshness of the treatment of U.S. interests was exacerbated by the existence of a series of historic U.S. policies that are indefensible in the long run.

Any U.S.-owned subsidiary located in a foreign land can be thought of in two different ways: As a national of the country in which it

operates, possessing a legal personality and a set of rights by virtue of the laws of that land, and owing its loyalty to the government that created it; and, at the same time, as a piece of foreign property, owned by a U.S. national and entitled to appropriate protection as foreign property. The ingenuousness of the U.S. position stems from the fact that it demands for its oversea subsidiaries all the rights and privileges that go with both sets of attributes.

Accordingly, the U.S. view is that U.S.-owned enterprises in foreign countries are entitled to so-called national treatment, that is, the treatment that any national in such countries similarly situated would be entitled to receive. At the same time, however, U.S. representatives would argue that the U.S.-owned enterprise is entitled to most-favored nation treatment, that is, the best treatment that would be accorded to the enterprise of any other foreigner similarly situated. On top of that, the U.S. Government argues that the U.S.-owned enterprise is entitled to all the rights it may have acquired by reason of having entered into a contract with the host government, even if these rights exceed those applicable to the national treatment standard or the most-favored-nation standard. As if these rights were not enough, the U.S. Government would argue that U.S.-owned enterprises were entitled to customary international usage, wherever that suggested a more generous form of treatment.

Then, to cap the climax of such rights, the U.S. Government—along with other governments—insists upon the right to act as mother hen: to provide diplomatic support and protection for these U.S.-owned subsidiaries when it sees fit to do so.

The confusion over the nature of our subsidiaries in foreign lands is compounded by another fact, already mentioned. From time to time, the U.S. Government insists that it has the right to extend its jurisdictional reach to these subsidiaries, commanding them to obey one aspect or another of U.S. law. Those commands, as is well known, have covered a wide range of subjects from antitrust to bribery.

The U.S. position with regard to its foreign subsidiaries, therefore, is far from neutral. It demands some extraordinary rights for its subsidiaries, and it saddles them with some extraordinary obligations. The contradictions in the U.S. position place it in a indefensible position whenever it attempts seriously to enforce those rights. At the same time, the U.S. Government is inextricably linked with the activities of the foreign subsidiaries in the eyes of the host government. Accordingly, whenever the foreign subsidiary is charged with selling shoddy goods or introducing inappropriate technology or engaging in improper politics, the link is extended to the U.S. Government as well.

While the U.S. Government's claims on behalf of the overseas subsidiaries of its multinational enterprises are clearly indefensible, we cannot escape from the fact that these foreign-owned subsidiaries do encompass two distinct sets of attributes—those that go with any national enterprise and those that go with foreign properties. The problem is to devise a set of rights both for such entities and for their owners that reflect a proper respect for the interests of all parties. Elsewhere, I have tried to suggest some propositions to which governments might conceivably be persuaded to adhere. (See my "Multinational Enterprises—No Strings Attached" in *Foreign Policy*, Winter 1978-79.)

The first principle in the suggested approach is that these foreign-owned entities should be placed much more unequivocally in the position of a national enterprise, with fewer ambiguities and contradictions than now exist. To develop that concept, one would need agreement on several critical points designed to cut the ties between the foreign subsidiaries and the governments of the parents: First, agreement that no government would seek directly to influence the behavior of a foreign subsidiary owned by one of its nationals; second, that no government would provide diplomatic support to any foreign subsidiary owned by one of its nationals. Those points having been agreed, the host government would be in a much better position to welcome the subsidiary into its fold as a bona fide national, entitled to national treatment of an unequivocal and undiluted kind. At the same time, home governments would have placed considerable distance between their official agencies and the foreign subsidiaries of their nationals. That distance should reduce the likelihood that the actions of these subsidiaries would be thought of, as they are today, as part and parcel of the official actions of the home governments.

The second principle in the suggested approach is to develop for foreign owners some reasonable protection against the destruction of their property rights by the host government. On this score, my proposal is to upgrade and strengthen the international convention already in force among a group of World Bank countries for the settlement of investment disputes, a convention that today is rarely applied. Foreign owners should have the right of direct access to such a court, and should be entitled to protest any alleged impairment of their property rights, whether because of a government's failure to grant national treatment or because of inadequate compensation in connection with an expropriation.

It will take considerable adjustment in national attitudes for governments to consider these principles seriously. For instance, governments will find it hard to cut themselves loose from the foreign subsidiaries of their own nationals, surrendering such subsidiaries to the protection of an untried international court. In practice, however, foreign investors that give up the mantle of protection provided by their governments are not giving up very much. The irony is that the U.S. Government, for all its professions about the rights of U.S.-owned subsidiaries, cannot provide much in the way of effective protection. This is not for lack of goodwill and commitment on the part of the U.S. executive branch. It stems rather from the fact that, in individual cases of dispute involving a U.S. investor, other U.S. interests also prove to be at stake. For instance, the subsidiaries of other U.S. investors may be imperiled, as was the case in Peru when Exxon's International Petroleum Company was expropriated; or other U.S. hostages may be imperiled, as is literally the case in Iran today; or critical military commitments may be at stake, as is the case in disputes with many Asian and Latin American countries. The upshot is that the U.S. prudently fails to push the claims of many aggrieved U.S. owners of foreign property; yet at the same time, it does not escape the international onus of supporting a set of principles that would give investors an untenable set of rights in foreign countries.

There are other reasons why we should not shrink from the development and application of new policies in this field, such as I suggest

here. One of these is that, with the growth of multinational enterprises to a dominant position in the world's industry, our existing policies are bound to generate an increasing stream of national disputes. Another is that an increasing number of multinational enterprises are establishing themselves on U.S. territory; while on the whole the United States should be welcoming many of these enterprises for what they have to offer in capital, technology, and management, our national interests require that these enterprises should not be subject to the day-by-day commands of their ministries at home.

In the beginning, only a limited number of countries could be expected to enter into agreements of the sort described here; in all probability only some subset of OECD countries could be expected to look seriously at the proposed provisions. Nevertheless, there is a possibility that the proposed provisions may prove attractive to a larger group of countries, because they may provide an answer to some longstanding quarrels in the field of international investment. One such dispute involves the so called Calvo doctrine, a dispute that has colored U.S. relations with Latin America for many decades. The willingness of the United States to acknowledge the primacy of host country law in its application to foreign owned subsidiaries may be seen as a victory for the countries that have pushed that doctrine. If so, it could pave the way for their accepting the other indispensable portion of the package, an international court that could effectively protect the property rights of the foreign investors. All told, there seems little to lose and something significant to gain in a new approach.

#### CONGRESSIONAL POWERS AND INTERNATIONAL ECONOMIC POLICY

My guess is that the largest source of opposition to the lines of policy suggested in these pages will come from the Congress itself. The reasons are evident: In most instances, the proposals would subordinate domestic laws to international agreements and international institutions; and it is the executive, not the Congress, that plays the lead role in negotiating such agreements and in participating in such international institutions.

This is a problem of the most profound importance for the United States. In no other country is the problem so acute. Again, the reason is evident: The relationship of the U.S. Congress to the U.S. President is unique among the legislatures of the world, entailing much greater elements of an adversary relationship than exists in parliamentary systems. In the field of foreign affairs, that adversary element is exacerbated by the fact that the direct participation of the Congress in that field is so limited.

Yet neither side can afford to let the problem go unattended. The intertwining of the world's economies means that foreign economic problems are no longer separable from domestic economic problems. Congress may continue to legislate on domestic issues; but increasingly it will be unable to legislate effectively unless the foreign aspect of the problem is also handled appropriately. And if my argument is correct, the foreign side of many of these issues cannot be handled adequately by the unilateral action of the United States.

The glimmerings of a solution may lie in the pattern that was devised in the Trade Act of 1974. That act contained two principles bearing on

the relationship of the Congress to the executive branch. One of these was that the Congress should be much more deeply engaged in devising the strategy and overseeing the tactics of the international negotiations contemplated by the act. That policy was embodied in an extraordinary set of provisions which designated 10 members of the Congress as official advisers to the U.S. delegation, and in a set of subsequent procedures that gave such members a genuinely substantive role. The second principle, however, was equally important. Congress was obliged by the terms of the Trade Act to address any agreements emerging from the negotiations on a take-it-or-leave-it basis, without the power to procrastinate or amend; the second principle also was made to work in practice. It seems to me that such an approach can be much more widely applied, and if applied, may improve the chances of negotiating some of the agreements proposed in this memorandum.

