

FOREIGN DIRECT INVESTMENT

HEARING

BEFORE THE

**JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES****ONE HUNDRED SECOND CONGRESS****SECOND SESSION**

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FOREIGN DIRECT INVESTMENT

WEDNESDAY, MAY 13, 1992

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, DC.

The Committee met, pursuant to notice, at 10:30 a.m., in room 2359, Rayburn House Office Building, Honorable Lee H. Hamilton (vice chairman of the Committee) presiding.

Present: Representatives Hamilton, Armev, Wylie, Fish and Snowe.
Also present: Richard Kaufman, general counsel.

OPENING STATEMENT OF REPRESENTATIVE HAMILTON, VICE CHAIRMAN

REPRESENTATIVE HAMILTON. The Joint Economic Committee will come to order.

There has been a great interest in recent years in the subject of foreign direct investment in the United States. Many Americans have been concerned about the consequences of acquisitions by foreigners of U.S. firms, office buildings, and other assets. Congress has quite appropriately conducted a number of inquiries into that subject.

The present hearing focuses on the much broader subject of worldwide foreign direct investment trends. We do not wish to exclude capital flows into this country, and there will be some testimony on that. But we are interested as well in U.S. foreign investment abroad, and beyond that the foreign investment of other countries.

What has peaked our interest is the fact that foreign direct investment, as a global phenomenon, has been growing at a much faster rate than foreign trade or economic output. Some experts assert that this investment is becoming more important economically than trade and may replace trade as an engine of world growth.

It's also argued in some quarters that an international set of guidelines, such as exist for trade through GATT, are needed for foreign direct investment.

The purpose of this hearing is to examine the facts and arguments concerning foreign direct investment and to raise questions about their significance for the U.S. economy.

We have an outstanding panel of specialists to help us probe this area. I'm delighted that all of you are here to help educate us and to answer some of our questions.

I want to apologize to you for keeping you waiting this morning, but it was unavoidable, and also apologize to my colleagues here on the other side.

Dr. Stephen Cooney is director of international investment and finance at the National Association of Manufacturers. He is the co-

author of the recent study, "Can the U.S. Export Drive Continue?," and a specialist on the European Community's 1992 program.

Dr. Edward John Kline is deputy director of the Landegger Program in International Business Diplomacy at the Georgetown University School of Foreign Service. He's done numerous studies of foreign direct investment for the United Nations and others, and has recently completed a book that deals with foreign direct investment in Chile.

Dr. Edward John Ray is a professor of economics and associate provost at Ohio State University, and until recently was the chairperson of the economics department at that university.

Dr. Karl P. Sauvant is acting assistant director for Research and Policy Analysis, Transnational Corporations and Management Division, Department of Economic and Social Development, the United Nations. He helped put together the United Nation's *World Investment Report, 1991*—the first in an annual series on foreign direct investment—and he is also involved in the 1992 edition.

Before we turn to your presentations, I want to ask my colleagues, Congressman Arme y or Congressman Wylie, if they have any comments they'd like to make.

Congressman Arme y, please proceed.

OPENING STATEMENT OF REPRESENTATIVE ARMEY

REPRESENTATIVE ARMEY. Thank you, Mr. Chairman.

Let me thank you for holding these hearings. I look forward to them. And I also look forward to hearing this distinguished group of panelists that we have before us.

The issue of foreign direct investment is an issue that has seen much heated debate as the global economy has become more complex and integrated.

I believe that the American economy possesses the qualities necessary to be the world's economic leader. Recent data show that our Nation's economy still outperforms Japan, Germany, and all other competitors in many areas. However, I recognize that the trends are mixed. But, Mr. Chairman, it is clear to me that we cannot be the global economic powerhouse that we would like to be if we allow the proponents of protectionism to clog the flow of fuel to America's economic engine.

There is sizable room for economic growth. It seems to me that this must come from a vibrant American role in the global marketplace.

We have tremendous evidence that the free market works. After experiencing feeble economic performance in the late 1970s and early 1980s, American manufacturers shifted from focusing on cutting cost to improving quality. American manufacturing now has improved its productivity to a level that is three times higher than the service sectors. Manufactured exports have been growing at a 15 percent annual rate for five years. The key to the comeback of American manufacturing, according to the National Association of Manufacturers, was the return to fundamentals—innovation, investment, productivity, aggressive selling, customer service, and unrelenting attention to cost and quality.

American manufacturers talk of government's ill-conceived initiatives that miss the mark of what's needed to keep the economy performing well. They would rather see investment tax incentives and relief from burdensome regulations.

I have not heard American businessmen say that the Congress or the Federal Government ought to cut off the supply of foreign investment capital, nor have I heard them say that U.S. companies would hire more American workers or become more globally competitive if the Federal Government prevented them from investing overseas.

Accordingly, such intervention by foreign governments must not be tolerated.

As policymakers, we must be focused on the long-term best interests of American, and in today's hearing that means economic growth and well-being. Accordingly, there are many questions that need to be addressed before the government intervenes to disrupt the flow of international direct investment.

For example, are the global patterns of foreign direct investment a natural market phenomenon, or are they an inefficient method for the free market to bypass trade barriers? If foreign direct investment is a natural market phenomenon, then I would be hard-pressed to see how government intervention would be in America's long-term interest.

But if the investments represent a way to circumvent trade barriers, decisionmakers ought to question the nature and value of the trade barriers.

I look forward to hearing the answers to such questions during today's hearings.

Thank you again, Mr. Chairman.

REPRESENTATIVE HAMILTON. Thank you, Congressman Armev. Congressman Wylie, please proceed.

OPENING STATEMENT OF REPRESENTATIVE WYLIE

REPRESENTATIVE WYLIE. Thank you, Mr. Chairman.

I agree that the subject of direct foreign investment is a very fascinating one, indeed, but it is especially interesting to me today because one of the witnesses is a constituent of mine. Dr. Edward Ray is the associate provost at Ohio State, as you have said, and he's a recognized expert in this field.

I am certainly pleased to welcome Dr. Ray here this morning, and compliment you, Mr. Chairman, for your good judgment in inviting him here as a witness, along with the other distinguished members of this panel.

Thank you very much.

REPRESENTATIVE HAMILTON. Thank you, Congressman Wylie, and we're glad to be joined now by Congressman Fish, who's coming into the room.

Mr. Fish. No opening statement, Mr. Chairman. Thank you.

REPRESENTATIVE HAMILTON. We'll begin with you, Mr. Sauvant, and just move across the table from my right to left.

We're pleased to have each one of you and ask that your statements, of course, be entered into the record in full. We would ask you to summarize your statements fairly briefly, if you would, so we can move to questions promptly.

Mr. Sauvant, please proceed.

**STATEMENT OF KARL P. SAUVANT, ACTING ASSISTANT DIRECTOR,
RESEARCH & POLICY ANALYSIS BRANCH, TRANSNATIONAL
CORPORATIONS AND MANAGEMENT DIVISION,
UNITED NATIONS DEPARTMENT OF ECONOMIC
AND SOCIAL DEVELOPMENT**

MR. SAUVANT. Thank you very much, Mr. Chairman, and thank you very much for inviting me to testify before this Committee on trends on foreign direct investment.

I am Karl Sauvant, chief of the Research and Policy Analysis Branch of the Transnational Corporation and Management Division of the Department of Economic and Social Development of the United Nations. But I'm here in my personal capacity.

I have submitted a written statement and I appreciate that it can be included in the record, as you said. It is based largely on the *World Investment Report*, 1991 and 1992, to which you have made reference.

Mr. Chairman, in my oral introduction, I would like to make one straightforward point; namely, that foreign direct investment is today the most important form of international economic transaction. And at the same time, the firms that are responsible for foreign direct investment, transnational or multinational corporations, have become the most important private actors in the world economy.

With your permission, I would like to elaborate very briefly about the absolute and relative importance of foreign direct investment and its interrelationships with some other forms of international transactions.

As far as absolute importance is concerned, foreign direct investment flows, which were some \$30 billion at the end of the 1970s, are now, in 1990, some \$225 billion annually. Half of these flows are in the service sector.

As you mentioned in your introductory statement, Mr. Chairman, foreign direct investment has grown at 30 percent during the second half of the 1980s, three times faster than trade and four times faster than world output.

The cumulative flow of foreign direct investment today represents a stock of \$1.7 trillion of productive assets worldwide—\$1.7 trillion. It has been accumulated by some 15,000 to 20,000 transnational corporations; that is, firms that control assets abroad. Many of them are small- and medium-sized enterprises, but, of course, most big companies are transnational corporations as well. These corporations control more than 100,000 foreign affiliates.

The principal home countries are, in order of importance, the European Community, Japan and the United States, as far as flows are concerned. As far as stock is concerned, the order is the European

Community, United States and Japan. These three areas represent the Triad, which is a topic that we had explored in last year's *World Investment Report*.

The Triad is also the principal host area, in the sense that it absorbs approximately 70 percent of world foreign direct investment. Less than one-fifth of foreign direct investment goes to developing countries, reflecting that these countries overall are not as important in terms of markets and growth potential as the developed countries.

An interesting development in recent years has been the formation of clusters of countries around one of the Triad members, meaning that one of the Triad members like the United States, accounts for the predominant share of foreign direct investment inflows in a number of countries, in the case of the United States, particularly in Latin America; in the case of Japan, particularly in Asia; and in case of the EC, particularly in Central and Eastern Europe, but also in a number of other countries. These clusters are results of regional strategies of transnational corporations which focus very much on countries which are typically adjacent to the home country.

So, in terms of absolute importance, foreign direct investment has become a major form of international economic transaction.

Let me now very briefly highlight a few aspects of the relative importance of foreign direct investment. And here, the most important comparison is with trade as an alternative way to deliver goods and services to foreign markets.

I think the figures are quite impressive and telling. The sales of foreign affiliates—in other words, goods and services sold by foreign affiliates abroad—are in the order of magnitude of \$4.4 trillion. Exports, excluding intra-firm exports, are approximately \$2.5 trillion. In other words, foreign sales by foreign affiliates are considerably more important than exports in bringing goods and services to foreign markets.

Let me illustrate that for the United States in relation to the European Community. Eighty-five percent of all goods sold by the United States in the European Community are actually produced by U.S. foreign affiliates in the European Community. Only 15 percent are exported to the European Community. So, in the case of the United States, in fact, the relative importance of foreign direct investment as a means to deliver goods and services to foreign markets is even higher than for the world as a whole.

Important is also another comparison: Private capital flows, in particular to developing countries. Some 70 percent of total private capital flows to developing countries today consists of foreign direct investment. Some ten years ago, the ratio was 30 percent. In other words, today, foreign direct investment is the principal source of capital for developing countries.

Take a third comparison, technology. We all know that technology is a key ingredient of economic growth. Today, some 80 percent of licensing fees and royalties that the United States receives for technology transfer is received in the context of foreign direct investment; that is, from foreign affiliates. In other words, foreign direct investment is the principal source of technology transfer.

This increased relative importance of foreign direct investment is also reflected at the national level where foreign affiliates account now for a considerable share of assets, production and trade in many industries, in many countries. In the case of the United States, for instance, foreign direct investment, as a percentage of gross domestic capital formation, increased from 3 percent in the early 1980s to 7 percent by the end of the 1980s.

In sum, foreign direct investment, in terms of relative importance, has clearly become a major form of international economic transactions, and most importantly is more important than trade in delivering goods and services to foreign markets.

A quick word about interlinkages.

Actually, in my comments so far, I have already made a number of points about interlinkages. In the case of transfer of technology, I mentioned that foreign direct investment is the major carrier of technology—and, I should add, human resource development, as far as training is concerned, because a lot of training is undertaken in the context of foreign affiliates abroad. So transfer of technology today occurs to a large extent through, or is actually only possible because of, foreign direct investment.

As far as linkages of foreign direct investment to capital flows are concerned, I made reference already to the fact that a good part of capital flows consists of foreign direct investment flows, and this is not even paying any attention to the activities of transnational banks.

And finally, as far as trade is concerned, a good part of trade is actually undertaken by transnational corporations. A good part of it is intra-firm trade, meaning that goods and services are exchanged within the same network of the same transnational corporation worldwide. In the case of the United States, for instance, more than one-third of the imports and exports of the country are undertaken by transnational corporations on an intra-firm trade basis.

In summary, foreign direct investment is actually a package. It consists of capital, technology, training and access to markets. As a result, a substantial part of the flows of trade, technology and training is associated with foreign direct investment, and foreign direct investment structures these international flows.

Let me draw some quick points by way of conclusion.

First, because of its absolute and relative importance and because of its relationship to flows of trade, technology and training, foreign direct investment is today the most important form of international economic transaction.

Second, the institution that is responsible for foreign direct investment, and which draws together and manages the flows of capital, trade and technology and training, is the transnational corporation; which is, therefore, the most important private actor in the world economy. Transnational corporations are global, efficient organizers of resources.

Third, this makes transnational corporations potential engines of economic growth in developed, as well as in developing countries. Actually, this is the topic of the *World Investment Report, 1992*, precisely because transnational corporations contribute to capital formation, to

technology, to human resource development, to trade and, I should add, to environmentally sustainable growth.

Finally, I think all this calls for a change in perspective. In a world in which foreign direct investment, and not trade, is the principal form of international economic exchanges, shouldn't policymakers pay more attention to an appropriate international framework for foreign direct investment?

I leave you, Mr. Chairman, if I may, with this question. Thank you.
[The prepared statement of Mr. Sauvant follows:]

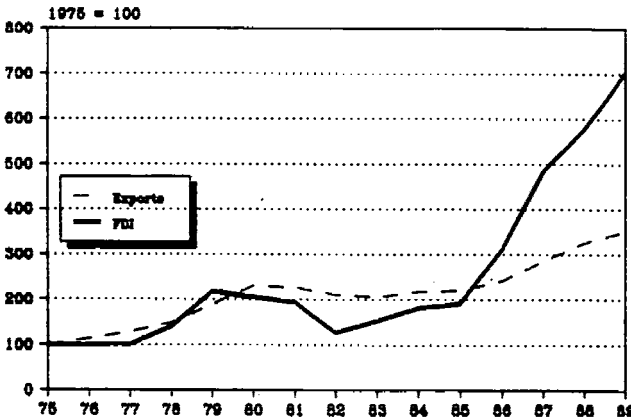
TRENDS IN FOREIGN DIRECT INVESTMENT

My name is Karl P. Sauvant. I am Chief of the Research and Policy Analysis Branch in the Transnational Corporations and Management Division, Department of Economic and Social Development, at the United Nations. I am pleased to submit this statement on global trends in foreign direct investment. Most of the data I would like to present to you come from two recent publications of the United Nations, namely, *World Investment Report 1991: The Triad in Foreign Direct Investment* and *World Investment Report 1992: Transnational Corporations as Engines of Growth*. However, my remarks are made in my personal capacity and do not necessarily reflect the views of the United Nations.

1. Recent trends in global FDI flows

Between 1983 and 1989, foreign direct investment (FDI) outflows have increased at the unprecedented rate of twenty nine per cent a year, three times faster than that of the growth of exports and four times that of the growth of world output (figure 1). This growth, coupled with changes at the policy level which are encouraging greater international private investment flows, may well signal that the current phase of international economic integration will be driven primarily by FDI, as opposed to earlier periods of integration which were driven mainly by trade (the 1960s) and international financial flows (the 1970s). Issues relating to FDI and the activities of transnational corporations (TNCs) are thus more central to international and domestic policy agendas than ever before. This testimony hopes to contribute to the process of policy formulation by providing a review of recent trends relating to global patterns of FDI.

Figure 1. Index of current value of exports and foreign-direct-investment outflows, 1975-1989



Source: UNCTC, *World Investment Report 1991: The Triad in Foreign Direct Investment* (New York, United Nations publication, Sales No. E.91.II.A.12).

highlighting its interlinkages with other important economic variables, such as trade, technology, and financial flows.

In 1990, which marked the beginning of the current recession, foreign direct investment continued to grow, although more slowly than in previous years. **Worldwide FDI outflows reached \$225 billion, representing an increase of 7 per cent over 1989 (table 1).** By 1990, total world stock, or the outstanding volume, of FDI stood at approximately \$1.7 trillion. The rate of growth of outflows in 1990—although the lowest in several years—was higher than what might have been expected, given the slowdown in world economic growth and tightened international liquidity. In fact, the changes observed for 1990 can largely be explained by a drop in FDI into the United States, where inflows fell from \$71 billion in 1989 to \$37 billion in 1990, as the onset of a recession made investments less profitable and slowed new inflows from the largest investing countries, Japan and the United Kingdom.

Table 1. Inflows and outflows of foreign direct investment, 1986-1990

Country group	1986	1987	1988	1989	1990 ^a	1980-1985	1986-1990 ^a	1980-1985	1986-1990 ^a
	(Billions of dollars)					Share in total (Percentage)		Growth rate (Percentage)	
Developed countries									
Inflows	64	108	129	165	152	75	83	-3	24
Outflows	86	135	161	201	217	98	97	-2	26
Developing countries									
Inflows	14	25	30	30	32	25	17	4	22
Outflows	2	2	6	10	8	2	3	1	47
All countries									
Inflows	78	133	158	195	184	100	100	-1	24
Outflows	88	137	167	211	225	100	100	-2	26

Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report 1992: Transnational Corporations as Engines of Growth* (New York, United Nations, 1992).

^aBased on preliminary estimates.

This trend seems to have continued in 1991. Indeed, preliminary data for 1991 indicate a sharp decline of outflows for a number of major home countries, including France, Japan, and the United Kingdom (table 2). This may be an indication that TNCs may be concentrating on consolidating the foreign investments they made in the late 1980s, as recessionary forces (as well as economic conditions particular to given countries) dampen new overseas investment plans. This appears to be particularly the case for Japan. The late 1980s witnessed a massive outpouring of foreign investment from that country, aimed particularly at the United States and Europe. This remarkable growth is illustrated by the fact that, in the two-year period leading up to March 1990, Japanese investment flows (on an approvals basis) to the EC and the United States were 13 per cent and 8 per cent higher, respectively, than the total flows over the previous

Table 2. Outflows of foreign direct investment from five major home countries, 1986-1990

Country	1986	1987	1988	1989	1990	1991 ^a	1980-1985	1986-1990	1980-1985	1986-1990
	Outflows (Billions of dollars)						Share in total (Percentage)		Growth rate (Percentage)	
France	5	9	15	19	35	21	6	10	-6	59
Germany	10	9	11	14	23	23	8	8	4	22
Japan ^b	15	20	34	44	48	31	10	20	22	35
United Kingdom	18	31	37	36	21	18	20	17	-1	6
United States ^c	14	28	14	29	29	29	26	14	-16	20
Total	61	97	112	142	156	122	69	72	-5	26

Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report 1992: Transnational Corporations as Engines of Growth* (New York, United Nations, 1992).

^aPreliminary estimates.

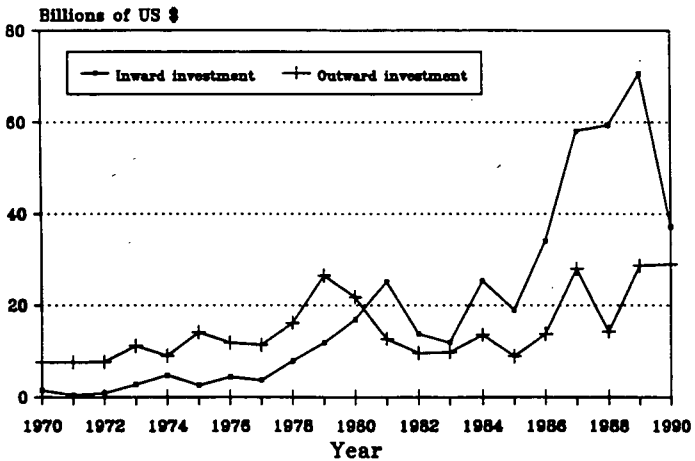
^bData for Japan do not include reinvested earnings.

^cExcluding outflows to the finance (except banking), insurance and real estate sectors of the Netherlands Antilles. Also excludes currency translation adjustments.

36 years combined. Now, tightened liquidity in Japan, a slow-down of growth in the United States, and a need to put the systems in place to manage their recent build-up of overseas investments, are likely behind the recent decline in Japanese outward investments.

One important trend in the area of FDI has been the relative shift of the United States from a home (investing) country to a host (recipient) country. The 1980s has been a decade of rapidly increasing flows of FDI into the United States, while its outflows have not grown at a similar rate, such that inflows are greater than outflows (figure 2). In 1980, the ratio of United States outward FDI stock to FDI stock in the United States was 2.7; in 1990, that ratio had fallen to about 1.0. In other words, the United States is now host to about as much foreign investment as it owns abroad. Compared to other industrialized powers, the ratio of outward to inward FDI is the lowest for the United States, as shown in table 3 (data on the geographical distribution of United States FDI is given in table 4). These data reflect the growing strength of TNCs from

Figure 2. United States foreign-direct-investment inflows and outflows, 1970-1990



Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Directory, 1992* (New York, United Nations, 1992).

Europe and Japan in the world economy, as well as the relative openness and attractiveness of the United States to foreign investors. The relative decline of the United States as a home country and its growth as a host country are, indeed, behind the shift towards a tri-polar structure in economic relations, explored further below.

About 17 per cent of FDI inflows, or some \$32 billion in 1990, are directed to developing countries, a share that has remained relatively stable over the last several years. The distribution of FDI among developing countries is highly skewed, with the ten largest host countries receiving approximately two-thirds of all FDI inflows. Asia and Latin America attract the majority of inflows to developing countries (61 per cent and 32 per cent, respectively), with

Table 3. Inward and outward foreign direct investment in the largest developed market economies, 1989
(Billions of dollars; percentage share; ratios)

<i>Item</i>	<i>European Community^a</i>	<i>Japan^b</i>	<i>United States</i>	<i>France</i>	<i>Germany, Federal Republic of</i>	<i>United Kingdom</i>
Inward stock of FDI	249	28	374	51	74	135
Percentage of world total	22	2	27	4	5	10
Outward stock of FDI	370	156	376	75	122	213
Percentage of world total	32	11	27	5	9	16
Ratio of outward stock to inward stock	1.5	5.6	1.0	1.5	1.6	1.6
Ratio of inward stock to GDP	0.05	0.01	0.07	0.05	0.06	0.17

Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report 1992: Transnational Corporations as Engines of Growth* (New York, United Nations, 1992).

^aExcludes intra-EC FDI.

^bThe stock of FDI in Japan is estimated, using data on outward investment from Australia, Canada, the European Community, Norway, Switzerland and the United States.

Table 4. United States, geographical distribution of foreign direct investment stock 1980 and 1990
(Millions of United States dollars)

Country or territory	Inward investment				Outward investment			
	1980		1990		1980		1990	
	Value	Percent of total	Value	Percent of total	Value	Percent of total	Value	Percent of total
<i>Developed areas</i>	72 239	86.9	376 995	93.4	162 573	73.8	316 506	74.8
Netherlands	19 140	23.0	64 333	15.9	8 039	3.7	22 778	5.4
United Kingdom	14 105	17.0	108 055	26.8	28 460	12.9	64 983	15.4
Japan	4 723	5.7	83 498	20.7	6 225	2.8	20 994	5.0
<i>Developing areas</i>	10 760	13.0	26 683	6.6	57 605	26.2	106 670	25.2
<i>Eastern Europe and USSR</i>	47	0.1	57	0.0	-	-	7	0.0
Total	83 046		403 735		220 178		423 183	

Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Directory 1992* (New York, United Nations, 1992).

Africa accounting for a slim 7 per cent of inflows. Foreign direct investment to Central and Eastern Europe increased sharply in 1990, but remained at low levels.

The sectoral composition of FDI flows in the 1980s shifted strongly towards the service sector, as shown in table 5. For all but one country (Canada), the services sector continued to be the single largest sector, and reached, for outward investment, over two-thirds of the stock of Japan and over 40 per cent of the stock in most of the other countries. This reflects the facts that services have grown to become the largest sector in most industrialized countries, and that many services companies (including banks and insurers) often follow their domestic clients to overseas markets. Despite annual fluctuations, the shift towards services in global FDI flows is likely to continue in the future.

Table 5. Sectoral composition of the stock of outward foreign direct investment
of major home countries
(Percentage share and compound annual growth rate of stock)

Country	Sectors				
	Period	Primary	Secondary	Tertiary	Total
Canada					
Composition	1975	9	62	29	100
	1989	7	52	42	100
Growth rate	1975-89	13	14	19	17
France ^a					
Composition	1975	22	38	40	100
	1989	13	40	47	100
Growth rate	1975-89	23	28	29	27
Germany, Federal Republic of					
Composition	1976	5	48	47	100
	1989	3	42	56	100
Growth rate	1976-89	7	10	13	22
Japan					
Composition	1976	28	32	40	100
	1989	7	26	67	100
Growth rate	1976-89	10	20	27	22
Netherlands					
Composition	1975	47	39	15	100
	1989	35	24	41	100
Growth rate	1975-89	6	5	17	12
United Kingdom					
Composition	1981	31	43	26	100
	1987	27	34	39	100
Growth rate	1981-87	13	11	23	15
United States ^a					
Composition	1975	26	45	29	100
	1990	8	44	47	100
Growth rate	1975-90	0	8	12	12

Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report 1992: Transnational Corporations as Engines of Growth* (New York, United Nations, 1992).

^aBased on cumulative flows of direct investment from 1972.

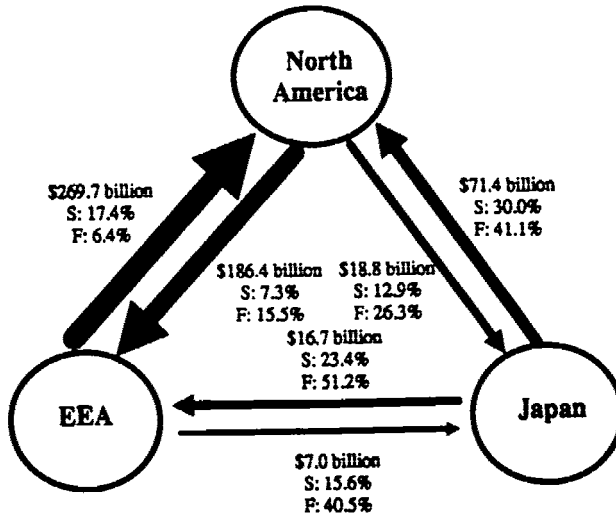
^bThe vertically-integrated petroleum industry is included in the primary sector in 1975. In 1990, only the extractive portion of the industry is included in the primary sector, with processing included in the secondary sector and marketing and distribution in the tertiary sector.

2. The importance of the Triad in global FDI flows

In the early 1980s, the global pattern of FDI could be characterized as uni-polar, dominated by the United States which was alone the single most important home and host country for FDI in the world economy. By the beginning of the 1990s, the European Community achieved a level of integration in terms of FDI that it may properly be considered a single home and host region, and Japan emerged as an equally important FDI power, at least as far as outward flows are concerned. As a result, the global pattern of FDI can now be characterized as tri-polar, with the EC, the United States and Japan being the three poles of the Triad. Together, the Triad account for approximately 70 per cent of world-wide inflows, a proportion unchanged from that of the decade of the 1980s, and about 80 per cent of outflows. Between 1980 and 1988, intra-Triad FDI stock nearly tripled, from \$142 billion to \$410 billion. In the 1990s, the emerging Triad may be more aptly described as including Japan, North America (Canada and the United States) and the European Economic Area, or EEA (EC plus its EFTA neighbors). Cross-holdings of stocks of FDI within this emerging Triad amounted to \$572 billion in 1989, or some 46 per cent of worldwide inward stock.

Figure 3 shows that the most important intra-Triad relationship is between Europe and the United States, which together have invested some \$456 billion in each others' economies, or 80 per cent of total intra-Triad stock. Indeed, fears of an inward-looking "Fortress Europe" in the wake of the EC 1992 unification programme may be belied by the significant investments that TNCs from the European Community have made in the United States and their correspondingly large stakes in that market. Furthermore, United States TNCs have a long history of significant investments in the European Community; about 85 per cent of all goods sold in the EC market by United States firms are produced in that market by the affiliates of United States TNCs, with only 15 per cent sold as exports from the United States. Thus, the FDI relationship between the United States and the EC is of great significance, and in fact outweighs their trade relations in many important industries.

Figure 3. Intra-Triad foreign direct investment, 1989



Source: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report 1992* (New York, United Nations, 1992).

Note: Dollar figures show estimated value of stock of foreign direct investment based on data on onward and outward investment from North America and the European Economic Area (EEA), excluding Iceland and Liechtenstein. Intra-North American investment and intra-EEA investment has been netted out. Percentages show average annual growth rates for stocks (1980-1989) and flows (1985-1990). North America includes Canada and the United States. The European Economic Area includes the European Community (EC) and the European Free Trade Association (EFTA), excluding Iceland and Liechtenstein.

The fastest growth in FDI in the Triad has been from Japan, which, as mentioned above, has rapidly been building up a direct presence in European and United States markets. Japan is now the world's largest foreign investor in terms of outflows, although in terms of stock it has not surpassed the United States and the United Kingdom. This represents a fundamental shift in the strategies of many Japanese TNCs to replace exports, at least partially, with the sales of overseas affiliates, and is attributable to a number of factors. Primary among these are the desire of Japanese firms to overcome mounting protectionism in their major overseas markets and to position themselves as "regional insiders" in the unified European market; the acquisition of new technologies is also an important motive for some Japanese investment in the Triad,

although it accounts for a far lower share than investment aimed at protecting market share. This is reflected in the fact that most Japanese investments in the Triad are trade-replacing in nature, concentrated in such industries as automobiles and electronics. Japanese strategies in the United States and Europe are geared to serving the local market (or, in the case of Europe, the regional market), with less than 5 per cent of sales exported to other countries, although that proportion may rise as Japanese affiliates mature. Recent evidence points to the fact Japanese TNCs are building up networks of suppliers to serve their overseas affiliates. Trends thus indicated rising local content by Japanese affiliates located in the Triad, although this is often achieved through sourcing from locally-based Japanese suppliers.

In 1989, the EC surpassed the United States for the first time in terms of the growth of inward flows from Japan, a trend that is informally supported by surveys, which show the rising strategic importance of the EC to Japanese TNCs. That shift may indicate that a longer-term relative shift of Japanese TNCs from the United States to the EC may be taking place, as improved economic conditions and new opportunities in the Single Market make that area more attractive for foreign investors.

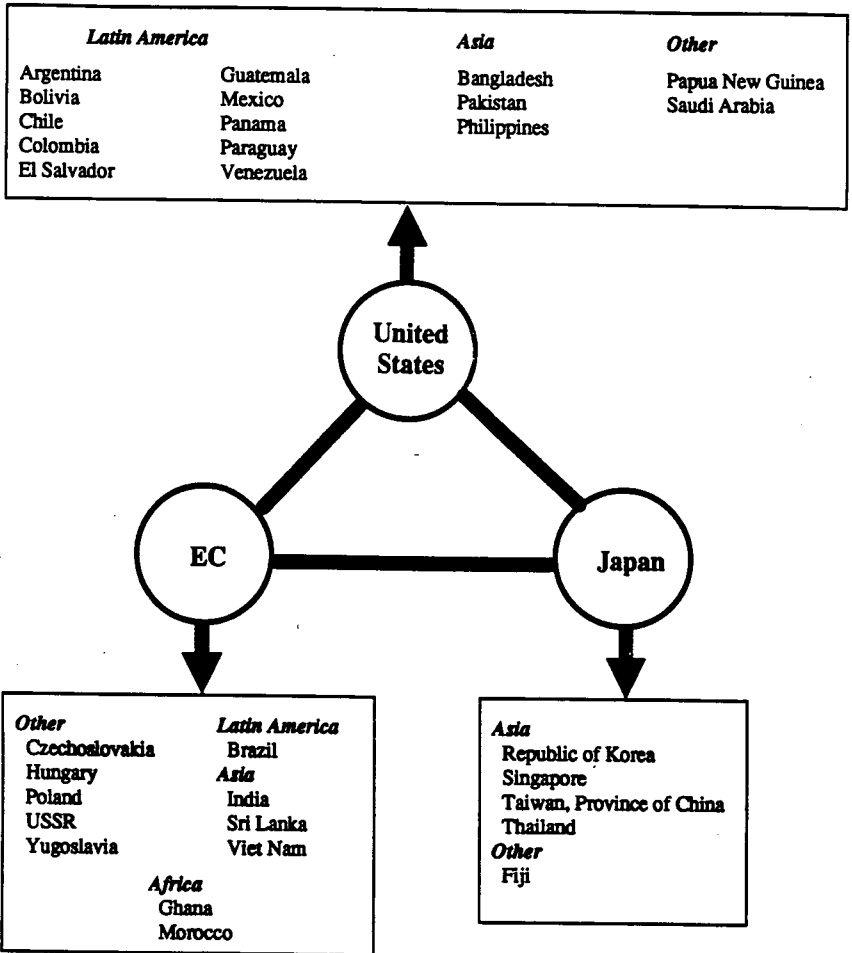
One interesting pattern that characterizes the Triad is the formation of *regional clusters* of developing countries around each pole of the Triad. Countries in a cluster are dominated by FDI from a single Triad member, either in an absolute sense (where a single Triad member accounts for more than 50 per cent of inflows to that country) or in a relative sense (where a single Triad member is the largest investor by a margin of 10 per cent or more over the next largest investor). Figure 3 shows how those clusters looked in the late 1980s. It reveals that the United States dominates inward investment in most Latin American countries, Japan dominates investment in several Asian countries, and the EC is dominant in a number of Eastern European countries. Thus, a regional pattern is emerging, with Triad members dominating investment in neighboring developing countries. This represents a shift from the early 1980s, when FDI clusters were distributed more randomly; indeed, in that period the United States dominated FDI in several of the Asian countries that now belong to the Japanese cluster. That

is a result of the fact that Japanese TNCs have been increasing their foreign investments in Asia faster than TNCs from the United States.

It is possible that the strategies of TNCs to build independently sustainable regional production and service networks ("regional core networks") in their regional markets is partly responsible for this clustering pattern. Such networks involve specialized production among different sites to take advantage of the different factor endowments in the region (ie, lower production costs in developing-country neighbours), and involve a substantial degree of intra-firm, intra-regional trade. Japanese networks appear to be particularly strong in Asia. United States TNCs in the automobile industry have also been active in building such production networks, linking United States and Canadian operations to operations in Mexico. Indeed, one-third of Mexico's trade with the United States is undertaken as intra-firm trade by United States TNCs (trade between two firms owned by the same parent), indicating a fair amount of integration between United States affiliates located in those two countries.

These patterns suggest that FDI is increasingly driving regional economic integration. In the European Community, for instance, FDI between countries in the region grew faster than intra-regional FDI in the last half of the 1980s, indicating that investment, not trade, has characterized this phase of European integration. In North America, the economic links between Canada, the United States, and Mexico are to a large extent forged by TNCs. And in Asia, the regional strategies of Japanese (and other Asian TNCs) are fuelling the rapid growth of regional ties. Integration that is driven by investment in this way is likely to be far deeper than trade-led integration, as the former involves a much greater degree of policy convergence than the latter. Indeed, this process, of adjusting national policies to reflect the regional character of economies, a phenomenon driven largely by FDI, is likely to be among the major policy issues of the 1990s.

Figure 4. Foreign-direct-investment clusters of Triad members, 1986-1989
 (Economies in which one Triad member dominates average annual investment inflows)



Sources: Transnational Corporations and Management Division, Department of Economic and Social Development, *World Investment Report* (New York, United Nations, 1992).

3. Foreign direct investment in the world economy

Having reviewed recent trends and patterns of global FDI flows, it should be pointed out that the stocks and flows of FDI are actually an underestimating measure of the activities of TNCs, and in fact their impact in the world economy is far greater than that captured by their overseas investments only. Although it is difficult to show, with macro-economic data, the activities of TNCs are a major factor structuring international economic relations among industrialized countries and between the latter and developing countries. Furthermore, a great deal of the world's trade, technology, and financial flows are organized, managed, and transferred by TNCs, and they are critical actors in the development of national and international competitiveness. Unfortunately, national and international policies have not adjusted to the central role of TNC activities in the world economy, and a change in this direction is urgently needed.

The United Nations Department of Economic and Social Development has estimated the global sales of the overseas affiliates of TNCs at some \$4.4 trillion dollars in 1989, whereas world exports (excluding intra-firm trade) stood at only \$2.5 trillion. Thus, in today's economy, direct production by TNCs is by far a more important means of serving overseas markets than trade, a fact not usually brought out in bi-lateral and multi-lateral economic policy discussions.

Foreign direct investment is also becoming more important in terms of world private capital flows. In developed countries, FDI flows have grown more rapidly than international portfolio investments (which, unlike FDI, do not confer a measure of managerial control, only passive ownership of equity). The equity portion of the latter were adversely affected by the October 1987 stock market crash, while FDI flows, responding to more long-term motives than portfolio investment, were not similarly affected. For developing countries, the financial role of FDI is far greater than for developed. Indeed, by the end of the 1980s, FDI had become the principal source of private foreign capital for the majority of developing countries. The non-debt

creating nature of FDI, its relative stability and the fact that outflows (profit remittances) are linked to performance make it a desirable source of external capital for many developing countries.

The activities of TNCs are increasingly a key variable in the economic competitiveness of their host countries. Although for most countries the ratio of foreign to domestic investment is relatively low, and usually stands at less than 10 per cent, the ratio has been consistently rising in the 1980s, and has been rising particularly rapidly for developed countries. In the United States, for example, foreign direct investment inflows as a percentage of gross domestic capital formation rose from 3.0 per cent in the first half of the 1980s to 6.7 per cent in the last half of the decade. In some industries and sectors, which are often strategic sectors in terms of employment and growth, the ratio is far higher. In the United States manufacturing sector, for instance, foreign direct investment accounts for some 16.8 per cent of total assets in that sector. Thus, host countries—developed as well as developing—will increasingly need to adjust their policy frameworks to account for the growing role of TNCs in their national economies.

Another factor they will have to grapple with is the fact that the global strategies of TNCs are weakening the very concept of a "national economy". This is particularly true in the areas of technology and trade, which are at the heart of national competitiveness. Regarding the former, the affiliates of TNCs engage in a significant amount of trade in their host countries; in the United Kingdom, for instance, foreign firms account for about 40 per cent of that country's exports. In the United States, TNCs and their overseas affiliates are responsible for about half of United States trade, and more than one-third of United States trade is intra-firm, ie, trade between TNC affiliates and their parent companies. Transnational corporations and their overseas affiliates are clearly a driving force in international trade; indeed, there is substantial overlap between FDI relationships and trading relationships. The role of TNCs in trade needs to be brought more sharply into focus in national and international discussions of trade policy.

The interlinkages between FDI and technology are also quite strong. It is not surprising that a handful of the largest TNCs account for the bulk of the world's expenditures on research and development. Increasingly, such activity is being performed abroad, and technological competence is being diffused across national borders at a rapid rate. United States TNCs perform about 10 per cent of their R&D abroad, and the figures are generally higher for European TNCs. Strategic technology alliances -- another important way in which new technology is generated -- have exploded in the 1980s, and an estimated 40 per cent are cross-border alliances among TNCs from the Triad. Regarding the international sale and purchase of technology, TNCs also play a central role. To use again the United States as an example, about 75 per cent of its sales of United States technology abroad take place within the networks of United States TNCs, and a little over one-half of its technology purchases were made by foreign affiliates located in the United States (as measured by royalty and licensing fees, an incomplete measure of total technology transfer).

These statistics are meant to underline the fact that international production by TNCs is among the most important variables driving national competitiveness and world economic integration. Critical areas of policy formulation are deeply affected by the activities of TNCs: economic integration with regional neighbors; international financial flows and new private investment; trade performance and the overseas market share of domestic firms; and technological competence and the international diffusion of new technologies. However, current policy debates and negotiations in these areas often fail to take into account the central role of TNCs. A change in perspective is needed, towards one in which international production is at the heart of international economic relations, and in which TNCs act as integrating agents of much of the world's investment, trade, financial, and technology flows. Such a change in perceptions is needed in order to construct fair and adequate policies to safeguard the interests of both firms and Governments in a world increasingly governed by international production.

REPRESENTATIVE HAMILTON. Thank you very much, Mr. Sauvant. Mr. Kline, please proceed.

**STATEMENT OF JOHN KLINE, KARL F. LANDEGGER PROGRAM
IN INTERNATIONAL BUSINESS DIPLOMACY,
GEORGETOWN UNIVERSITY**

MR. KLINE. Thank you, Mr. Chairman. My name is John Kline. I am deputy director of the Landegger Program in International Business Diplomacy at the Georgetown University School of Foreign Service.

I'm pleased to appear today before the Committee to discuss foreign direct investment trends and the concept of an international framework for foreign investment principles.

Foreign investment is, indeed, the most important force shaping the world economy that will take us into the next century. Regrettably, we are currently ill-equipped as a nation and as a world community to understand and manage this powerful engine of growth.

As a nation, we need to develop a broader view of how the United States fits within an interdependent world economy, especially now that we are both the world's largest home and host country to foreign direct investment.

As a world community, we need to develop an international set of principles on foreign investment and business conduct that can meet the challenge of improved global cooperation.

With total world stock of foreign direct investment amounting to over \$1.7 trillion, the numbers are impressive, but really do not tell the full story. For example, the sales by foreign-affiliated companies were estimated at over \$4-1/2 trillion in 1989, 50 percent higher than the value of world exports. But recent research on trade and investment data suggest that if the competitiveness of U.S. companies is calculated to include the foreign sales of affiliated enterprises, the positive impact would be around \$100 billion, or essentially enough to wipe out the U.S. trade deficit that is so widely used as evidence that U.S. business can no longer compete in the world economy.

The important concept here is that competitiveness in an integrated, interdependent global economy signifies more than can be represented by traditional trade statistics.

In the 1960s and 1970s, world trade fueled the international economy, and foreign direct investment followed exports. Today's world shows a different relationship between trade and investment. With over a trillion and a half dollars already invested in overseas facilities, foreign direct investment has begun to shape trade flows rather than vice-versa.

As investment becomes more important in shaping economic relations, at least four significant developments are emerging.

First, cross-investment among major capital-exporting countries is creating a rough balance between inward and outward direct investment in Western Europe, the United States and Canada. Japan remains an outlier in this system, with foreign investment outflows still far exceeding in-flows.

Nevertheless, commerce in the Northern Hemisphere's so-called Triad region is fast converging into a closely integrated, cross-national business system. This convergence could mean that an agreement on common investment principles is easier to reach now among nations that have a rough balance between home and host country concerns.

However, the more troubling implication is that countries lying outside the Triad structure risk being cut out of the global economy. The proportion of foreign direct investment received by developing countries fell over the 1980s from 25 percent to 19 percent. Only ten developing countries accounted for three-fourths of this investment, leaving the rest of the world increasingly isolated from the investment flows that are determining the future structure of international commerce.

The second development is the relative decline of foreign investment in raw materials and basic manufacturing compared to services in high technology operations. This development links the regulation of global finance directly to international investment structure.

Third, intercorporate alliances among multinational corporations have expanded exponentially. Driven by increasing costs, technology and marketing imperatives, even the largest MNCs now must forge cooperative ventures often with rival firms. These shifting alliances blur the national identity of individual products and often of the corporations themselves.

Fourth, international investment is assuming a greater political role. Communist regimes and other highly statist governments around the world have given way to democratization and privatization, but capitalism does not function well without capital.

Foreign private investment is seen as essential to spurring the economic growth needed to sustain these fragile democracies. Unfortunately, there does not appear to be enough private capital to go around, especially when industrialized country markets are still the most stable and attractive.

An international framework of investment principles could aid the optimal allocation of scarce capital. However, we currently lack such a mechanism. The need for improved cooperation in investment matters is evident from the increasing efforts to negotiate bilateral investment treaties and to insert investment-oriented clauses into regional trade agreements. The GATT has also been asked to negotiate so-called trade-related investment measures, not so much because they are trade issues, but because no comparable international institution exists to discuss foreign investment.

With the GATT already struggling to manage negotiations on traditional trade topics, we should all hope that burdening the organization with complex new issues that stray from its established expertise will not prove an unwise decision.

The OECD may have the best record of accomplishments on investment issues, including its 1976 declaration on international investment in multinational enterprises. However, this organization suffers from the inherent drawback that it is the rich nation's club, representing only the most advanced industrialized countries.

A more comprehensive and inclusive forum is necessary to address the many investment-related problems, whose origins and required solutions are truly international in scope.

Some of these problems are obvious. Pollution of the air and oceans respects no national boundaries and demands concerted global action. Production and production-related health, safety and quality issues are international concerns. Trade regulations applied at the border of a few industrialized countries, or assessed after an injury has been suffered, are insufficient remedies for the threats from defective gray market goods—hazardous pesticide residues—or the need to improve worker and consumer welfare around the world.

The scandal involving the Bank of Credit and Commerce International also illustrates the need for greater international cooperation on regulation and enforcement procedures.

Operating in 73 countries, with 14,000 employees of 83 nationalities, this institution reportedly affected 1.3 million people worldwide when it collapsed.

Finally, an agreed-upon framework, such as the proposed UN Code of Conduct on transnational corporations, is necessary to set out desirable international standards for both governments and enterprises. New nations are emerging from the former Soviet Empire, while countries in other regions of the world are undergoing similar restructuring.

Many new governments have little or no history of dealing with private foreign investment, often lacking even a basic legal and public policy infrastructure.

At the same time, there are growing numbers of new and less internationally experienced MNCs moving into the global arena. It's time to share the lessons of the past by setting forth a positive international framework for government policies and corporate conduct that can help guide these numerous new actors, promoting the benefits and minimizing the frictions that can arise from foreign direct investment.

Mr. Chairman, I commend you and the other Committee members for holding hearings such as this, which attempt to understand the present and discern the future.

In closing, I urge you to look out as broadly as possible in evaluating U.S. interests. The term, New World Order, means many things to many people. Nevertheless, it is clear that some type of new world will emerge out of the enormous changes now taking place.

Whether or not that new world will form itself into an order and whether we like the shape of the world system that emerges are very much open questions.

I, for one, am worried about the prospect of a world increasingly divided on the north-south axis, one where an economically integrated triad of rich nations becomes ever more isolated from the more numerous and populous poorer countries that require access to international trade and investment if they are to escape from poverty and underdevelopment.

U.S. leadership is urgently needed in its own self-interest and in the world community at large, to fashion a broadly inclusive international

Investment Trends and Emerging Issues

Total world-wide stock of foreign direct investment was conservatively estimated to stand at \$1.5 trillion in 1989. This figure is increasing constantly, with reported outflows reaching nearly \$225 billion in 1990.¹ These aggregate numbers do not come close to measuring the significance of foreign direct investment, however. Related effects, seldom considered as part of foreign investment measures, far exceed the impact of these indicators.

For example, sales by foreign affiliated companies were estimated at \$4.5 trillion in 1989, which was 50 percent higher than the value of world exports. Recent research on trade and investment data for 1986-87 suggest that, if the competitiveness of U.S. companies were calculated to include the foreign sales of affiliated enterprises, rather than just exports, the positive impact on the U.S. balance would be around \$100 billion, enough to wipe out all or most of the U.S. trade deficit which has been so widely used as evidence that U.S. business can no longer compete in the world economy. (See DeAnne Julius, 1991; National Research Council, 1992)

¹ Global economic statistics can be useful as very general indicators of magnitude and direction, but substantive differences of definition and serious deficiencies in data collection around the world make short-term precision impossible. The United States is generally acknowledged as a leader in data-gathering and accuracy, yet Commerce Department estimates of net private capital inflows in 1990 admitted to a "statistical discrepancy" of \$73 billion. A serious debate also exists over whether to use book value, current replacement cost, or market value as primary global investment measures. Under these circumstances, statistics should clearly be used as indicative measures of broad change over time rather than definitive calculations at a precise moment.

The important concept here is that competitiveness in an integrated and interdependent global economy signifies more than can be represented by traditional national trade balance statistics. In the 1960s and most of the 1970s, world trade fueled the engine of the international economy and foreign direct investment followed exports. Multinational corporations (MNCs) responded to the dictates of both market forces and the growth in governmental nontariff barriers by establishing overseas affiliates in order to remain competitive in foreign markets.

The world of the 1980s and 1990s shows a different trade and investment relationship. With over \$1.5 trillion of direct investment in foreign facilities already in place, and the growth of new foreign investment outpacing trade, foreign direct investment has begun to shape trade flows rather than vice versa. An increasing proportion of world trade now occurs either entirely within or related to the operations of global MNC networks.

At least 80 percent of U.S. trade is undertaken by MNCs, including U.S.-based firms, their foreign affiliates, and the U.S. affiliates of foreign-based MNCs. Over one-third of U.S. trade is intra-firm; that is, composed of international transactions that take place between parent corporations and foreign affiliates of the same global enterprise. This relationship extends outside the United States as well. Sales to third countries by the foreign affiliates of U.S. corporations amounted to over two-thirds of U.S. manufactured exports in 1988, with the majority of those sales also occurring on an intra-firm basis.

investment framework that can shape the future on our way to the next century.

Thank you.

[The prepared statement of Mr. Kline follows:]

PREPARED STATEMENT OF JOHN KLINE

My name is John Kline. I am Deputy Director of the Karl F. Landegger Program in International Business Diplomacy at the Georgetown University School of Foreign Service. I am pleased to appear today before the Joint Economic Committee to discuss foreign direct investment trends and the concept of an international framework for foreign investment principles and policy.

Mr. Chairman, foreign investment is the most important force shaping the world economy that will take us into the twenty-first century. During the latter half of the 1980s, foreign direct investment flows grew two and one-half times faster than exports. On average, investment inflows more than doubled the expansion of domestic investment around the world and exceeded the increase of domestic output by nearly four times. Regrettably, however, we are presently ill-equipped, as a nation and as a world community, to understand or manage properly this powerful engine of growth.

U.S. national interest now encompasses the concerns of being both the world's largest home and host country to foreign direct investment. We need a broader view of how the United States fits within an interdependent world economy and a deeper understanding of complex relationships between foreign investment, trade and financial activities, as well as between international economic and political issues. Looking ahead, the pressing challenges of the future can only be conquered through improved international cooperation. The development of an international set of principles on foreign direct investment and business conduct is an important step in this direction.

If investment has become more important to determining world trade and competitiveness patterns, how are current investment trends shaping that structure? At least four significant developments appear to emerge.

1. Cross-investment among major capital exporting countries is creating a rough balance between inward and outward direct investment in Western Europe, the United States and Canada; Japan remains an outlier in this system with foreign investment outflows still far exceeding inflows. Nevertheless, cross-national commerce in the northern hemisphere's "triad" is still converging into a closely integrated business system.

This development has two important implications. First, nations with a rough balance between "home" and "host" country concerns about foreign direct investment may be able to achieve agreement more easily on common investment principles. In the past, the predominant U.S. position as the "home" nation to the world's MNCs practically precluded an understanding of "host" country concerns. Current public sentiment about foreign investment in the United States has reversed this situation, throwing many traditional "host" country issues onto the congressional agenda. However, investment trends over the last two years suggest that the period of dramatic increases in foreign direct investment in the United States may be over as the nation stabilizes into a more balanced investment position similar to that of Western Europe.

The second and more troubling implication of this convergence trend is that nearly everywhere else, with the limited exception of a few newly industrializing countries, regions lying outside the triad structure risk increased isolation from global economic activity. The proportion of foreign direct investment flowing to developing countries has been decreasing, falling over the 1980s from 25 percent to 19 percent. Even more ominously, only ten developing countries accounted for three-fourths of the foreign investment, leaving the rest of the world increasingly isolated from the investment flows that are determining the structure of future commercial relationships.

2. Service sector investments, and low or non-equity arrangements such as franchising and long-term contracting, are altering the composition and nature of MNC business activities. Foreign investment in raw materials and basic manufacturing industries is declining relative to investment in services and high technology-based activities. Services accounted for nearly 60 percent of foreign investment flows in the late 1980s and have attained a majority share of the world's stock of foreign direct investment.

These developments increase the complexity of investment issues and link the regulation of global finance more directly to the international investment structure. Contemporary global business integrates investment, trade and finance, with investment decisions becoming a more determinative element. Maintaining a public policy separation between trade, investment and finance

issues is becoming increasingly artificial and potentially misleading. Attempts to measure and evaluate these segregated elements on a national territorial basis only compounds the problem, creating even more possibilities for misinterpretations.

3. Intercorporate alliances among MNCs have expanded exponentially. Driven by increasing cost, technology and international marketing imperatives, even large rival MNCs now forge cooperative arrangements in some business activities while retaining their overall competition. These alliances tend to change more often across a broader range of business functions than traditional joint ventures. This shifting array of cooperative arrangements blurs the national identity of individual products and often of the corporations themselves, leading to difficult public policy debates about national security and national economic competitiveness. Especially across Europe, Japan and North America, national territorial borders are losing their significance as mixed-nationality corporations (M-NCs) arise whose operations are driven by competitive forces that demand global efficiencies in research, development, production, marketing, and service activities.

4. International investment is fast assuming an enhanced and potentially crucial role in the political economy. Foreign private investment is seen as essential to creating the economic growth needed in many troubled world regions where new democratic institutions may otherwise fall victim to public dissatisfaction over domestic economic conditions. Communist regimes and other

highly statist governments in the developing world have given way to the forces of democratization and privatization, but capitalism does not function well without capital.

Many industrialized democracies, including especially the United States, appear anxious to turn inward with the end of the Cold War, portending serious limits to public foreign aid monies just as the need for such support increases worldwide. Hence, elected officials within the triad region can be heard almost daily extolling with renewed vigor the virtues of private foreign investment as the way to stimulate and transform restructuring economies without burdening national treasuries. Unfortunately, there does not appear to be enough private capital to go around, particularly when the most attractive markets still lie within the industrialized nations themselves where the same political leaders are also anxious to spur their own country's economic competitiveness.

The adoption of sound policies on foreign direct investment, placed within an international framework of foreign investment principles, could help encourage an optimal allocation of scarce capital resources. It is important to remember that world economic development needs are not solely a matter of finance capital, however. Other business elements closely associated with foreign direct investment are equally, or more, important. Corporate assets including technology and managerial know-how are often not easily capitalized in terms of investment statistics. Nevertheless, financial investments in a foreign project can be

wasted unless guided and enhanced by the technological and organizational expertise developed through years of learning experiences in MNC global networks.

Past Problems and Future Challenges

After decades of skeptical and sometimes hostile treatment abroad, private foreign investors might be excused if they viewed the present competition among nations for scarce private capital as a virtual dreamworld. However, policymakers must resist the temptation to focus solely on the conditions required to attract private foreign investment. A parallel consideration must be how to promote intergovernmental cooperation to cover follow-on operational issues. An international framework of investment principles and business guidelines must be constructed to address a range of new policy issues that can be dealt with effectively only through international public and private sector cooperation.

We currently lack a true international accord or institutional mechanism that establishes a framework for foreign investment policy and associated corporate activities. The need for such cooperation is evident from the increasing efforts to negotiate bilateral investment treaties and to insert investment-oriented clauses into regional trade agreements. Most notably, the current Uruguay round of negotiations under the General Agreement on Tariffs and Trade (GATT) is being asked to deal with so-called trade-related investment measures. In practical terms, these issues are being forcibly injected into the GATT framework, not so much because they are trade issues, but because no comparable

international institution or mechanism exists to cover foreign investment. With the GATT already clearly struggling to manage negotiations on traditional trade topics, we should all hope that burdening the organization with complex new issues that stray from its established expertise will not prove an unwise decision.

The Organization for Economic Cooperation and Development (OECD) boasts perhaps the best record of accomplishments on substantive international investments issues, including its Capital Movements Codes; ministerial Decisions on standards for national treatment, international investment incentives and disincentives; and a set of voluntary Guidelines for Multinational Enterprises. Further worthwhile progress in this institution is possible and, with the commitment of a bit more political will on the national treatment standard, realistically attainable in the near future. However, the OECD suffers from the inherent drawback that it is the "rich nations" club, essentially representing the interests and concerns of only the most advanced industrialized countries. A more comprehensive and inclusive forum such as the United Nations is necessary if the world community is to address a wide range of emerging investment-related problems whose origins and required solutions are truly international in scope.

Some of these problems are obvious. Pollution of the air and oceans demands concerted global action, as recognized by the theme of the upcoming Rio Conference. Investment-related development objectives and standards for corporate operations must be integral parts of any practical plan for improvement. The effect of

Chloroflourocarbon (CFC) production on the earth's ozone layer must be addressed in a manner that involves the developing countries and the corporations with production capabilities, or else the improvement gained from restrictions and reform efforts in the industrialized nations will be more than offset by increased usage in other regions of the world.

Additional international challenges involve production and product-related health, safety and quality control standards. Trade regulations applied at the border of a few industrialized countries, or assessed after an injury has been suffered, are insufficient remedies for the control of defective graymarket goods, hazardous pesticide residue, or the need to improve general worker and consumer welfare in affected countries everywhere.

The service sector presents a clear and growing need for expanded global cooperation on investment issues. Despite the rhetoric of the current GATT round, many services are not really traded in the sense of GATT relationships. They rely instead on foreign investment principles such as open or equal access, and nondiscriminatory national treatment of established enterprises, in order to compete in a foreign market.

Truly inclusive international cooperation is also necessary to improve coordination among the varied national criteria, regulations and enforcement procedures governing the operations of global enterprises. The Bank of Credit and Commerce International (BCCI) operated in 73 countries, with over 400 offices and some 14,000 employees of 83 nationalities. The collapse of this

institution reportedly affected some 1.3 million people worldwide, providing notable evidence of the reach and potential ramifications of insufficient coordination in the prevention and resolution of an international financial scandal. The same lesson emerges from the unforeseen build-up of official debt with private international banks that plunged many developing countries into economic and political crises in the early 1980s, confronting the world financial system with the prospect of global collapse.

Finally, an agreed-upon framework such as the proposed United Nations Code of Conduct for Transnational Corporations is necessary to set out desirable international standards for both governments and corporations that are conducive to productive, sustained and responsible business activity. New nations are emerging from the former Soviet empire while countries in other regions of the world are abandoning failed regimes and philosophies for new governments and economic approaches. In many cases, these countries and governments have little or no history of dealing with private foreign direct investment and lack the legal and public policy infrastructure to manage this task. At the same time, there is a growing multitude of new and less internationally experienced MNCs moving into the global business arena. It is time to share the lessons of the past, setting forth a positive international framework for government policies and corporate conduct that can help guide these numerous new actors, promoting the benefits and minimizing the frictions that can arise from foreign direct investment.

Foreign Investment and Restructuring Economies

Mr. Chairman, I recently completed a study on foreign direct investment in Chile, based on research conducted in that country under a Fulbright Research Fellowship. The results of this study will be published in the fall by Quorum Books under the title Foreign Investment Strategies in Restructuring Economies: Learning from Corporate Experiences in Chile. This case offers valuable lessons to countries facing the difficult struggle for democratization, privatization, and sustained economic growth. Chile and its MNC investors have built a productive new partnership against the historical backdrop of highly antagonistic relations, marked by charges of ITT's intervention in Chile's internal political affairs and the expropriation of numerous foreign investor properties by the Allende regime.

Now, some two decades later, the country offers one of the globe's most open and attractive foreign investment climates. A new democratic government is maintaining stable political and economic policies while increasing its spending on priority social needs in housing, health and education. Foreign investors responded to these policies by making Chile the per capita leader among Latin American nations in attracting foreign investment. MNCs used their global experience to help double the nation's exports while diversifying both product sales and overseas markets. Foreign investment provided up to one-third of the investment needed to achieve an average growth rate above 5.6 percent since the mid-1980s.

Occasional cases of inappropriate corporate conduct still arise, most notably in connection with executing approved debt-to-equity swaps, but these instances are the clear exceptions. In general, MNCs stand at the forefront of beneficial changes in the economy, including in such critical tasks as environmental protection and labor relations improvements.

It is important to note that this productive partnership did not develop overnight. Chile needed a full decade to get its policies right in terms of domestic fiscal reforms, foreign macroeconomic policies, and a democratization process that would attract a competitive array of foreign firms. Another important caveat is that Chile cannot maintain its development process into the next century without an international framework of supportive economic policies.

Chile's continued growth requires a successful GATT agreement, especially in agriculture on liberalization issues promoted by the Cairns negotiating group. Chile is also ready and qualified to enter into negotiations for a free trade agreement with the United States as part of the Enterprise for the America's Initiative. And the country could benefit from the development of an international investment framework to supplement the pattern of bilateral investment treaties that it has begun to negotiate. Other nations, many less fortunate and foresighted than Chile, could benefit even more from such an international investment accord.

U.S. and Global Interests in an International Investment Framework

The United States attempted to construct a new economic system in the immediate post-World War II years that could promote and guide global recovery and growth. The missing element in the resulting agreements and institutions was an accord establishing an international framework for investment relations. The seriousness of this omission was not readily apparent until the progressive expansion of foreign investment took hold in the following decades. Now, nearly a half century later, the world is again embarking in new directions with the end of the Cold War. The United States and the expanded world community have an opportunity to complete the unfinished and increasingly important task of building an international framework for cooperation on foreign investment issues.

The concept of a new world order means many things to many people. It is clear, however, that some type of new world will emerge out of the enormous changes now taking place. Whether or not that new world will form itself into an order, and whether we will like the shape of the world system that emerges, are very much open questions. I, for one, do not like the prospect of a world increasingly divided on the North-South axis; one where an economically integrated "triad" of rich nations becomes ever more isolated from the more numerous and populous poorer countries that require access to international trade and investment flows if they are to climb out of the depths of poverty and underdevelopment.

U.S. leadership is urgently needed, in its own self-interest and that of the world community at large, to fashion a broadly inclusive international investment framework to minimize frictions and encourage productive partnerships. An accord setting forth a broad framework of investment principles is not a full solution to emergent global problems, but it is a good place to begin.

REPRESENTATIVE HAMILTON. Thank you, Mr. Kline.
Mr. Cooney, please proceed.

**STATEMENT OF STEPHEN COONEY, DIRECTOR, INTERNATIONAL
INVESTMENT, NATIONAL ASSOCIATION OF MANUFACTURERS**

MR. COONEY. Thank you, Mr. Chairman.

Mr. Chairman and members of the Committee, I'm Stephen Cooney, director of international investment and finance for the National Association of Manufacturers. I'm extremely pleased, as always, to be invited to testify before this Committee.

My testimony will basically focus on the direct investment trends by U.S. companies abroad and the impact on U.S. trade and the economy.

I want to commend Karl Sauvart before this Committee, because he was really the research leader on the study that the UN did last year. I'm rather hesitant to talk on investment trends from other countries abroad when we have the heroic work which the UN did to try to pull together some of that data and compare countries across different regions.

So I'm going to focus on U.S. trends and investment abroad, and the impact on the U.S. economy.

The second introductory point I want to make, even after just commending Mr. Sauvart for his role and the role of the UN Center on Transnational Corporations in preparing that study, is to take issue with part of his statement. Mr. Sauvart fell into a fairly typical error, in talking about the relationship between investment and trade and exports and sales abroad.

It's done many times. People say that the sales of U.S. companies abroad are five, six, seven, ten times higher than our exports. And I've tried to do some of those numbers myself. There's a big problem, a big conceptual problem, I think, we all have to keep in mind.

Sales of U.S. companies abroad are double- and triple-counted. Exports are only counted once. Let me just give you a quick example.

If you take a U.S. company making semi-conductors abroad, let's say in Europe, and a U.S. company making disk drives in Europe. The semi-conductor maker and the disk-drive maker both sell their finished products to the computer maker. The computer maker then sells the computer.

The computer maker may sell the computer to another U.S. company, which may be included as part of another package. That's all added together as sales. And when you say, what are the sales of U.S. companies in Europe—all of their double and triple-counted items are included. Therefore, sales may be on the order of a trillion dollars a year, or something close to that, \$700 or \$800 billion a year.

When you count our exports to Europe, even though they have doubled in the past five years, that's only \$100 billion. Let's look at Boeing as a counterexample. Boeing Aircraft, in producing a 747, has subcontractors in 35 different states. Most of those subcontractors aren't even aware that they're exporting. They just produce products for Boeing. And then Boeing then takes the products and puts them in an airplane.

Now, the airplane could go to—I'm trying to think of an airline that's still in existence. They could sell that plane to American Airlines based in Dallas. That's not an export. They could sell the same airplane to British Airways, and then it is an export.

But the whole collection of parts only counts as an export one time when it goes abroad, when it is counted through the shipper's export declaration.

This is a fairly common problem that I've encountered, a difficult problem to deal with in measuring sales versus exports. Perhaps, we'll get into that. I don't want to bore the Committee on that point, but I think it's an important point to keep in mind.

It leads to another important perspective that we bring at NAM, which is the policy goal. We still think that the national balance of payments and the national trade deficit are very important, and there's still a policy goal at NAM to move this country in the direction of a trade surplus once again, or at least a balanced trade account.

The manufacturing community, the country as a whole, has done a very good job in that area. We've reduced the trade deficit by about \$100 billion in the past four or five years, but it's not enough.

The second thing, from the point of view of our members, our members find they have to invest abroad to stay competitive. When testifying three years ago before the Senate Finance Committee, our then chairman, Dick Heckert, of duPont, I think said it best. He said, if you're going to be a major player in a major market, you have to make an investment.

Surviving through exporting only is basically a niche role. You cannot really be a major player in an important market just through exports.

So we see exports and investment abroad as being very positively linked, and I've tried to point that out in the data that I presented here today. Let me just summarize the findings that we made in preparing this testimony for you.

The first is that, and not too many people know this, U.S. direct investment abroad has grown strongly in the past five years. Everybody looks at the rapid growth of foreign investment in the U.S., but, in fact, there has been a 73 percent increase in U.S. investment abroad. But most of this direct investment growth is attributable to reinvested earnings plus valuation adjustments.

If you look at that chart I produced, for example, at the end of the testimony, the first chart, you see this huge rise in U.S. investment abroad in 1987. You say, "what were they doing? Giving away money?"

No. The fact is that the dollar exchange rate fell and the value of everybody's investment abroad increased correspondingly because a \$5 million investment in Germany now became a \$10 million investment in Germany. And that's a big difference in the pattern from foreign investment in the United States. Most foreign investment in the United States in the past ten or fifteen years has been new money coming in, rather than reinvested earnings and valuation adjustments.

The second point is that the increase in U.S. direct investment abroad, including both fresh outflows and reinvested earnings, has been strongest in Europe, largely in response to the 1992 program, and I think also in response to a revival in growth in Europe in the late 1980s.

So it's interesting that even fresh investment has been stronger with respect to flows to Europe.

However, I see, from the statistics and from some further anecdotal evidence, support of a recovery of U.S. capital outflows and reinvested earnings in Latin America, especially Brazil, Mexico and Chile.

The third general point that I really wanted to make here today is that the increase in U.S. direct investment abroad has been directly tied to the U.S. export explosion. The share of U.S. exports going to affiliated companies abroad has increased in all regions—22 to 28 percent overall. Twenty-eight of our total exports go to our foreign-affiliated companies. The highest levels are areas where our investment has been the largest and where trade has generally been the highest or the freest.

In Canada, for example, in 1989, 48 percent of our exports went directly to our affiliates there.

In the EC, the level increased from 26 to 30 percent. But even in areas where the levels are relatively low, we have seen strong increases, primarily due to liberalized trade and investment policies. In Latin America, the ratio jumped from 16 to 26 percent. In Japan, the ratio jumped from 11 to 18 percent.

We're not happy yet with the policies in those countries. We want to improve them. But they're moving in the right direction.

And contrary to popular opinion on this, we do have a surplus in our trade relations between U.S. companies and their affiliates abroad. That surplus was \$8 billion in the last year for which full data is available for counting it, in 1989. But, in fact, if you take out the petroleum affiliates and just look at the manufacturing and distribution affiliates—I explain the technical reasons why I use those two categories in the statement—the surplus is \$16 billion.

Now, that's in comparison with an overall deficit of about, for 1989, \$110 billion. So we had a net surplus in trade by U.S. multinational companies with their affiliates, and a net deficit overall.

Which leads to my next point, the U.S. employment effects of increased U.S. direct investment abroad have been positive. The share of U.S. exports going to foreign affiliates increased, and the total value of such exports doubled during the 1980s.

The result was a gross gain of about 800,000 jobs, due to increased exports to those sources between 1982 and 1989.

Now during the same period, there was no net increase of employment in U.S. companies' foreign affiliates. I think that would surprise most people. In fact, there was a total loss of 19,000 jobs, which is more or less an insignificant number. But if you look only at manufacturing, there's a clear downward trend, a loss of 240,000 jobs at U.S. affiliates abroad in manufacturing.

The reason is very simple. Basically, our largest base is in Europe. Europe is a high-wage area, by and large. In most European countries

today, the wage levels are higher than the United States, on a dollar basis.

The same phenomenon of improved productivity that has led to a reduction of direct employment in manufacturing that occurred in the United States has occurred in Europe.

U.S. affiliates in Europe reduced manufacturing employment by 280,000 people during the 1980s. Offsetting that, to some extent, were relatively small increases in other areas of the world. So small, as I point out in the testimony, it's less than the normal monthly change in our domestic economy. I think we added a total of about 50,000 jobs in Latin America in manufacturing-only affiliates; 35,000 in the Far East; 19,000 total in Japan.

And if you look at the movement there, you find that what's really going on are more interregional shifts rather than jobs being exported to the United States.

I point out, for example, in the electronics industry, U.S. companies cut 30,000 jobs in the Far East, while increasing employment in affiliates by 40,000 jobs in Mexico, which is one of our rationales, by the way, for supporting the North America Free Trade Area. We think that bringing that type of employment closer to the United States, rather than doing it in the Far East, will have a big spill-over effect to the domestic export economy in America.

Finally, on the last point, the question of the UN code of conduct on transnational corporations. This is something that NAM has always supported in principal, but we are concerned that an unbalanced code would encourage continuation of interventionist trade-restricting policies which have frequently been used by foreign governments to reduce U.S. exports.

In particular, I would say that, at this point, the transnational code should reflect progress made over the past ten years through the OECD and U.S. bilateral investment treaties, and, prospectively, through the North American Free Trade Agreement and GATT negotiations with the Dunkel draft, in establishing restraints on governments in treatment of companies and investment flows as they impact trade.

I discuss this a little more fully in my written statement. I'd be happy to take any questions on that later.

Thank you.

[The prepared statement of Mr. Cooney follows:]

PREPARED STATEMENT OF STEPHEN COONEY

Mr. Chairman and members of the Committee, I am Stephen Cooney, Director of International Investment and Finance for the National Association of Manufacturers. I am extremely pleased to be invited to testify on this subject today. My testimony will focus on recent direct investment trends by U.S. companies abroad, and the impact on U.S. trade and the U.S. economy. I will also conclude, as requested, with comments on international investment codes and principles, particularly the proposed UN Code of Conduct for Transnational Corporations.

Let me first summarize the major points in this testimony.

- U.S. direct investment abroad has grown strongly in the past five years - a total 73 percent increase. Most of this growth is attributable to reinvested earnings plus valuation adjustments, not fresh outflows from the United States.
- The increase in U.S. direct investment abroad (DIA), and also in both fresh outflows and reinvested earnings, has been strongest in Europe.

- The increase in U.S. DIA has been directly tied to the U.S. export explosion. The share of U.S. exports going to affiliated companies abroad has increased in all regions. In contrast with the overall U.S. trade deficit, the latest Commerce Department survey figures show an annual U.S. surplus of \$8.4 billion in direct trade with U.S. foreign affiliates.
- The U.S. employment effects of increased DIA in the 1980s have been positive. The share of U.S. exports going to foreign affiliates increased, and the total value of such exports doubled during the 1980s. The result was a gross gain of about 800,000 jobs in the United States. During the same period, there was no net increase of employment in U.S. companies' foreign affiliates, nor any net increase in the share of U.S. imports from such affiliates. Direct employment by U.S. manufacturing affiliates abroad fell by 240,000 employees.
- All international investment agreements should reflect recent progress in achieving acceptance of the principle that trade-distorting and trade-restricting national investment rules must be reduced and subjected to international discipline. NAM has always accepted in principle the concept of a UN Code of Conduct on Transnational Corporations. But we are concerned that an unbalanced code would encourage continuation of interventionist, trade-restricting policies which have frequently been used by foreign governments to reduce U.S. exports.

In the balance of my statement, I would like to discuss these issues in more detail.

Overall Growth in U.S. Direct Investment Position Abroad

The U.S. direct investment position abroad has increased about 73 percent over the past five years, from \$260 billion at the end of 1986 to \$451 billion in 1991, on an "historical cost" basis (note that the number for 1991 is incomplete, and based only on a preliminary balance-of-payments "capital flow" analysis).

Most of the increase in this investment has come from locally reinvested earnings, or from increases in investment valuations, particularly due to exchange rate changes in Europe. "Fresh" investment flows (equity flows and intercompany debt transactions) have increased after being low or negative in the early and mid-1980s; but as shown in the graph in Figure 1, total fresh investment outflows have typically been about half the level of reinvested earnings since 1987.

This pattern contrasts sharply with the sourcing of the increase in foreign direct investment (FDI) in the United States. Most of the growth in FDI has come about through fresh investment flows. This is typical in situations when there is a lot of first-time investment, through new investments or acquisitions. Earnings for new investments tend to be weak or negative. As I testified before the Senate Commerce Committee last November, the recent and much-publicized fall in the rate of FDI is due to a combination of developments affecting foreign investors in both the United States and their home markets. Many recent investments have lost money heavily; the U.S. recession and slow growth period of 1990-91 has meant fewer earnings to reinvest. Meantime, negative financial market developments, especially in the United Kingdom and Japan, have also reduced the amount of capital available for fresh inflows. The result has been a net slowdown in the rate of growth of FDI. U.S. direct investment abroad is once again higher than foreign investment here, even on the basis of conservative historic-cost estimates.

Most U.S. DIA Increase Occurs in Industrial Countries - Strongest Growth in Europe

Most of the growth in U.S. DIA has occurred in the developed, industrial countries, according to Commerce Department statistics. This also confirms the analysis published last year by the UN's Center on Transnational Corporations, which found that most international investment flows were originated by and occurred within the industrial "triad" of Europe, North America and Japan. However, from the U.S. point of view, this finding is qualified by a relative strengthening in the U.S. investment position in parts of Asia and Latin America in 1989-91 (see especially the table in Figure 1).

In 1986-1991, using the flow estimates for the latter year, U.S. DIA increased by \$190 billion. Of that increase, approximately \$100 billion was in Europe, almost all of it in the member countries of the European Community (see detailed analysis in Figure 2). Buoyed by exchange rate changes that increased the value of existing investment, the U.S. DIA position grew substantially in virtually every EC member state. However, as shown in the table in Figure 1, fresh U.S. outflows to the EC have also generally been high compared to other regions.

Last year, however, there was apparently a substantial drop in the growth of the U.S. DIA position in Europe, though the increase was still larger than all other major destinations combined. The latest report in the Commerce Department's *Survey of Current Business* on U.S. companies' foreign capital spending plans confirms this slowdown in new U.S. investment in Europe. Growth in capital spending by U.S. majority-owned affiliates averaged well over 20 percent per year in the late 1980s through 1990. The rate of spending growth slowed to an estimated 4 percent in 1991, and latest plans indicate only another 4 percent growth this year. By actual dollar amounts, however, the planned growth of such U.S. investment in Europe still

far outstrips the rest of the world; the currently planned \$36 billion of new investment in 1992 would account for over 70 percent of planned spending for U.S. majority-owned direct investors worldwide. Another phenomenon that we have seen in the wake of the dynamic EC growth and the EC-92 Single Internal Market program is a wave of interest in investments by small and medium-sized companies. Many of these companies are establishing a distribution or production facility for the first time.

There is considerable variation among individual European countries as well, though U.S. DIA grew in every country:

- U.S. DIA in the **United Kingdom**, already the largest destination in Europe, doubled from \$35 billion to an estimated \$70 billion between 1986 and 1991. U.S. investment increased in most types of activity, although the largest amount of growth occurred in financial, banking and insurance services. By 1991, the United Kingdom was virtually even with Canada as the top national destination for U.S. DIA, at least in terms of historic book value.
- **Germany** is the second-largest investment destination in Europe with a 1991 estimated total of \$31 billion. But the rate of growth in U.S. investment there has lagged behind all other major EC countries. The U.S. position grew about 50 percent or \$10 billion, but during the same period U.S. investment tripled in Spain and doubled or nearly doubled in the U.K., Netherlands, France, Italy and Belgium. Informal discussions with a number of U.S. investors or potential investors indicate that the combination of high German wage levels with rigid labor market laws and policies have discouraged increased investment, despite strong local market growth and the effects of unification on increasing the total size of the German market.

- Because of their strategic position at the center of the EC market and their closeness to Germany, the Netherlands and Belgium have also shown strong increases in U.S. investment. U.S. DIA in the Netherlands more than doubled to nearly \$25 billion, allowing that country to overtake Switzerland as a U.S. investment location in Europe, and making it a strong third to the U.K. and Germany.
- Profiting in part from a liberalization in French inward investment laws, the U.S. DIA position also more than doubled in France, from \$9 billion to \$18.4 billion. France's central location has also been attractive to many companies considering new European production facilities.
- By contrast, Spain has benefited from competitive wage rates, its new EC membership and a fairly sizeable local market to offset its peripheral location. It has attracted a high rate of growth of U.S. investment - from a DIA position of just \$2.7 billion in 1986 to about \$7.7 billion last year.

Direct Investment Position Also Doubles in Japan and Far East

Although Japanese investment here has been a controversial topic and has increased at rapid rates, it is less well known that U.S. DIA in Japan has also doubled since 1986. At \$22.6 billion, the estimated U.S. DIA in Japan is only outranked today by the positions in Canada and the four largest European destinations. Of course, this figure has been increased by valuation changes. The table in Figure 1 also shows that since 1987 reinvested earnings have increased at just over \$1 billion per year, while fresh capital flows on a net basis have been almost zero.

Given the size and potential gain from U.S. investments in Japan, the U.S. DIA total is actually rather anemic, even though it is the largest foreign investment position in Japan.

Industrial investors have indicated such constraints as the difficulties of acquiring Japanese companies outright, conditions placed on joint venture investments (including technology transfer requirements), difficulties of arranging product distribution, and collusive market sharing arrangements in Japan as major impediments to increasing U.S. investment.

We at NAM have noted that despite strong U.S. export growth to Japan in recent years, such de facto investment constraints have prevented an even more rapid expansion of U.S. exports and a resultant reduction in the bilateral U.S. trade deficit with Japan. This is one reason that NAM has strongly supported the U.S.-Japan Structural Impediments Initiative. The SII is designed to monitor some of these problem areas for both U.S. investors and U.S. exporters.

U.S. DIA has also increased strongly in some of the other Asian markets, especially because of reinvested earnings in the newly industrializing countries. As shown in Figure 2, the so-called "four tigers" of Hong Kong, Singapore, Taiwan, and Korea have attracted most of the new investment, and the U.S. stake in each case has doubled since 1986. The total increase in the U.S. investment position in these countries has been almost \$10 billion since 1986. Thailand and Malaysia have also grown strongly, but at lower rates; these countries have both been surpassed by Taiwan and Korea in the past five years. Growth has been slowest - well below the general rate of the U.S. increase - in Indonesia, the Philippines and also in Australia, listed separately here. Most surprisingly, especially in view of sensationalist headlines about "billions" of new U.S. investment, the total DIA position in China remains only around the \$300 million, the lowest figure of any major market in the region. It seems that much of China's investment and export drive, which has had such an impact on trade with the United States, is not fueled by U.S. direct investment but by investment from third countries.

Slow Growth in Canada and Most Developing Country Regions

Canada remains the largest single U.S. direct investment destination, though its nominal lead over the U.K. has virtually disappeared. The U.S. DIA position has increased just over a third to about \$70 billion since 1986, but we should remember that U.S. DIA in Canada has not benefited from currency appreciation trends as strong as those in Europe and Japan. The performance of reinvested earnings, averaging about \$3 billion per year, was solid until earnings were hit by the recession in 1990; the low position change figure in 1991 also implies that complete data will show low or negative reinvested earnings again for last year. Fresh outflows for 1991 may also be low or negative, after a stronger performance in 1990. Although the U.S. investment position in Canada has continued to increase since the Free Trade Agreement went into effect in 1989, poor economic growth conditions so far have seemed to discourage any major U.S. DIA surge.

The U.S. DIA position fell substantially in most of Latin America in the early and mid-1980s, in the wake of the debt crisis, hyperinflation, consequent currency depreciation and poor growth prospects. A turnaround including positive performance in both new investment and reinvested earnings appears to have been established starting in 1989 (see especially the Table in Figure 1). If we exclude Panama, which is primarily used by U.S. investors as an offshore financial center, the net change in U.S. DIA in the region is between 10 and 15 percent or about \$5 billion since 1986.

The major gainers have been the two largest markets, Brazil and Mexico. The value of the U.S. DIA position in Mexico since 1986 has more than doubled, from \$4.6 billion to \$11.6 billion. A recent Commerce Department internal analysis indicates that the United States remains by far the largest single foreign investor, though it may have lost some ground to

European investors; the Japanese relative position actually declined between 1980 and 1990. U.S. DIA in Brazil also grew strongly, nearly doubling from \$9.3 billion to \$16.3 billion. There is some indication that the recent strengthening of the U.S. position is linked to liberalizations in both trade and investment laws and policies in Brazil.

Chile has been the next largest gainer over the five years, as U.S. DIA grew from a value of only \$300 million to \$1.6 billion, mainly due to Chile's successful debt/equity swap program. Argentina and Venezuela have demonstrated smaller, but positive, rates of growth, but the value of U.S. DIA in Colombia has declined by about one-third.

There has been little significant change in other regions of the world. In the wake of the bilateral FTA with Israel, the U.S. DIA position has doubled, but is still under \$1 billion. There has been little growth elsewhere in the Middle East and a substantial fall in Africa. In South Africa, the value of U.S. DIA declined from over \$2 billion at the beginning of the 1980s to less than \$1 billion ten years later. This, of course, has been due to dramatic local currency depreciation and the large number of outright disinvestments in the face of official U.S. sanctions. U.S. DIA appears to have resumed a slow rate of growth in 1991.

Positive Effects of Direct Investment Trends on the U.S. Economy

From the 1982 and 1989 official Commerce Department benchmark surveys, it appears that increased U.S. investment abroad has had a strong positive impact on U.S. exports and domestic growth, with no downside effects.

The trade effects as surveyed in the benchmark data are summarized in Figure 3. I have compared "nonbank affiliates of nonbank U.S. parents," because the final 1989 tables for all affiliates are not yet complete. There are some technical problems in comparing trade data in

the Commerce department benchmark surveys with general U.S. trade data, but this data can be used to get a good idea of the major trends.

The most important point is that in every major region the share of U.S. exports going to foreign affiliates was higher at the beginning of the 1990s than at the beginning of the 1980s. Overall, the increase was from 22 percent to 28 percent (see Figure 3). This reinforces our view at NAM that U.S. direct investment in foreign markets is an increasingly important beachhead for U.S. exports. Our affiliates abroad are our own best customers.

Another interesting point is that while the relationship is still strongest in those regions that are historically more open to U.S. exports, big gains were registered in this ratio in most regions. Fully 48 percent of U.S. exports to Canada go to local affiliated companies, and this figure increased seven points from 1982. In Europe, the share rose from 26 to 30 percent. Japan and Latin America showed even stronger relative changes in the ratio of exports to U.S. companies' affiliates abroad - from 11 to 18 percent in Japan, and from 16 to 26 percent in Latin America.

800,000 new jobs were created on a gross basis in the 1980s by higher levels of exports to foreign affiliates of U.S. companies. Total exports to such affiliates more than doubled, from \$47 billion in 1982 to \$102 billion by 1989. Allowing for the impact of inflation and productivity gains in reducing the number of estimated jobs created by each billion dollars of exports, and using the latest Commerce Department figures relating jobs to exports, I would calculate that the number of jobs directly related to exports to U.S. affiliates abroad has increased from 1.165 million in 1982 to 1.950 million by the end of the 1980s.

I also see no net adverse impact on U.S. employment from the increase in U.S. direct investment abroad. Imports from U.S. affiliates have increased, but at a slower pace than

exports. A recent Commerce Department analysis of employment at U.S. affiliates, published in the October 1991 *Survey of Current Business*, shows direct employment by U.S. foreign affiliates virtually flat since 1982, and a reduction in employment since 1977.

In focusing on only the most recent period, we find U.S. companies' foreign affiliates total employment down by 19,000 in the period 1982-89. But employment in manufacturing affiliates is down by a total of 240,000 jobs. Focusing more closely on specific countries and industries, we can see that transfer of jobs may be occurring between regions, rather than via outsourcing from the United States. For example, between 1982 and 1989, U.S. affiliates actually cut employment in electrical and electronics industries in Asia and the Pacific by 31,000 jobs - and added 40,000 jobs in this sector in Mexico.

Overall, the 1982 and 1989 benchmarks show that for manufacturing affiliates, the big change was a cut of 280,000 jobs in Europe, despite the large increase in the value of the U.S. investment presence. Jobs in Canada were stable, and small gains were recorded in Latin America (50,000 jobs), Asia/Pacific (35,000) and Japan (19,000). These latter increases over seven years are marginal. They are less than the typical monthly variations in manufacturing employment in the United States. So far, these changes do not give any indication of a massive export of jobs to U.S. manufacturing affiliates abroad.

The same picture emerges with regard to U.S. imports from overseas affiliates, and the balance of trade with these affiliates. In fact, despite large overall U.S. trade deficits, this balance has always been positive, if we exclude trade with U.S. petroleum affiliates. But the U.S. surplus strengthened between 1982 and the end of the decade.

The trade between U.S. affiliates defined as "manufacturing" was virtually balanced in both 1982 and 1989. However, if we add in trade with wholesale and retail distribution

affiliates, under which many U.S. manufacturers' affiliates are classified under the primary-line-of-business rule, we see a \$10 billion U.S. surplus in 1982, increasing to \$16.7 billion in 1989. About half of this 1989 surplus was offset by an \$8.3 billion deficit in trade with U.S. petroleum affiliates. This deficit is to be expected because the primary function of these affiliates is to locate and produce petroleum products for the U.S. and world markets.

The overall share of imports from U.S. affiliates abroad did not increase in the 1980s. And the only region to show a substantial increase in the ratio was Europe, a high-wage source. Between 1982 and 1989, U.S. imports from affiliates in Europe increased from 12 to 16 percent of total imports from Europe. Again, there is no evidence of massive outsourcing of production to low-wage affiliates.

International Codes and Agreements Should Reflect Progress in Agreeing to Discipline Trade-Distorting Investment Policies

The final part of this testimony examines the question in the letter of invitation regarding "...an international set of principles...such as...the proposed United Nations Code of Conduct for Transnational Corporations."

NAM has supported the principle of such codes, if we believed that they provided balanced obligations between governments and companies, and if code principles were compatible with a market-oriented trading system. For example, NAM supported the U.S. government decision to sign the 1976 OECD Code of Conduct for Multinational Enterprises and, along with other U.S. business organizations, urged that our members adopt these principles. This code was accompanied by a pioneering "Declaration on National Treatment" by OECD member governments, which remains the best multilateral policy statement on non-discriminatory treatment of foreign investors by host countries.

The UN Code of Conduct ("TNC Code"), on which negotiations began in 1977, has never achieved agreement on such a balance. This exercise has become almost a moribund affair, discussed only at annual reviews by the UN Economic and Social Committee (ECOSOC). Most developing countries are now more interested in establishing trade and investment policies that attract foreign investors. But the UN negotiating structure makes it difficult for the less developed countries' (LDC) negotiating bloc to shift long-held principles that they should restrict and control investment for their own trade benefit and in support of import substitution policies.

As a recent study for Investment Canada commented:

The emphasis on controlling behavior of transnational companies has, in large part, been the cause of the stalemate and reflects the continued preoccupation by some LDCs with advancing a largely discredited model of economic development.

At NAM we have generally maintained the position that U.S. policy toward trade and investment issues in bilateral, regional and multilateral negotiations should be consistent and compatible with market-oriented trade policies. Given the strong link between U.S. exports and investment positions abroad, we believe it to be in the national interest that trade-distorting investment policies be kept to a minimum. We make a general exception in this area for national security questions. Our views are in general accord with the presidential policy statements on international investment of September 1983 and December 1991.

Over the past ten years, the United States has been broadly successful in seeking greater acceptance for this approach to international investment policy. NAM has strongly supported these policy initiatives at several levels.

Bilateral Investment Treaties (BITs). U.S. policy in these agreements has been to seek four major elements of investor protection:

-- Control over conditions of expropriation and nationalization, including prompt, adequate and effective compensation of the investor.

- Dispute settlement procedures that allow investors to seek international arbitration, in accordance with international law.
- Freedom to transfer earnings, including the right to pay for imported materials and components and to repatriate profits.
- National treatment of the foreign investor, meaning treatment on terms no worse than accorded nationally-owned companies and in accordance with international law. This is also interpreted to mean that host governments refrain from the use of trade "performance requirements" as a condition for permitting and regulating an investment.

Twenty BITs on this basis have now been signed with an increasingly broad range of trading partners from among the LDCs and the eastern European countries. They include Argentina, Poland, Czechoslovakia, Hungary and Egypt.

North American Free Trade Agreement (NAFTA). As part of the 1989 FTA with Canada, the United States achieved a major liberalization of controls under the Investment Canada Act, as they applied to inward investors of U.S. origin. In expanding the North American free trade concept to include Mexico, NAM has indicated that it also supports a full liberalization of Mexican investment policies. We believe that Mexico at the very least should accept the four major BIT principles outlined above as they apply to U.S. investors in Mexico, if Mexico is to receive free trade access to the U.S. market.

Investment Issues in the GATT. The NAM has consistently supported the U.S. government position that GATT rules should be expanded to include coverage of a wide range of trade-related investment measures (TRIMs). The draft GATT negotiating text produced under the authority of GATT Secretary General Arthur Dunkel ("Dunkel draft") in December 1991 establishes discipline over such policies in a number of important ways:

- It outlaws or constrains use of a wide range of specified TRIMs.
- It would require member countries to consult with the GATT before resorting to balance of payments measures that are frequently used to restrict trade and payments transfer activities of foreign investors.
- It strengthens discipline over the use of subsidies, and specifically bans performance requirements as a type of subsidy.

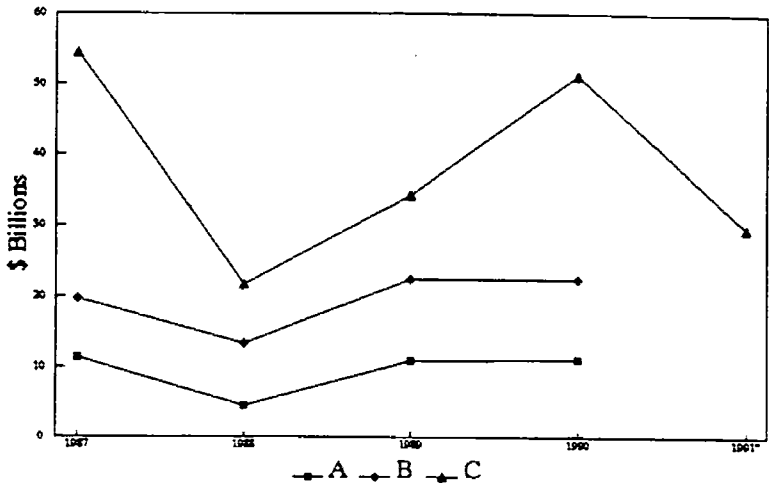
NAM believed that the Dunkel draft was a major step forward in the GATT negotiations. We supported continued negotiation on the basis of this text, though we do not support all of its provisions. In particular, we support the approach of this proposal in establishing firm control over national policies that seek to distort trade flows by the regulation of inward investment.

These views on BITs, NAFTA and the GATT negotiations indicate that NAM would only support a comprehensive TNC Code that accepted the same principles. A February 1992 report of the UN Commission on Transnational Corporations outlined "settled issues" in defining a UN "framework" for transnational corporations, and "issues on which consensus is to be achieved." NAM does not even agree with all the points in the list of "settled" issues. For example, neither private U.S. industry nor the U.S. government has ever accepted the concept of permanent sovereignty over national resources, which is listed as a settled issue. The "settled issues" also do not include an adequate statement of investor rights in cases of expropriation and nationalization. The UN study then indicates other areas where a "consensus" may be found in establishing a loose framework for regulating transnational corporations, a framework endorsed by governments which such corporations would "voluntarily" accept.

But it is our view that the U.S. government should not be party to any international code that does not explicitly incorporate the provisions and policies of national treatment, as contained and defined in the OECD Code, the BITs and the prospective outcomes we are seeking in the

Figure 1:

DIRECT U.S. INVESTMENT ABROAD 1987-1991



A - "Fresh" Capital Outflows

B - Reinvested Earnings

C - Total DIA Change

*1991 preliminary flow data only

By Host Countries and Regions:

	1987	1988	1989	1990	1991*
EUROPE					
"Fresh" Capital Outflows	2.6	3.1	7.0	2.4	
Reinvested Earnings	10.1	6.0	10.9	12.1	
Total DIA Change	29.7	6.6	18.1	29.0	14.9
JAPAN					
"Fresh" Capital Outflows	0.4	-0.1	-0.5	0.4	
Reinvested Earnings	1.1	1.4	1.0	1.1	
Total DIA Change	4.2	2.3	0.5	2.5	1.6
OTHER ASIA					
"Fresh" Capital Outflows	-0.3	0.3	0.2	-0.1	
Reinvested Earnings	1.5	0.9	2.1	2.6	
Total DIA Change	1.7	1.5	2.7	3.5	3.7
CANADA					
"Fresh" Capital Outflows	3.0	0.3	-1.5	2.5	
Reinvested Earnings	3.2	2.3	3.3	-0.2	
Total DIA Change	7.2	4.9	2.9	2.9	1.2
LATIN AMERICA (ex. Panama)					
"Fresh" Capital Outflows	-0.4	-1.0	0.9	1.4	
Reinvested Earnings	1.4	1.8	2.7	2.2	
Total DIA Change	1.8	1.5	3.5	3.5	4.9

Source: NAM from U.S. Commerce Department,
Survey of Current Business and unpublished data.

Figure 2:

U.S. DIRECT INVESTMENT POSITION ABROAD
1986-1991

(All figures in \$ billions - yearend basis)

1986 1991*

1986 1991*

	1986	1991*		1986	1991*
EUROPE (total)	120.7	219.3	CANADA	50.6	69.7
-- United Kingdom	35.4	69.4			
-- Germany	20.9	31.0	LATIN AMERICA (tot.)	36.9	49.7
-- Netherlands	11.6	24.6	-- Brazil	9.3	16.3
-- France	9.0	18.4	-- Mexico	4.6	11.4
-- Italy	7.4	13.5	-- Argentina	2.9	3.3
-- Belgium	5.0	9.8	-- Venezuela	2.0	2.8
-- Ireland	4.3	7.9	-- Colombia	3.3	2.1
-- Spain	2.7	7.7	-- Chile	0.3	1.6
-- Denmark	1.1	1.8	-- Panama	5.5	9.4
-- Luxembourg	0.8	0.9	-- Other Central America	0.5	1.0
-- Portugal	0.3	0.8			
-- Greece	0.1	0.4	MIDDLE EAST (total)	4.9	5.6
EC TOTAL	98.6	186.1	-- Saudi Arabia	2.5	2.9
-- Switzerland	16.4	24.4	-- Israel	0.4	0.9
-- Norway	3.2	4.2			
-- Sweden	0.9	1.6	AFRICA (total)	5.5	4.4
JAPAN	11.5	22.6	-- South Africa	1.5	1.0
			-- Egypt	1.8	1.5
OTHER ASIA (total)	15.3	28.4			
-- Hong Kong	3.9	7.7	WORLD TOTAL	259.8	451.0
-- Singapore	2.3	4.7			
-- Indonesia	3.2	4.0			
-- Taiwan	0.9	3.0			
-- Korea	0.8	2.3			
-- Thailand	1.1	1.9			
-- Malaysia	1.0	1.7			
-- Philippines	1.3	1.7			
-- India	0.4	0.8			
-- PR China**	0.2	0.3			
AUSTRALIA	9.3	15.7			

* 1991 preliminary flow data only

**China data through 1990 only

Source: NAM from U.S. Commerce Department,
Survey of Current Business and unpublished data.

Figure 3:

U.S. TRADE WITH FOREIGN AFFILIATES OF U.S. COMPANIES

MAJOR COUNTRIES OR REGIONS	1982 - EXPORTS					1982 - IMPORTS				
	All Affiliates Total % \$ Bils. Share of US Exps		By Type of Affiliate: Mfg. Petrol. Dist. (\$ Billions)			All Affiliates Total % \$ Bils. Share of US Imps		By Type of Affiliate: Mfg. Petrol. Dist. (\$ Billions)		
CANADA	15.5	41	12.8	0.2	2.3	21.4	46	16.4	3.8	0.4
EUROPE	15.6	26	8.2	0.4	6.7	6.1	12	3.2	1.9	1.0
JAPAN	2.3	11	1.1	0.1	*n/a	3.9	10	3.3	*n/a	*n/a
OTHER ASIA/PACIFIC	6.1	18	3.7	*0.3	*1.1	7.8	20	*4.5	*2.2	0.5
LATIN AMERICA**	5.5	16	4.0	0.4	0.8	7.5	20	3.0	3.5	0.3
MIDDLE EAST	0.6	3	0.1	0.1	0.3	1.8	15	0.1	1.6	0.0
WORLD TOTAL	46.6	22	30.4	1.9	13.4	51.4	21	31.1	15.8	2.7
	1989 - EXPORTS					1989 - IMPORTS				
	All Affiliates Total % \$ Bils. Share of US Exps		By Type of Affiliate: Mfg. Petrol. Dist. (\$ Billions)			All Affiliates Total % \$ Bils. Share of US Imps		By Type of Affiliate: Mfg. Petrol. Dist. (\$ Billions)		
CANADA	38.2	48	33.1	0.4	4.1	40.1	46	34.8	3.6	0.9
EUROPE	30.1	30	17.0	0.5	12.0	15.8	16	10.6	*n/a	2.6
JAPAN	8.2	18	3.1	*n/a	4.9	6.9	7	6.1	*n/a	0.8
OTHER ASIA/PACIFIC	11.9	19	6.6	0.5	4.7	16.0	16	11.0	*n/a	3.5
LATIN AMERICA**	12.5	26	9.8	0.8	1.4	11.9	21	9.6	0.8	0.6
MIDDLE EAST	0.5	4	0.1	0.1	*n/a	0.7	5	0.3	*n/a	*n/a
WORLD TOTAL	102.1	28	70.1	2.5	27.4	93.7	20	72.4	10.7	8.4

* Some or all data unavailable due to business confidentiality reasons.

**Latin America and other Western Hemisphere.

Source: NAM from U.S. Department of Commerce, Bureau of Economic Analysis
1982 and 1989 benchmark survey data on U.S. direct investment abroad and
Commerce Department trade data.

REPRESENTATIVE HAMILTON. Mr. Cooney. Thank you.
Mr. Ray, please proceed.

**STATEMENT OF EDWARD J. RAY, PROFESSOR,
DEPARTMENT OF ECONOMICS, OHIO STATE UNIVERSITY**

MR. RAY. Thank you, Mr. Chairman. I'm Ed Ray, professor of economics and associate provost at Ohio State University.

I'm reminded of John Kenneth Galbraith's observation that, as a university professor, one learns to take two hours to make a point. I think my only hope of hopefully making several points in the few minutes allotted to me is if I excerpt from the written statement that I've provided.

The comments that I'm going to make are based on empirical work on foreign direct investment in the United States over the period, 1979 to 1988, primarily. And that's the period of greatest activity.

You have already heard comments to the effect that foreign direct investment activity globally is quite concentrated. That's true of foreign direct investment in the United States as well. It's dominated by inflows from Europe, Canada and Japan.

It's also interesting that, in a sense, it breaks down in terms of equity versus plant and plant expansion investment in very dramatic fashion.

It turns out that, in fact, something on the order of 91 percent of foreign direct investment activity during this period in the United States, overall investment activity, was in the form of equity investment, as opposed to plant and plant expansion investment. And in manufacturing, 84 percent was in the form of equity, as opposed to plant and plant expansion investment.

The only observation I'd want to make in that regard, since people like to make assertions about motives for foreign direct investment activity, is that while the European community accounted for 48 percent of all equity foreign direct investment activity in the United States, and 60 percent of manufacturing equity FDI, Japan accounted for 42 percent of overall plant and plant expansion FDI in the United States, and 49 percent of manufacturing plant and plant expansion FDI in the United States.

If one wants to make the simple-minded argument that, in fact, it's plant and plant expansion investment that we're most positive about, as opposed to equity investment, then it seems, at least on this issue, the Japanese are on the right side.

Moving along, there was some observation about whether foreign direct investment is a market phenomenon or an adaptation to the regulation of international trade through protectionist measures in the United States and abroad. And there is some information on this point. Let me read.

To some extent, FDI activity provides foreign producers with a means of capturing local sales that may or may not be captured through export activities. It has been suggested that FDI activity may occur either to circumvent existing trade barriers or in anticipation of future restrictions within the target market.

The traditional tariff and nontariff trade barrier jumping argument for FDI activity would lead one to expect to find evidence that equity and/or plant expansion creation activity would be positively related to tariff and/or NTB protection.

For most of the source areas considered, those relationships were negative or insignificant.

Given the intensity of Japan-bashing in the United States, one might expect to find evidence of Japanese FDI activity in anticipation of a widening in the scope of protectionism in the United States incorporating industries with rapidly deteriorating trade balances. But there is no evidence that any of the regions investing in the United States have targeted investment toward industries in which the United States appears to be losing its competitive position in world markets.

One possible explanation of equity FDI activity is that it might be motivated by attempts to capture quasi-rents, or higher than normal profits associated with organizational skills within the acquiring parent; for example, in management-intensive industries. And, in fact, empirical tests indicate that equity FDI activity by each of the major sources is positively related to the management intensity of production in an industry.

In contrast, one could hypothesize that plant creation expansion FDI activity would tend to be associated with industries that provided higher than normal profits in return for real capital investment that embodies high-tech methods of operation. Such industries might be expected to exhibit economies of scale and to be relatively R&D-intensive operations.

While there are exceptions, it is interesting to note that plant creation expansion FDI activities in the United States, overall, and for Japan, in particular, are positively associated with industries characterized by scale economies and intensive R&D expenditures.

Given the dominant position of Japan in the new plant and plant expansion FDI activity in the U.S. manufacturing, the Japanese pattern may be driving the overall results.

From a policy standpoint, these results suggest that the Japanese investment in new plant and plant expansion in U.S. manufacturing may be transferring technology into the United States rather than out of the United States.

Simple logic suggests that systematic efforts to enter industries and capture existing U.S. technological know-how could be accomplished through takeovers of existing high-tech firms. But the evidence indicates that there is no positive association between Japanese equity FDI activity and industry-originating R&D expenditures.

Limiting Japanese FDI activity in the United States could slow the rate of technology advances in U.S. manufacturing.

A detailed analysis of data indicates that contrary to popular belief—and this moves on to looking at geographical issues—differences in the relative tax burden across states did not influence new investment FDI activity, and state incentive programs to encourage businesses to invest in a state generally did not have a significant impact on new plant and plant expansion FDI activity.

Those results are confirmed for all industry and manufacturing industry investment activity and equity, as well as new plant and plant expansion activity.

High state unemployment rates tended to discourage all forms of FDI activity for each of the countries and regions that we have been considering. High unionization rates among employees by state tended to discourage all forms of FDI activity, except for overall investment activity by Japan.

That finding may help to explain the southern location of much of the non-Japanese FDI activity, since southern states historically have had relatively low unionization rates.

The fact that the high state unionization rates attract Japanese FDI in the form of equity acquisitions but not in terms of new plant and expansion investment, does suggest the possibility that Japanese investors may have targeted highly unionized businesses for takeovers. Whether or not the ultimate objective of those investments includes union-busting remains to be seen.

The United States has strong FDI positions in chemicals and related products—this is on the outbound side—electrical and electronic equipment, nonelectrical machinery and transportation equipment—all of which are areas in which the United States has strong export capabilities. FDI, on both the outbound and the inbound side, as already has been suggested, tends on balance to complement rather than substitute for commodity trade.

Foreign direct investment is an engine for export growth, not a substitute for export performance.

Attempts elsewhere to determine, and this gets back to this business of size of sales, whether you have it measured right or not versus exports, attempts elsewhere to determine if intra-firm trade is driven by different forces than arms-length trade, have failed to demonstrate that such differences exist. And a citation is given in my written statement.

Therefore, calls to regulate FDI activity, because it is generating a system of trade relationships that we do not understand or that would be harmful to us, are without empirical support.

That is not to say that there would not be some value to supporting international rules of the game regarding foreign investment activity. But the United States should not support any system of rules that runs counter to our established commitment to promote open markets and fair competition.

One could argue that a regime for permitting foreign direct investment to occur more routinely around the world would be in the interest of the United States, and might actually keep countries like Japan from shooting themselves in the foot.

Whatever the social arguments may be for the Japanese to discourage foreign direct investment activity in Japan, it is undoubtedly the case that such a closed-door policy works to the detriment of the Japanese economy.

Japan may be a good example of a country whose economic success has permitted it to prosper, despite some clearly counterproductive investment policies.

Finally, Mr. Chairman, it occurs to me that these comments are getting sufficiently general to suggest that I'm moving far afield and that maybe broader issues of this sort are best left to more open discussion.

Thank you.

[The prepared statement of Mr. Ray, together with attachments, follows:]

PREPARED STATEMENT OF EDWARD JOHN RAY

The purpose of my testimony today is to complement the input available to the Committee in general regarding overall patterns and trends in both out-bound and in-bound foreign direct investment for the U.S. and the relevance of those trends for trade policy. While I will make some broader comments about the relationship between trade and foreign direct investment, my remarks will focus on the area in which my knowledge of research is most current: the significance, character and consequences of foreign direct investment in the United States over the course of the last 12 years. Hopefully, that focus will prove to be of interest to the Committee both as an area of inquiry in its own right and as a useful means for putting the broader issues of concern to the Committee in perspective.

The following remarks are based on statistical evidence, much of which is included in a separate 31 page appendix that has been provided to the Committee. Most of the empirical evidence I will refer to is based on 4 digit SIC data that covers over 400 industries in manufacturing for

the period from 1979 to 1988 during which the dramatic increase in foreign direct investment in the United States occurred.

Let me begin with some general observations. Together, the UK, EC' (the EC excluding the UK), Canada and Japan accounted for 82% of the \$315 billion in FDI activity in the United States during the 1979-88 period and 84% of the \$145 billion in manufacturing FDI in the U.S. The European Community alone accounted for 47% of all FDI activity and 55% of manufacturing FDI activity in the U.S. during the 1979-88 period. Equity FDI totaled \$287.6 billion, or 91.2% of the \$315 billion of overall FDI activity that we can document and \$121.4 billion, or, 83.9% of \$144.8 billion, of documented manufacturing FDI. While the European Community accounted for 48% of all equity FDI activity and 60% of manufacturing equity FDI activity, Japan accounted for 42% of overall plant and plant expansion FDI in the U.S. and 49% of manufacturing plant and plant expansion FDI in the U.S. between 1979 and 1988.

The UK, EC', and Canada accounted for 26%, 22%, and 19% of equity FDI in the U.S. during the period. Japan accounted for only 15% or \$43.4 billion of the \$287.6 billion in equity FDI activity in the U.S. At the same time, Japan accounted for 49% or \$11.4 billion of the \$23.3 billion in "real" or plant and expansion foreign direct investment in U.S. manufacturing between 1979 and 1988, while the UK, EC', and Canada together

accounted for 44.9% of plant and expansion FDI activity in manufacturing in the United States.

Among the top 20 industries targeted for equity FDI at the 4 digit SIC level, which includes over 400 industries, the UK had a major investment stake in petroleum refining, the EC' had major holdings in toilet preparations and industrial organic chemicals. Japan took major positions in tires and inner tubes, and in prerecorded records and tapes. Canada obtained major holdings in plastic materials, resins and in aluminum plate, sheet and foil. The share of the top 20 industries in overall equity FDI investment in manufacturing was 55% compared to a range of values from 43.53% for Canada to 58.66% for Japan.

Plant and plant expansion FDI activity in manufacturing was more concentrated than equity FDI activity. The top 20 industries accounted for 65.57% of overall plant and plant expansion FDI and they accounted for shares of area FDI activity that ranged from 46.94% for the UK to 86.69% for Canada. Major areas for physical capital FDI activity for the UK, EC', and Canada were related to the further processing of natural resource based products such as plastic materials and resins and miscellaneous petroleum and coal products for the UK, petroleum refining and plastic materials and resins for the EC', and paper mills, pulp mills and carbon and graphite products for Canada. By contrast, Japanese plant and expansion FDI activity was heaviest in the automobile and

electronics sectors of the U.S. manufacturing sector.

As a general matter, it appears that countries and regions invested in product areas in the United States in which they have been recognized as strong competitors in international markets. That observation is consistent with the general view that often it is more difficult to compete in local production and sales in a market as a foreign entrant than as a domestic producer and that foreign entrants must have some competitive edge that compensates them for the disadvantage of setting up shop in a distant market.

With those generalizations out of the way, let us turn to summary remarks regarding the specific factors that appear to influence equity and new plant FDI activity in the U.S. Empirical tests indicate that where relative economic growth effects at the industry or national level are significant they have a positive impact on FDI activity. To the extent that it matters, the real exchange rate induces foreign direct investment in the U.S. when the dollar is relatively cheap compared to the investing parent company home currency. And, parent company investment is biased toward firms producing products that are familiar to the investing parent in the sense that parent foreign companies have a strong tendency to invest in subsidiaries in the United States that are in the same 4-digit SIC product line as the parent company.

Equity and physical capital FDI activity tended not to be

associated with consumer as opposed to producer goods, with high rates of unionization within industries or with concentration in production within an industry. The most important element of this summary may be to emphasize that there is no evidence that Japanese equity and/or physical capital FDI activity is associated with highly unionized industries.

To some extent FDI activity provides foreign producers with a means of capturing local sales that may or may not be captured through export activities. It has been suggested that FDI activity may occur either to circumvent existing trade barriers or in anticipation of future trade restrictions within the target market. The traditional tariff and/or NTB, (nontariff trade barrier), jumping argument for FDI activity would lead one to expect to find evidence that equity and/or plant expansion/creation activity would be positively related to tariff and/or NTB protection. For most of the source areas considered those relationships were negative or insignificant.

However, it is notable that overall and Canadian new plant and plant expansion FDI activity in the United States tended to be associated with industries that were protected by both tariffs and NTBs. And, equity FDI by Japan in the United States tended to be associated with industries protected by tariffs and NTBs.

Given the intensity of Japan bashing in the United States,

one might expect to find evidence of Japanese FDI activity in anticipation of a widening in the scope of protectionism in the United States toward industries with relatively rapidly deteriorating trade balances. But, there is no evidence that any of the regions investing in the U.S. have targeted investment toward industries in which the U.S. appears to be losing its competitive position in world markets.

One possible explanation for equity FDI activity is that it might be motivated by attempts to capture quasi-rents or higher than normal profits associated with organizational skills within the acquiring parent in management intensive industries. And, in fact, empirical tests indicate that equity FDI activity by each of the major sources is positively related to the management intensity of production in an industry.

In contrast, one could hypothesize that plant creation/expansion FDI activity would tend to be associated with industries that provided higher than normal profits in return for real capital investment that embodies high tech methods of operation. Such industries might be expected to exhibit economies of scale and to be relatively R&D intensive operations. While there are exceptions, it is interesting to note that plant creation/expansion FDI activities in the United States overall and for Japan in particular are positively associated with industries characterized by scale economies and intensive in R&D expenditures. Given the

dominant position of Japan in the new plant and plant expansion FDI activity in U.S. manufacturing, the Japanese pattern may be driving the overall results.

From a policy standpoint, these results suggest that Japanese investment in new plant and plant expansion in U.S. manufacturing may be transferring technology into the United States rather than out of the U.S. Simple logic suggests that systematic efforts to enter industries and capture existing U.S. technological know-how could be accomplished through takeovers of existing high tech firms. But, the evidence indicates that there is no positive association between Japanese equity FDI activity and industry originating R&D expenditures. Limiting Japanese FDI activity in the United States could slow the rate of technological advances in U.S. manufacturing.

Let me turn to a brief discussion of the geographical location of FDI activity in the United States and the relationship between that activity and the economic characteristics of the recipient states. To some extent it is plausible that new plant and plant expansion activities are more likely to create new jobs in the short-run than are equity investments. Therefore, it would be interesting to know if plant and plant expansion FDI was attracted to states in which unemployment problems were relatively severe or in which government policies toward potential investors were relatively favorable. A detailed empirical analysis of the

data indicates that, contrary to popular belief, differences in the relative tax burden across states did not influence new investment FDI activity and state incentive programs to encourage businesses to invest in a state generally did not have a significant impact on new plant and plant expansion FDI activity. Those results are confirmed for all industry and manufacturing-industry investment activity and for equity as well as new plant and plant expansion FDI.

High state unemployment rates tended to discourage all forms of FDI activity by each of the countries and regions we have been considering. High unionization rates among employees by state tended to discourage all forms of FDI activity except for overall investment activity from Japan. That finding may help to explain the southern location for much of the non-Japanese FDI activity, since southern states historically have had relatively low unionization rates.

The fact that high state unionization rates attract Japanese FDI in the form of equity acquisitions but not in terms of new plant and expansion investment does suggest that Japanese investors may have targeted highly unionized businesses for takeovers. Whether or not the ultimate objective of those investments includes union busting remains to be seen.

Given the industries in which various countries have tended to concentrate their investment activities, it is perhaps not surprising that the UK and the EC have tended to

locate investments in states with relatively high employment shares in the petroleum and automobile industries. Japan has concentrated FDI activity in states with high auto-industry employment, and Canada has concentrated FDI activity in states with high steel-industry employment shares. Since each of those major industries has experienced high-unemployment problems over the course of the last 12 years, it is fair to say that each of the major country and regional suppliers of FDI activity in the United States has invested in states that have been plagued with serious structural unemployment problems for some time. In that sense, FDI activity in the United States may have helped to alleviate some of the social and economic hardship associated with persistent unemployment.

Hopefully, these detailed remarks have provided some information regarding the linkages between foreign direct investment and trade, technology and financial flows. The potential positive impact of foreign direct investment on U.S. and global economic growth is reflected too in the empirical material I have provided.

The appendix that accompanies these remarks contains some data on U.S. in-bound and out-bound FDI activity. The figures are deceptive because they report FDI positions on an historical cost basis. Since much of U.S. out-bound FDI occurred in the early post-World War II period, the value of out-bound FDI holdings for the U.S. is seriously understated

relative to in-bound FDI holdings, most of which were acquired after 1979. The 1990 market value of U.S. FDI holdings abroad is probably three times the \$421.5 billion figure listed for historical value, while the market value of foreign FDI holdings in the U.S. is perhaps 50% higher than the \$403.7 billion listed for historical value.

U.S. FDI holdings abroad in 1990 on an historical cost basis of \$421.5 billion included \$168.2 billion in manufacturing. Therefore, the share of manufacturing in out-bound FDI holdings is equal to 39.9% compared to \$160 billion out of \$403.7, or, 39.6% for in-bound FDI. The U.S. has strong FDI positions in chemicals and related products, electrical and electronic equipment, non-electrical machinery and transportation equipment, all of which are areas in which the U.S. has strong export capabilities. FDI on both the out-bound and the in-bound side tends on balance to complement rather than substitute for commodity trade.

As the data in the appendix indicates, annual commodity export and import flows are comparable in size to the accumulated value of FDI holdings by the U.S. abroad and by foreigners in the U.S. when kept on an historical cost basis. The figures for FDI flows in 1990 indicate that both in-bound and out-bound flows, \$37.2 billion and \$33.4 billion, respectively, were less than 10% of the value of exports and imports of commodities. In short, FDI activity is extremely important but unlikely to replace commodity trade flows in

the foreseeable future.

Attempts elsewhere to determine if intra-firm trade is driven by different forces than arms length trade have failed to demonstrate that such differences exist (see for example: Benvignati, Anita M. "Industry Determinants and Differences in U.S. Intra-firm and Arms-length Exports" R.E. Stat. August, 1990. pp. 481-88.). Therefore, calls to regulate FDI activity because it is generating a system of trade relationships that we do not understand or that would be harmful to us are without empirical support.

That is not to say that there would not be some value to supporting international rules of the game regarding foreign investment activity. But, the U.S. should not support any system of rules that runs counter to our established commitment to promote open markets and fair competition. One could argue that a regime for permitting foreign direct investment to occur more routinely around the world would be in the interests of the United States and might actually keep countries like Japan from shooting themselves in the foot. Whatever the social arguments may be for the Japanese to discourage foreign direct investment in Japan, it is undoubtedly the case that such a closed door policy works to the detriment of the Japanese economy. Japan may be a good example of a country whose economic success has permitted it to prosper despite some clearly counter-productive investment policies.

It occurs to me that these comments are sufficiently general to suggest that I am moving too far afield. Broader issues are best explored in give and take discussion.

APPENDIXU.S. Foreign Direct Investment
and International TradeA Profile of Recent
Foreign Investment in the U.S.

By EDWARD JOHN RAY

ABSTRACT: This article analyzes data from 1979 to 1987 for foreign direct investment (FDI) in the United States. The European Community, Canada, and Japan accounted for 82 percent of the \$261 billion in overall FDI activity and 84 percent of the \$110 billion in manufacturing investments. New capital investments represented 10 percent of all investments and under 20 percent of manufacturing investments. Investment activity was highly concentrated by industry and in major industrial states. Japan supplied 44 percent of new plant investments in the United States during the period. Limiting Japanese FDI activity could slow technological advances in U.S. manufacturing. State-specific tax burdens and investment incentive programs had no impact on FDI activity. Tax-abatement programs deserve skepticism. FDI activity is concentrated in states with serious structural unemployment problems. Curbing FDI activity could worsen the unemployment problem. Cheap U.S. dollars and expanding U.S. markets have attracted foreign investments.

Edward Ray earned his M.A. degree (1969) and his Ph.D. (1971) in economics from Stanford University. He has been a member of the economics faculty at Ohio State University since 1970 and department chairperson since 1976. He has published extensively in major refereed journals and recently published U.S. Protection and the World Debt Crisis (1989). His areas of interest include U.S. trade policy, foreign direct investment, and the role of trade policy in economic development.

NOTE: The author is particularly grateful to Jami Bray for assistance in assembling the data and generating the material in the tables. None of the empirical work described here would have been possible without the generous assistance of the staff at the Department of Commerce International Trade Administration, which provided much of the data on foreign direct investment.

TABLE 1A
 THE VALUE AND LOCATION OF FOREIGN DIRECT
 INVESTMENT IN THE UNITED STATES: ALL INDUSTRIES, 1979-87

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
All Countries				
1311	Crude petroleum and natural gas	19,169.4	CA	44,289.9
2911	Petroleum refining	11,542.0	NY	39,220.0
6000	Depository institutions	9,277.2	TX	25,792.5
1211	Bituminous coal and lignite	7,715.2	OH	14,953.8
1021	Copper ores	6,353.0	IL	11,313.2
7011	Hotels and motels	6,330.0	CT	11,302.7
2023	Dry, condensed, or evaporated products	6,000.0	FL	8,023.0
4899	Communications services, NEC	5,343.0	NJ	5,690.0
3711	Motor vehicles and car bodies	5,068.4	GA	5,613.2
2821	Plastics materials and resins	5,047.6	KY	5,332.0
Total FDI in US: \$260,717 million				
Top 10 Industry share of total FDI: 31.39%				
Top 10 states share of total FDI: 65.79%				
United Kingdom				
2911	Petroleum refining	9,125.8	NY	10,112.7
6000	Depository institutions	3,722.5	OH	9,846.3
1311	Crude petroleum and natural gas	3,698.8	CA	7,111.3
6300	Insurance carriers	1,662.3	TX	4,185.8
5812	Eating places	1,587.3	IL	3,580.2
2879	Agricultural chemicals NEC	1,503.5	CT	3,058.3
7362	Temporary help supply services	1,350.0	AR	2,591.7
7311	Advertising agencies	1,343.2	NJ	2,318.3
2084	Wines, brandy, and brandy spirits	1,328.0	MA	2,113.2
1021	Copper ores	1,298.1	FL	1,934.4
UK FDI in US: \$64,371 million				
Top 10 Industry share of UK FDI: 41.35%				
Top 10 industry share of total FDI: 10.21%				
Top 10 states share of UK FDI: 72.78%				
Top 10 states share of total FDI: 17.97%				
European Community				
1311	Crude petroleum and natural gas	13,273.9	NY	18,011.4
2911	Petroleum refining	10,590.0	TX	15,549.3
6000	Depository institutions	4,773.0	CA	13,603.0
1021	Copper ores	3,805.8	OH	10,844.0
5172	Petroleum products, NEC	3,750.0	CT	9,930.5
2844	Toilet preparations	3,479.5	IL	5,143.5
2869	Industrial organic chemicals, NEC	3,291.5	NJ	4,137.1
1211	Bituminous coal and lignite	2,753.5	MA	3,447.5
6300	Insurance carriers	2,482.4	VA	3,239.3
2879	Agricultural chemicals, NEC	2,369.5	FL	3,135.8

(continued)

TABLE 1A Continued

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
European Community FDI in US: \$125,213 million				
Top 10 industry share of EC FDI: 40.39%				
Top 10 industry share of total FDI: 19.40%				
Top 10 states share of EC FDI: 69.51%				
Top 10 states share of total FDI: 33.38%				
Japan				
4899	Communications services, NEC	5,099.0	CA	8,421.9
3711	Motor vehicles and car bodies	3,713.5	NY	8,145.5
7011	Hotels and motels	3,336.3	HI	2,747.0
3652	Prerecorded records and tapes	2,006.0	OH	1,626.0
3312	Blast furnaces and steel mills	1,165.2	TX	1,149.4
6200	Security and commodity brokers	1,092.3	MI	1,143.5
3714	Motor vehicle parts and accessories	1,091.7	IL	1,136.3
6000	Depository institutions	1,044.5	WA	1,132.5
3674	Semiconductors and related devices	810.5	KY	1,127.6
2819	Industrial inorganic chemicals, NEC	655.8	IN	1,048.8
Japanese FDI in US: \$42,676.6 million				
Top 10 industry share of Japanese FDI: 46.90%				
Top 10 industry share of total FDI: 7.68%				
Top 10 states share of Japanese FDI: 64.85%				
Top 10 states share of total FDI: 10.62%				
Canada				
5311	Department stores	4,300.0	CA	8,548.7
2821	Plastics materials and resins	2,647.3	NY	5,586.4
4011	Railroads, line-haul operating	2,111.8	TX	5,415.2
1311	Crude petroleum and natural gas	2,091.4	IL	3,233.6
2621	Paper mills	1,239.4	DE	2,682.1
3353	Aluminum sheet, plate, and foil	873.6	FL	2,423.2
5944	Jewelry stores	609.6	CO	1,240.9
2611	Pulp mills	562.8	GA	1,175.0
6000	Depository institutions	557.7	CT	1,158.8
3634	Electric housewares and fans	523.0	AZ	1,068.2
Canadian FDI in US: \$45,159 million				
Top 10 industry share of Canadian FDI: 34.36%				
Top 10 industry share of total FDI: 5.95%				
Top 10 states share of Canadian FDI: 72.04%				
Top 10 states share of total FDI: 12.48%				

SOURCE: This table was constructed from data provided by the U.S. Department of Commerce, International Trade Administration.

NOTE: "NEC" stands for "not elsewhere classified."

Source: Ray, Edward John "A Profile of Recent Foreign Investment in the U.S." Annals of the American Association of Political and Social Scientists (July 1991) pp. 50-65.

TABLE 1B
 THE VALUE AND LOCATION OF FOREIGN DIRECT INVESTMENT IN NEW PLANTS
 AND PLANT EXPANSION IN THE UNITED STATES: ALL INDUSTRIES, 1979-87

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
All Countries				
3711	Motor vehicles and car bodies	3,669.4	CA	2,452.8
1311	Crude petroleum and natural gas	2,829.1	KY	2,358.0
3714	Motor vehicle parts and accessories	1,314.3	OH	1,836.9
3674	Semiconductors and related devices	951.4	TX	1,592.9
2621	Paper mills	901.5	AR	1,408.7
2821	Plastics materials and resins	899.1	NC	1,274.9
2911	Petroleum refining	758.3	MI	1,272.5
2611	Pulp mills	673.8	AL	1,157.5
3624	Carbon and graphite products	511.0	GA	953.4
2044	Rice milling	500.0	TN	898.3
Total FDI in new plant and expansion in US:				
\$25,079.4 million				
Top 10 industry share of total FDI: 51.9%				
Top 10 states share of total FDI: 60.6%				
United Kingdom				
1311	Crude petroleum and natural gas	1,248.4	AR	1,233.1
2821	Plastics materials and resins	388.2	TX	639.5
2999	Petroleum and coal products, NEC	238.0	NC	211.5
2813	Industrial gases	176.0	OH	201.4
1021	Copper ores	140.0	CA	169.5
3624	Carbon and graphite products	133.0	SC	158.0
2911	Petroleum refining	118.6	NM	137.2
2641	Coated paper and gummed products	80.5	NJ	108.4
3714	Motor vehicles, parts and accessories	72.8	VA	68.0
2022	Cheese, natural and processed	60.0	PA	67.5
UK FDI in new plant and expansion in US:				
\$3,577.3 million				
Top 10 industry share of UK FDI: 74.1%				
Top 10 industry share of total FDI: 10.6%				
Top 10 states share of UK FDI: 83.7%				
Top 10 states share of total FDI: 11.9%				
European Community				
1311	Crude petroleum and natural gas	1,661.5	AR	1,236.1
2911	Petroleum refining	757.4	TX	908.0
2821	Plastics materials and resins	755.4	CA	812.4
3711	Motor vehicles and car bodies	564.8	CO	534.5
2999	Petroleum and coal products, NEC	425.5	NC	534.0
2879	Agricultural chemicals, NEC	294.5	SC	500.3
3674	Semiconductors and related devices	261.2	PA	349.8
2819	Industrial inorganic chemicals, NEC	252.0	OH	345.2
2813	Industrial gases	224.9	MI	334.8
2869	Industrial organic chemicals, NEC	169.0	FL	334.7

(continued)

TABLE 1B Continued

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
European Community FDI in new plant and expansion in US: \$9,145.7 million				
Top 10 industry share of EC FDI: 58.7%				
Top 10 industry share of total FDI: 21.4%				
Top 10 states share of EC FDI: 63.4%				
Top 10 states share of total FDI: 23.5%				
Japan				
3711	Motor vehicles and car bodies	3,072.0	OH	1,388.7
3714	Motor vehicle parts and accessories	1,070.0	CA	1,172.5
3674	Semiconductors and related devices	621.2	KY	990.6
2044	Rice milling	500.0	MI	928.9
3662	Radio and television broadcasting equipment	359.2	TN	773.4
3573	Electronic computing equipment	350.3	IN	603.1
3341	Secondary nonferrous metals	250.0	OR	583.9
2282	Throwing and winding mills	213.0	NC	525.4
3651	Household audio and video equipment	192.6	GA	388.8
3465	Automotive stampings	150.6	SC	347.0
Japanese FDI in new plant and expansion in US: \$9,455.1 million				
Top 10 industry share of Japanese FDI: 71.7%				
Top 10 industry share of total FDI: 27.0%				
Top 10 states share of Japanese FDI: 80.9%				
Top 10 states share of total FDI: 30.5%				
Canada				
2621	Paper mills	883.9	AL	703.3
2611	Pulp mills	562.8	PA	477.2
3317	Steel pipe and tubes	400.0	CA	364.5
3624	Carbon and graphite products	378.0	GA	359.1
1061	Ferroalloy ores, except vanadium	300.0	MN	350.0
3334	Primary aluminum	240.0	MO	244.0
3312	Blast furnaces and steel mills	230.0	TX	201.2
1311	Crude petroleum and natural gas	167.6	AR	167.6
3679	Electronic components, NEC	119.8	NC	150.8
3353	Aluminum sheet, plate, and foil	88.4	NY	143.7
Canadian FDI in new plant and expansion in US: \$3,968.5 million				
Top 10 industry share of Canadian FDI: 84.9%				
Top 10 industry share of total FDI: 13.4%				
Top 10 states share of Canadian FDI: 79.7%				
Top 10 states share of total FDI: 12.6%				

SOURCE: This table was constructed from data provided by the U.S. Department of Commerce, International Trade Administration.

NOTE: "NEC" stands for "not elsewhere classified."

Source: See Table 1A

TABLE 2A
THE VALUE AND LOCATION OF FOREIGN
DIRECT INVESTMENT IN U.S. MANUFACTURING, 1979-87

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
All Countries				
2911	Petroleum refining	11,542.0	NY	16,486.1
2023	Dry, condensed, or evaporated products	8,000.0	CA	14,570.4
3711	Motor vehicles and car bodies	5,068.4	OH	13,636.8
2821	Plastics materials and resins	5,047.6	CT	7,313.1
2844	Toilet preparations	3,506.8	IL	6,171.1
2869	Industrial organic chemicals, NEC	3,425.4	TX	4,524.9
3573	Electronic computing equipment	2,633.5	PA	3,411.6
2879	Agricultural chemicals, NEC	2,601.1	KY	3,333.4
3652	Prerecorded records and tapes	2,365.4	GA	2,887.4
3312	Blast furnaces and steel mills	2,352.2	DE	2,770.1
Total FDI in US: \$109,601 million				
Top 10 industry share of total FDI: 40.64%				
Top 10 states share of total FDI: 68.53%				
United Kingdom				
2911	Petroleum refining	9,125.6	OH	9,313.1
2879	Agricultural chemicals, NEC	1,503.5	NY	5,348.0
2084	Wines, brandy, and brandy spirits	1,328.0	IL	2,928.1
3679	Electronic components, NEC	1,150.3	CA	2,464.7
2834	Pharmaceutical preparations	1,001.8	CT	1,989.2
2816	Inorganic pigments	976.0	KY	1,641.5
3353	Aluminum sheet, plate, and foil	964.8	TX	1,528.2
3822	Environmental controls	879.9	LA	1,099.7
2621	Paper mills	679.0	NJ	903.7
2631	Paperboard mills	668.1	VA	901.3
UK FDI in US: \$34,920 million				
Top 10 industry share of UK FDI: 52.34%				
Top 10 industry share of total FDI: 16.66%				
Top 10 states share of UK FDI: 56.52%				
Top 10 states share of total FDI: 16.0%				
European Community				
2911	Petroleum refining	10,590.0	NY	16,486.1
2844	Toilet preparations	3,479.5	CA	14,570.4
2869	Industrial organic chemicals, NEC	3,291.5	OH	13,636.8
2879	Agricultural chemicals, NEC	2,369.5	CT	7,313.1
2821	Plastics materials and resins	2,245.4	IL	6,171.1
3573	Electronic computing equipment	1,926.1	TX	4,524.9
2084	Wines, brandy, and brandy spirits	1,369.5	PA	3,411.6
2851	Paints and allied products	1,317.0	KY	3,333.4
2834	Pharmaceutical preparations	1,276.5	GA	2,887.4
3679	Electronic components, NEC	1,270.5	DE	2,770.1

(continued)

TABLE 2A Continued

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
European Community FDI in US: \$62,692.9 million				
Top 10 industry share of EC FDI: 46.47%				
Top 10 industry share of total FDI: 26.58%				
Top 10 states share of EC FDI: 72.78%				
Top 10 states share of total FDI: 41.63%				
Japan				
3711	Motor vehicles and car bodies	3,713.5	NY	3,845.0
3652	Prerecorded records and tapes	2,006.0	CA	2,159.4
3312	Blast furnaces and steel mills	1,165.2	OH	1,591.0
3714	Motor vehicle parts and accessories	1,091.7	KY	1,123.6
3674	Semiconductors and related devices	810.5	MI	1,110.7
2819	Industrial inorganic chemicals, NEC	655.8	IN	959.3
3573	Electronic computing equipment	653.9	TN	935.0
2893	Printing ink	562.7	GA	592.7
2044	Rice milling	500.0	OR	589.4
3662	Radio and television broadcasting equipment	389.0	NC	534.3
Japanese FDI in US: \$17,498.7 million				
Top 10 industry share of Japanese FDI: 65.88%				
Top 10 industry share of total FDI: 10.52%				
Top 10 states share of Japanese FDI: 76.81%				
Top 10 states share of total FDI: 12.26%				
Canada				
2821	Plastics materials and resins	2,647.3	DE	2,657.1
2621	Paper mills	1,239.4	CA	1,342.7
3353	Aluminum sheet, plate, and foil	873.6	CT	909.5
2611	Pulp mills	562.8	PA	884.4
3634	Electric housewares and fans	523.0	AL	855.2
2711	Newspapers	450.8	GA	618.9
3317	Steel pipe and tubes	403.0	NC	614.1
2731	Book publishing	385.9	WI	455.5
3624	Carbon and graphite products	378.0	OH	405.8
3272	Concrete products, NEC	350.9	NY	401.0
Canadian FDI in US: \$11,936.3 million				
Top 10 industry share of Canadian FDI: 65.47%				
Top 10 industry share of total FDI: 7.13%				
Top 10 states share of Canadian FDI: 76.81%				
Top 10 states share of total FDI: 8.34%				

SOURCE: This table was constructed from data provided by the U.S. Department of Commerce, International Trade Administration.

NOTE: "NEC" stands for "not elsewhere classified."

EC, and Japan accounted for \$19.45 billion, or 93.3 percent of all new-plant and plant-expansion FDI projects associated with manufacturing in the United States between 1979 and 1987.

TABLE 2B
THE VALUE AND LOCATION OF FOREIGN DIRECT INVESTMENT IN
NEW PLANTS AND PLANT EXPANSION IN U.S. MANUFACTURING, 1979-87

List of Top 10 FDI Values When Categorized by Industry and by State

SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
All Countries				
3711	Motor vehicles and car bodies	3,669.4	CA	1,973.8
3714	Motor vehicle parts and accessories	1,314.3	OH	1,804.3
3674	Semiconductors and related devices	951.4	TX	1,543.8
2621	Paper mills	901.5	KY	1,346.5
2821	Plastics materials and resins	899.1	NC	1,249.9
2911	Petroleum refining	758.3	MI	1,245.1
2611	Pulp mills	673.8	AL	1,153.5
3624	Carbon and graphite products	511.0	GA	922.9
2044	Rice milling	500.0	TN	898.3
3317	Steel pipe and tubes	463.3	SC	862.3
Total FDI in new plant and expansion in US:				
\$20,846.2 million				
Top 10 industry share of total FDI: 51.1%				
Top 10 states share of total FDI: 62.4%				
United Kingdom				
2821	Plastics materials and resins	388.2	TX	627.0
2999	Petroleum and coal products, NEC	238.2	NC	193.5
2813	Industrial gases	178.0	OH	191.3
3624	Carbon and graphite products	133.0	SC	158.0
2911	Petroleum refining	118.8	CA	156.2
2641	Coated paper and gummed products	80.5	NJ	108.4
3714	Motor vehicles, parts and accessories	72.8	PA	67.0
2022	Cheese, natural and processed	60.0	FL	60.0
3079	Miscellaneous plastics products	59.5	DE	53.0
3721	Aircraft	55.0	TN	52.9
UK FDI in new plant and expansion in US:				
\$2,021.6 million				
Top 10 industry share of UK FDI: 68.2%				
Top 10 industry share of total FDI: 6.6%				
Top 10 states share of UK FDI: 82.5%				
Top 10 states share of total FDI: 8.0%				
European Community				
2911	Petroleum refining	757.4	TX	863.8
2821	Plastics materials and resins	755.4	CA	786.8
3711	Motor vehicles and car bodies	584.8	NC	518.0
2999	Petroleum and coal products, NEC	425.5	SC	500.3
2879	Agricultural chemicals, NEC	294.5	OH	335.1
3674	Semiconductors and related devices	281.2	FL	334.7
2819	Industrial inorganic chemicals, NEC	252.0	PA	329.6
2813	Industrial gases	224.9	MI	324.8
2869	Industrial organic chemicals, NEC	169.0	KY	312.9
2834	Pharmaceutical preparations	168.0	AL	291.0

(continued)

TABLE 2B Continued

List of Top 10 FDI Values When Categorized by Industry and by State				
SIC	Industry	Value (millions of dollars)	State	Value (millions of dollars)
European Community FDI in new plant and expansion in US: \$7,010.2 million				
Top 10 industry share of EC FDI: 55.2%				
Top 10 industry share of total FDI: 18.6%				
Top 10 states share of EC FDI: 65.5%				
Top 10 states share of total FDI: 22.0%				
Japan				
3711	Motor vehicles and car bodies	3,072.0	OH	1,388.7
3714	Motor vehicle parts and accessories	1,070.0	CA	1,020.1
3674	Semiconductors and related devices	621.2	KY	988.1
2044	Rice milling	500.0	MI	918.8
3662	Radio and television broadcasting equipment	359.2	TN	773.4
3573	Electronic computing equipment	350.3	IN	603.1
3341	Secondary nonferrous metals	250.0	OR	583.9
2282	Throwing and winding mills	213.0	NC	525.4
3651	Household audio and video equipment	192.6	GA	386.8
3465	Automotive stampings	150.8	SC	347.0
Japanese FDI in new plant and expansion in US: \$9,097.9 million				
Top 10 industry share of Japanese FDI: 74.5%				
Top 10 industry share of total FDI: 32.5%				
Top 10 states share of Japanese FDI: 82.8%				
Top 10 states share of total FDI: 36.1%				
Canada				
2621	Paper mills	883.9	AL	703.3
2611	Pulp mills	562.8	PA	477.2
3317	Steel pipe and tubes	400.0	GA	359.1
3624	Carbon and graphite products	378.0	MN	350.0
3334	Primary aluminum	240.0	MO	244.0
3312	Blast furnaces and steel mills	230.0	TX	201.2
3679	Electronic components, NEC	119.8	NC	150.8
3353	Aluminum sheet, plate, and foil	88.4	NY	141.4
3714	Motor vehicle parts and accessories	76.5	CA	63.5
3661	Telephone and telegraph apparatus	51.3	ME	54.8
Canadian FDI in new plant and expansion in US: \$3,339.5 million				
Top 10 industry share of Canadian FDI: 90.8%				
Top 10 industry share of total FDI: 14.5%				
Top 10 states share of Canadian FDI: 82.2%				
Top 10 states share of total FDI: 13.2%				

SOURCE: This table was constructed from data provided by the U.S. Department of Commerce, International Trade Administration.

NOTE: "NEC" stands for "not elsewhere classified."

TABLE 1(a)
Value of Foreign Direct Investment in U.S. Manufacturing: 1979-1987
(\$ billions)

SIC Code	Industry	All Countries		United Kingdom		European Commodity		Japan		Canada	
		(rank)	value	(rank)	value	(rank)	value	(rank)	value	(rank)	value
2911	Petroleum Refining	(1)	11.5	(1)	9.1	(1)	10.6	--	--	--	--
2023	Dry, Condensed Evaporated Products	(2)	6.0	--	--	--	--	--	--	--	--
3711	Motor Vehicles & Car Bodies	(3)	5.1	--	--	--	--	(1)	3.7	--	--
2821	Plastics Materials & Resins	(4)	5.0	--	--	(5)	2.2	--	--	(1)	2.6
2844	Toilet Preparations	(5)	3.5	--	--	(2)	3.5	--	--	--	--
2869	Industrial Organic Chemicals ^a	(6)	3.4	--	--	(3)	3.3	--	--	--	--
3573	Electronic Computing Equipment	(7)	2.6	--	--	(6)	1.9	(7)	0.65	--	--
2879	Agricultural Chemicals ^a (8)	2.6	(2)	1.5	(4)	2.4	--	--	--	--	--
3652	Pre-recorded Records & Tapes	(9)	2.36	--	--	--	--	(2)	2.0	--	--
3312	Blast Furnaces & Steel Mills	(10)	2.35	--	--	--	--	(3)	1.17	--	--
2084	Wines, Brandy & Brandy Spirits	(17)	1.64	(3)	1.3	(7)	1.4	--	--	--	--
3679	Electronic Components ^a	(14)	1.73	(4)	1.2	(10)	1.27	--	--	--	--
2834	Pharmaceutical Preparations	(13)	1.78	(5)	1.0	(9)	1.28	--	--	--	--
2816	Inorganic Pigments	(24)	1.13	(6)	0.98	--	--	--	--	--	--
3353	Aluminum Plate Sheet & Foil	(12)	1.93	(7)	0.96	--	--	--	--	(3)	0.9
3822	Environmental Controls	(31)	0.90	(8)	0.88	--	--	--	--	--	--
2621	Paper Mills	(11)	1.95	(9)	0.68	--	--	--	--	(2)	1.2

Source: Ray, Edward John, "Foreign Takeovers and New Investments in the United States
 Contemporary Policy Issues IX (April 1991) pp. 59-71

TABLE 1(a) continued
Value of Foreign Direct Investment in U.S. Manufacturing: 1979-1987
(\$ billions)

SIC Code	Industry	All Countries		United Kingdom		European Commodity		Japan		Canada	
		(rank)	value	(rank)	value	(rank)	value	(rank)	value	(rank)	value
2631	Paperboard Mills	(25)	1.10	(10)	0.67	—	—	—	—	—	—
2851	Paints and Allied Products	(19)	1.32	—	—	(8)	1.3	—	—	—	—
3714	Motor Vehicle Parts & Accessories	(18)	1.54	—	—	—	—	(4)	1.1	—	—
3674	Semiconductors & Related Devices	(15)	1.71	—	—	—	—	(5)	0.8	—	—
2819	Industrial Inorganic Chemical ^a	(20)	1.31	—	—	—	—	(6)	0.66	—	—
2893	Printing Ink	(44)	0.58	—	—	—	—	(8)	0.6	—	—
2044	Rice Milling	(55)	0.50	—	—	—	—	(9)	0.5	—	—
3662	Radio & TV Broadcasting Equipment	(27)	1.02	—	—	—	—	(10)	0.4	—	—
2611	Pulp Mills	(32)	0.86	—	—	—	—	—	—	(4)	0.6
3634	Electric Housewares & Fans	(48)	0.53	—	—	—	—	—	—	(5)	0.5
2711	Newspapers	(37)	0.66	—	—	—	—	—	—	(6)	0.45
3317	Steel Pipe & Tubes	(42)	0.62	—	—	—	—	—	—	(7)	0.40
2731	Book Publishing	(28)	1.01	—	—	—	—	—	—	(8)	0.39
3624	Carbon & Graphite Products	(38)	0.66	—	—	—	—	—	—	(9)	0.38
3272	Concrete Products ^a	(43)	0.59	—	—	—	—	—	—	(10)	0.35
Total FDI (\$ billions)			109.6		34.92		62.69		17.5		11.9
Top 10 Share of Total Area FDI (%)			40.64%		52.34%		46.47%		65.88%		65.47%

^aNot elsewhere counted.

Source: See Table 1(a)

TABLE 1(b)
Value of New Plant and Expansion FDI in U.S. Manufacturing: 1979-1987
(\$ billions)

SIC Code	Industry	All Countries		United Kingdom		European Commodity		Japan		Canada	
		(rank)	value	(rank)	value	(rank)	value	(rank)	value	(rank)	value
3711	Motor Vehicles & Car Bodies	(1)	3.7	—	—	(3)	0.6	(1)	3.07	—	—
3714	Motor Vehicle Parts & Accessories	(2)	1.3	(7)	0.07	—	—	(2)	1.07	(9)	0.08
3674	Semiconductors & Related Devices	(3)	1.0	—	—	(6)	0.26	(3)	0.6	—	—
2621	Paper Mills	(4)	0.902	—	—	—	—	—	—	(1)	0.90
2821	Plastic Materials & Resins	(5)	0.899	(1)	0.39	(2)	0.755	—	—	—	—
2911	Petroleum Refining	(6)	0.8	(5)	0.12	(1)	0.757	—	—	—	—
2611	Pulp Mills	(7)	0.7	—	—	—	—	—	—	(2)	0.6
3624	Carbon & Graphite Products	(8)	0.51	(4)	0.13	—	—	—	—	(4)	0.38
2044	Rice Milling	(9)	0.50	—	—	—	—	(4)	0.5	—	—
3317	Steel Pipes & Tubes	(10)	0.46	—	—	—	—	—	—	(3)	0.4
2999	Petroleum & Coal Products ^a	(11)	0.43	(2)	0.24	(4)	0.4	—	—	—	—
2813	Industrial Gases	(24)	0.25	(3)	0.18	(8)	0.2	—	—	—	—
2641	Coated Paper & Gummed Products	(41)	0.09	(6)	0.08	—	—	—	—	—	—
2022	Cheese, Natural & Processed	(51)	0.06	(8)	0.06	—	—	—	—	—	—
3079	Miscellaneous Plastics Products	(32)	0.13	(9)	0.059	—	—	—	—	—	—
3721	Aircraft	(48)	0.07	(10)	0.055	—	—	—	—	—	—
2879	Agricultural Chemicals ^a	(17)	0.30	—	—	(5)	0.3	—	—	—	—
2819	Industrial Inorganic Chemicals ^a	(18)	0.30	—	—	(7)	0.25	—	—	—	—

Source: See Table 1(a)

TABLE 1(b) continued
 Value of New Plant and Expansion FDI in U.S. Manufacturing: 1979-1987
 (\$ billions)

SIC Code	Industry	All Countries		United Kingdom		European Commodity		Japan		Canada	
		(rank)	value	(rank)	value	(rank)	value	(rank)	value	(rank)	value
2869	Industrial Organic Chemicals ^a	(16)	0.30	—	—	(9)	0.17	—	—	—	—
2834	Pharmaceutical Preparations	(19)	0.28	—	—	(10)	0.168	—	—	—	—
3662	Radio & TV Broadcast Equipment	(14)	0.37	—	—	—	—	(5)	0.36	—	—
3573	Electronic Computing Equipment	(13)	0.39	—	—	—	—	(6)	0.35	—	—
3341	Secondary Non-ferrous Metals	(22)	0.27	—	—	—	—	(7)	0.25	—	—
2282	Throwing & Winding Mills	(25)	0.21	—	—	—	—	(8)	0.21	—	—
3651	Household Audio & Video Equipment	(21)	0.27	—	—	—	—	(9)	0.19	—	—
3465	Automotive Stamping	(20)	0.28	—	—	—	—	(10)	0.15	—	—
3334	Primary Aluminum	(15)	0.33	—	—	—	—	—	—	(5)	0.24
3312	Blast Furnaces & Steel Mills	(12)	0.43	—	—	—	—	—	—	(6)	0.23
3679	Electronic Components ^a	(23)	0.25	—	—	—	—	—	—	(7)	0.12
3353	Aluminum Sheet, Plate & Foil	(31)	0.14	—	—	—	—	—	—	(8)	0.09
3661	Telephone & Telegraph Appliances	(34)	0.12	—	—	—	—	—	—	(10)	0.05
Total New Plant & Expansion FDI			20.8		2.02		7.0		9.1		3.3
Top 10 Share of Total Area New Plant & Expansion FDI			51.1%		68.2%		55.2%		74.5%		90.8%

^aNot elsewhere counted.

Source: See Table 1(a)

TABLE 2
 Characteristics of Top 10 Industries for Overall and Plant and Expansion FDI in
 Manufacturing in the United States 1979-1987

Characteristics	All	All Countries		United Kingdom		European Commodity		Japan		Canada	
	Industry Average Value*	FDI	Plant and Expansion FDI	FDI	Plant and Expansion FDI	FDI	Plant and Expansion FDI	FDI	Plant and Expansion FDI	FDI	Plant and Expansion FDI
Four-Firm Concentration Ratio (%)	39	44	46	40	46	34	46	48	49	35	51
Unionization (%)	59	66	78	63	63	50	57	70	60	75	83
Capital-Labor Ratio (%)	148.75	316.34	186.18	248.73	240.37	324.97	312.35	160.11	126.16	148.51	100.6
Management and R&D Personnel (%)	16.44	22.47	16.67	21.96	19.03	24.54	20.50	25.86	22.18	17.55	18.48
Midpoint Plant Shipments (\$ millions)	38.70	184.16	166.03	86.65	114.95	93.61	163.59	176.62	217.29	33.80	105.10
Average Tariff (%)	4.36	3.99	3.06	3.67	4.31	4.98	4.30	3.06	2.79	2.65	2.99
Non-tariff Barriers (1 = 100%)	0.333	0.667	0.4	0.333	0.60	0.444	0.444	0.3	0.5	0.444	0.25

Notes: The all industry averages are based on available industry data at the four-digit SIC level. The number of industries is 449 for concentration and the capital-labor ratio, 330 for unionization, midpoint plant shipments and non-tariff barriers, 440 for management and R&D personnel, and 489 for tariffs. The four-firm concentration ratio is for 1982. Unionization is the percentage of production workers unionized in an industry, 1972. The capital-labor ratio is for 1982. Management and R&D personnel represents the percentage of management, scientists, and engineers in the workforce in 1982. Midpoint plant shipments is measured by the value of shipments by the minimum number of establishment necessary to account for 50 percent of industry output for 1972. Average tariff is the nominal tariff rate for 1986. Non-tariff barrier is a (1, 0) dummy variable set equal to 1 if an industry had non-tariff trade restrictions in 1984.

Source: See Table 1(a)

Table 1: Sources of Foreign Direct Investment
in the United States 1979-88

Source	All Countries	U.K.	EC	Japan	Canada
Measure of FDI					
Value of All Industry FDI (\$ million)	315,221	79,239.1	69,109.9	55,129.1	57,838.7
% of All Industry FDI	100	25	22	17	18
Value of Manufacturing FDI (\$ million)	144,759	47,042.9	33,311.1	27,483.3	15,057.0
% of Manufacturing FDI	100	32	23	19	10
% of Manufacturing to Total FDI (within area) (\$ million)	46	59	48	50	26
Value of All Industry Equity FDI	287,603	75,606.6	63,430.2	43,396.0	53,831.2
% of All Industry Equity FDI (\$ million)	100	26	22	15	19
Value of Manufacturing Equity FDI	121,410	44,966.1	28,211.2	16,129.4	11,678.5
% of Manufacturing Equity FDI (\$ million)	100	37	23	13	9.6
Value of All Industry Plant and Expenses FDI	27,618.4	3,632.5	5,678.7	11,733.1	4,007.5
% of All Industry Plant and Expansion FDI (\$ million)	100	13	21	42	15
Value of Manufacturing and Expansion FDI	23,348.7	2,076.8	5,099.9	11,353.9	3,378.5
% of All Manufacturing Plant and Expansion FDI	100	8.9	22	49	14
% of Manufacturing to All Industry Plant and Expansion FDI (within area)	85	57	90	97	84

Source: Ray, Edward John "Old Myths and New Realities: Foreign Direct Investment in the United States" (unpublished manuscript, March 1992).

Table 2A: Sources of Equity FDI in Manufacturing, 1975-88

Rank	Industry	All Countries		US		EC ¹		Japan		Canada	
		Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%
1	Petroleum Refining	14,162.2	100	9,427.5	66	823.6	5.8	10.0	.07	717.2	5.1
2	Dry, condensed and evaporated products	6,000.0	100	0.0	0	0.0	0	0.0	0	0.0	0
3	Book Publishing	4,416.1	100	3,074.2	69.6	948.6	21.5	0.0	0	388.0	8.8
4	Plastics materials and resins	4,218.3	100	0.0	0	1,523.0	36	50.2	1.2	2,645.1	62.7
5	Tires and Inner Tubes	3,871.0	100	0.0	0	922.0	23.8	2,949.0	76.2	0.0	0
6	Follet Preparations	3,827.4	100	210.0	5.5	3,256.5	85.2	355.1	9.3	0.0	0
7	Electronic Computing Equipment	3,438.7	100	38.6	1.1	3,060.0	89.1	1,424.6	41.2	23.2	.67
8	Industrial Organic Chemicals, nec	3,138.5	100	228.5	7.3	2,910.0	92.7	0.0	0	0.0	0
9	Periodicals, Pre-recorded Records and Tapes	2,878.6	100	1,343.5	47	921.6	32.1	0.0	0	139.0	4.1
10	Agricultural Chemicals, nec	2,371.4	100	3.0	0.1	100.0	12.6	2,032.0	86	0.2	.001
11	Pharmaceutical Preparations	2,300.0	100	1,500.0	65	575.0	25	0.0	0	0.0	0
12	Aluminum sheet, plate, & foil	2,181.4	100	1,412.9	65	200.7	9.2	216.9	10	83.5	4.3
13	Miscellaneous Manufactures	2,003.8	100	944.8	48	0.0	0	255.0	13	785.2	39
14	Blast Furnaces & Steel Mills	1,920.0	100	274.7	14	0.0	0	1,060.2	55	73.1	3.8
15	Electronic Components, nec	1,785.9	100	1,450.4	81	104.6	5.9	157.9	8.8	16.0	0.9
16	Cement	1,697.9	100	608.7	36	714.2	42	0.0	0	22.7	1.3
17	Wines, Brandy, & Brandy spirits	1,662.6	100	1,360.0	82	27.0	1.6	55.1	3.3	200.0	12
18	Wet corn milling	1,527.5	100	1,500.0	98	27.5	1.8	0.0	0	0.0	0
19	Motor Vehicle & Car Bodies	1,416.4	100	0.0	0	882.5	62	458.9	47	0.0	0
20	Total Top 20	66,814.7	100	25,485.8	38.02	25,296.8	38.02	9,460.7	14.16	5,081.2	7.61
	Top 20 Share Area FDI %	55%	----	36.50%	----	36.00%	----	14.16%	----	7.61%	----

Source: See Table 1

Table 2B: Sources of Plant & Expansion FDI in Manufacturing, 1979-88

Rank	Industry	All Countries		UK		EC ¹		Japan		Canada	
		Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%	Value (\$ mill)	%
1	Motor Vehicle & Car bodies	4,071.5	100	0.0	0	564.8	14	3,474.1	85	0.7	.02
2	Motor vehicle parts and accessories	1,961.1	100	72.6	3.7	63.2	3.2	1,716.8	88	76.5	3.9
3	Semiconductors & related device	971.4	100	0.0	0	261.2	27	641.2	66	3.0	0.3
4	Paper mills	905.5	100	0.0	0	21.6	2.4	0.0	0	883.9	98
5	Plastics materials & Resins	899.1	100	388.2	43	367.2	41	38.1	4.2	2.2	0.2
6	Petroleum refining	758.3	100	116.6	15	640.8	85	0.0	0	0.9	0.1
7	Pulp mills	673.8	100	0.0	0	0.0	0	0.0	0	562.8	84
8	Carbon & Graphite products	511.0	100	133.0	26	0.0	0	0.0	0	378.0	74
9	Rice milling	500.0	100	0.0	0	0.0	0	500.0	100	0.0	0
10	Steel pipe & tubes	474.3	100	0.0	0	146.5	9.8	27.8	5.9	400.0	84
11	Blast Furnaces & Steel mills	452.2	100	22.0	4.9	44.1	9.8	105.0	23	250.0	55
12	Petroleum & Coal product,nc	434.4	100	238.0	55	187.5	43	0.0	0	0.9	2.0
13	Electronic computing equipment	388.7	100	0.9	.23	37.5	9.6	350.3	90	0.0	0
14	Radio & Television comm. equip.	366.7	100	0.0	0	0.0	0	359.2	98	0.0	0
15	Electronic components,nc	342.6	100	0.0	0	15.9	4.6	205.8	60	119.8	35
16	Automotive stampings	337.6	100	0.0	0	127.0	38	210.6	62	0.0	0
17	Primary aluminium	328.0	100	0.0	0	0.0	0	79.3	24	248.0	73
18	Industrial organic chemicals,nc	323.4	100	0.0	0	189.5	59	20.0	6.2	0.0	0
19	Photographic equip & supply	308.3	100	0.0	0	60.5	20	247.8	80	0.0	0
20	Agric. chemicals,nc	301.1	100	3.3	1.1	291.0	97	0.0	0	2.0	.66
	Total Top 20	15,309	100	874.8	6.37	2,918.3	19.06	7,976	52.10	2,928.7	19.13
	Top 20 Share Area FDI %	63.57%	----	46.94%	----	57.22%	----	70.25%	----	86.69%	----

Table 3a: Market Structure and The Value of Equity Foreign Direct Investment in the U.S.: 1979-1988
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables										# of Observations
	Constant	Consumer Goods	Unionization	Four Firm Concen. Ratio	Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GNP Growth	Eff. Exchg. Rate	R ²	
All Countries	-4.70 (19.98)	-0.005 (0.06)	-0.0002 (0.16)	-0.003 (2.28)	0.002 (10.33)	0.37 (15.19)	0.001 (5.06)	-0.004 (0.36)	1.57 (7.29)	0.05	2,950
U.K.	-3.97 (11.07)	0.02 (0.16)	-0.003 (2.17)	-0.006 (2.92)	0.02 (6.75)	0.29 (9.04)	0.001 (4.83)	0.06 (1.97)	0.001 (1.16)	0.05	2,950
EC*	-5.03 (13.24)	-0.23 (1.94)	-0.002 (0.98)	-0.0004 (0.18)	0.008 (5.63)	0.30 (8.74)	0.0007 (2.57)	0.002 (0.25)	0.02 (4.78)	0.05	2,950
Japan	-5.23 (14.63)	-0.10 (0.87)	-0.003 (1.59)	0.002 (0.76)	0.003 (3.58)	0.33 (8.96)	0.0001 (0.29)	-0.03 (0.94)	2.04 (6.95)	0.05	2,950
Canada	-4.91 (4.91)	0.16 (1.15)	-0.001 (0.57)	-0.007 (2.82)	0.09 (5.10)	0.30 (7.12)	0.0005 (1.37)	0.08 (0.37)	0.01 (0.92)	0.06	2,950

Table 3b: Market Structure and The Value of Foreign Direct Investment in the U.S.: 1979-1988
New Plant and Expansion
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables										# of Observations
	Constant	Consumer Goods	Unionization	Four Firm Concen. Ratio	Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GNP Growth	Eff. Exchg. Rate	R ²	
All Countries	-4.67 (18.34)	-0.33 (3.78)	0.0005 (0.40)	0.007 (4.96)	0.001 (5.10)	0.41 (15.30)	0.00001 (0.04)	0.03 (2.06)	0.07 (0.31)	0.05	2,950
U.K.	-5.13 (9.39)	-0.51 (2.49)	-0.0005 (0.21)	0.003 (1.21)	0.02 (5.65)	0.22 (4.77)	0.0009 (2.21)	0.07 (1.46)	0.006 (3.22)	0.07	2,950
EC*	-4.24 (11.43)	-0.26 (2.10)	-0.002 (1.09)	0.002 (0.97)	0.009 (6.19)	0.28 (8.19)	0.0006 (1.92)	-0.007 (1.29)	0.007 (1.46)	0.06	2,950
Japan	-5.25 (14.67)	-0.21 (1.84)	-0.003 (1.97)	0.006 (2.92)	0.008 (10.17)	0.35 (9.74)	-0.0003 (0.73)	0.23 (2.98)	1.33 (4.64)	0.10	2,950
Canada	-6.40 (5.09)	-0.57 (2.65)	0.003 (1.28)	-0.002 (0.67)	0.07 (3.30)	0.28 (5.77)	0.00009 (0.19)	0.04 (0.17)	0.02 (1.83)	0.06	2,950

Source: See Table 1

Table 4a: U.S. Protectionism and The Value of Equity Foreign Direct Investment in the U.S.: 1979-1988
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables					Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GNP Growth	Eff. Exchange Rate	R ²	# of Observations
	Constant	Tariff	Non-Tariff Trade Barriers	Tariff and Nontariff Trade Barriers	Trade Balance							
All Countries	-4.51 (17.92)	-0.0003 (2.43)	-0.08 (0.78)	0.01 (0.73)	-0.000002 (0.90)	0.002 (9.34)	0.35 (13.36)	0.001 (4.23)	-0.006 (0.45)	1.60 (6.79)	0.05	2,410
U.K.	-4.24 (11.00)	0.01 (0.75)	0.08 (0.54)	-0.03 (1.21)	0.0001 (1.43)	0.02 (5.91)	0.30 (8.35)	0.001 (4.05)	0.05 (1.47)	0.0008 (0.55)	0.04	2,390
EC ^a	-4.80 (11.85)	-0.02 (0.92)	-0.27 (1.80)	0.009 (0.39)	0.00002 (0.77)	0.007 (4.79)	0.30 (7.81)	0.0005 (1.52)	-0.0004 (0.06)	0.02 (3.88)	0.05	2,400
Japan	-4.87 (12.67)	-0.05 (2.41)	-0.53 (3.31)	0.06 (2.33)	3.0x10 ⁻⁷ (0.44)	0.003 (4.14)	0.30 (7.67)	0.0002 (0.40)	-0.009 (0.11)	2.09 (6.60)	0.05	2,380
Canada	-5.27 (4.72)	-0.07 (2.12)	0.10 (0.53)	0.05 (1.30)	0.0005 (1.42)	0.08 (4.21)	0.26 (5.72)	0.0006 (1.25)	0.26 (1.04)	0.02 (1.31)	0.06	2,400

Table 4b: U.S. Protectionism and The Value of Foreign Direct Investment in the U.S.: 1979-1988
"New Plant and Expansion"
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables					Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GNP Growth	Eff. Exchange Rate	R ²	# of Observations
	Constant	Tariff	Non-Tariff Trade Barriers	Tariff and Nontariff Trade Barriers	Trade Balance							
All Countries	-4.25 (15.51)	-0.02 (1.49)	-0.29 (2.57)	0.04 (2.77)	-1.7x10 ⁻⁶ (0.85)	0.001 (5.23)	0.39 (13.48)	0.0004 (1.55)	0.03 (1.98)	0.03 (0.11)	0.05	2,410
U.K.	-5.28 (8.91)	0.009 (0.37)	0.06 (0.29)	0.001 (0.04)	-0.00007 (1.92)	0.02 (4.44)	0.22 (4.27)	0.001 (2.15)	0.07 (1.26)	0.007 (3.28)	0.06	2,390
EC ^a	-4.37 (10.60)	0.0009 (0.05)	-0.07 (0.46)	0.02 (0.93)	0.00005 (1.21)	0.008 (5.48)	0.28 (7.15)	0.001 (2.77)	-0.008 (1.26)	0.007 (1.33)	0.06	2,400
Japan	-4.98 (13.12)	-0.008 (0.47)	-0.34 (2.26)	0.02 (1.14)	5.3x10 ⁻⁷ (0.76)	0.009 (10.70)	0.33 (8.47)	6.5x10 ⁻⁶ (0.02)	0.26 (3.13)	1.25 (4.06)	0.10	2,380
Canada	-7.30 (5.12)	-0.10 (2.82)	-0.95 (3.94)	0.14 (3.39)	0.0002 (0.75)	0.07 (3.50)	0.34 (6.19)	0.0005 (0.99)	0.10 (0.36)	0.03 (2.29)	0.07	2,400

Source: See Table 1

Table 5a: Production Characteristics and The Value of Equity Foreign Direct Investment in the U.S.: 1979-1988
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables		Mgmt. Inten- sity	(DOLRRD) Origin R&D	Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GDP Growth	Eff. Exchg. Rate	R ²	# of Obser- vations
	Con- stant	Midpoint Plant Shpmts.									
All Countries	-5.47 (19.78)	-0.0008 (1.69)	0.03 (6.72)	-0.0004 (1.49)	0.002 (10.67)	0.40 (13.48)	0.0007 (2.76)	-0.009 (0.65)	1.70 (7.36)	0.05	2,450
U.K.	-5.20 (12.10)	-0.001 (1.95)	0.03 (4.78)	-0.0006 (1.78)	0.02 (6.38)	0.34 (8.28)	0.001 (3.19)	0.08 (2.14)	0.002 (1.60)	0.04	2,450
EC*	-6.00 (13.52)	-0.002 (3.11)	0.03 (6.18)	-2.0x10 ⁻⁶ (0.0005)	0.01 (6.39)	0.35 (8.13)	0.00006 (0.17)	0.0009 (0.14)	0.02 (4.76)	0.06	2,450
Japan	-5.86 (13.28)	-0.0008 (1.32)	0.03 (5.09)	0.0003 (0.95)	0.003 (3.14)	0.33 (7.08)	-0.0005 (1.25)	-0.04 (0.50)	2.21 (6.90)	0.06	2,450
Canada	-6.22 (5.74)	-0.002 (2.61)	0.02 (2.78)	-0.00008 (0.21)	0.08 (4.79)	0.37 (7.15)	0.00005 (0.12)	0.10 (0.41)	0.01 (1.23)	0.05	2,450

Table 5b: Production Characteristics and The Value of Foreign Direct Investment in the U.S.: 1979-1988
New Plant and Expansion
(Tobit regressions with absolute t-statistics in parentheses)

Dependent Variable	Independent Variables		Mgmt. Inten- sity	(DOLRRD) Origin R&D	Within Parent Industry	Log Value of Shpmts.	U.S. Industry Growth	U.S. Relative GDP Growth	Eff. Exchg. Rate	R ²	# of Obser- vations
	Con- stant	Midpoint Plant Shpmts.									
All Countries	-3.16 (11.12)	0.002 (5.13)	-0.003 (0.70)	0.001 (4.85)	0.0007 (2.64)	0.22 (7.12)	0.0005 (1.65)	0.02 (1.67)	0.09 (0.36)	0.06	2,450
U.K.	-5.55 (8.60)	-0.0004 (0.52)	0.02 (2.56)	-0.0002 (0.39)	0.02 (5.54)	0.23 (3.96)	0.0003 (1.35)	0.06 (1.24)	0.006 (3.17)	0.07	2,450
EC*	-4.30 (9.84)	0.0002 (0.41)	0.01 (1.73)	0.0004 (1.33)	0.008 (4.95)	0.25 (5.75)	0.0007 (1.98)	-0.009 (1.34)	0.007 (1.43)	0.06	2,450
Japan	-4.42 (10.97)	0.001 (2.49)	0.007 (1.17)	0.0008 (2.65)	0.006 (5.71)	0.21 (4.80)	-0.0002 (0.57)	0.24 (2.84)	1.40 (4.53)	0.10	2,450
Canada	-6.79 (4.96)	-0.0005 (0.06)	-0.01 (1.28)	-0.0003 (0.59)	0.07 (3.56)	0.29 (4.89)	0.0004 (0.74)	0.07 (0.28)	0.03 (2.15)	0.05	2,450

Source: See Table 1

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III INDUSTRIAL COUNTRIES

Table 10. Industrial Countries: Medium-Term Flow of Funds, 1967-96¹
(Percent of GNP/GDP)

	1967-73 ²	1974-79	1980-90	Medium-Term Projections 1991-96	
				Average level	Change during period ³
All industrial countries					
National saving	23.0	23.1	20.6	21.4	1.9
Private saving	21.5	21.8	20.3	19.3	-0.1
Government saving	3.5	1.3	0.3	2.1	2.0
Foreign saving	-0.5	—	0.3	0.3	-0.2
Total investment	24.4	23.1	20.9	22.0	1.7
Real business fixed investment	12.4	11.9	13.1	16.3	2.3
Major industrial countries					
National saving	24.0	23.0	20.4	21.2	2.1
Private saving	21.0	22.0	20.2	19.2	0.1
Government saving	3.0	1.1	0.2	2.0	2.0
Foreign saving	-0.5	-0.1	0.2	0.4	-0.3
Total investment	23.5	22.9	20.7	21.5	1.8
Real business fixed investment	12.0	11.7	13.2	16.5	2.5
Canada					
National saving	23.0	22.7	20.3	...	...
Private saving	19.9	22.6	23.8	...	...
Government saving	3.0	0.1	-3.5	...	...
Foreign saving	0.1	1.9	1.0	...	...
Total investment	23.0	24.6	21.3	...	...
Real business fixed investment	8.6	9.5	12.4	...	...
United States					
National saving	16.0	16.6	13.6	...	...
Private saving	16.6	17.8	16.1	...	...
Government saving	-0.6	-1.2	-2.5	...	...
Foreign saving	-0.1	—	1.9	...	...
Total investment	15.9	16.6	15.5	...	...
Real business fixed investment	10.9	11.2	12.0	...	...
Japan					
National saving	38.0	33.0	31.9	...	...
Private saving	30.3	29.0	26.3	...	...
Government saving	7.7	4.0	5.6	...	...
Foreign saving	-1.1	-0.3	-2.0	...	...
Total investment	36.9	32.7	29.9	...	...
Real business fixed investment	15.5	14.0	16.5	...	...
France					
National saving	26.1	24.6	20.2	...	...
Private saving	21.3	21.7	18.8	...	...
Government saving	4.8	2.9	1.4	...	...
Foreign saving	0.7	0.1	0.6	...	...
Total investment	26.8	24.7	20.8	...	...
Real business fixed investment	13.6	12.7	11.9	...	...
Germany (west)					
National saving	26.9	22.5	22.7	...	...
Private saving	21.5	20.1	20.8	...	...
Government saving	5.3	2.4	1.9	...	...
Foreign saving	-1.4	-1.0	-2.2	...	...
Total investment	25.5	21.5	20.6	...	...
Real business fixed investment	12.2	10.9	12.0	...	...
Italy					
National saving	27.1	25.5	21.7	...	...
Private saving	28.3	30.9	28.1	...	...
Government saving	-1.2	-5.3	-6.4	...	...
Foreign saving	-1.5	0.2	0.9	...	...
Total investment	25.6	25.8	22.6	...	...
Real business fixed investment	15.2	13.8	12.4	...	...

Table 10. (concluded)

	1967-73 ^a	1974-79	1980-90	Medium-Term Projections 1991-96	
				Average level	Change during period ^d
United Kingdom					
National saving	20.2	19.1	17.3	...	...
Private saving	13.3	16.9	15.4	...	...
Government saving	6.9	2.2	1.9	...	...
Foreign saving	-0.3	0.9	0.2	...	...
Total investment	19.9	20.0	17.5	...	...
Real business fixed investment	7.9	8.5	10.9	...	...
Other industrial countries					
National saving	27.6	23.4	21.3	23.2	0.7
Private saving	21.7	20.4	20.7	20.1	-1.1
Government saving	6.0	3.0	0.6	3.0	1.9
Foreign saving	-0.7	0.8	0.7	1.5	0.4
Total investment	26.9	24.2	22.0	24.6	1.2
Real business fixed investment	13.2	12.8	12.7	14.7	0.9

^a All ratios are in national terms, except for real business fixed investment which is expressed in percent of real GNP/GDP. National income accounts definitions are used throughout, except for foreign saving which is defined as the current account of the balance of payments with sign reversed. For the foreign sector, a positive number indicates a current account deficit or a use of foreign saving; for the government sector, a positive number indicates a budget surplus or a provision of saving. Government saving refers to the general government excluding government capital formation, which is included in investment. In Japan and the United Kingdom, public sector enterprises are included in the government sector. Data for the Federal Republic of Germany relate only to the former territory of west Germany in order to ensure consistency among the data for the public, private, and foreign sectors. The figures exclude estimates of the current account and budgetary positions of the former German Democratic Republic which are subject to a wide margin of uncertainty. Some historical data are from the OECD Economic Outlook, volume 48, December 1990. The real business fixed investment series was used, along with OECD estimates of depreciation, to generate the capital stock series underlying the factor contributions to actual output growth presented in Table 9; for the projections period, average depreciation rates during 1987-89 were assumed. Figures may not add up to totals due to rounding, to the statistical discrepancy in the national accounts, and to statistical differences between the concepts of foreign saving and the current account deficit.

^b Owing to data availability, the time period is 1971-73 for the "other" and the "all" industrial countries groups.

^c Change from 1990 to 1996 in percentage points of GNP/GDP.

is projected to rise by nearly 2 percent of GNP during 1991-96. The private saving rate fell by 1½ percent of GNP in the 1980s from the level in the latter half of the 1970s, but it is expected to decline only slightly during 1991-96. Factors that appear to have contributed to the fall in the 1980s include: the upward revaluation of the stock of wealth, particularly in housing and equities; improvements in the relative income position of older groups in the population who tend to save a relatively low fraction of their current income; financial liberalization, which eased traditional borrowing constraints on both households and businesses; and the increased availability and benefits of public pension plans. Changes in interest rates seem to have had relatively small effects on saving behavior in the past 20 years.²⁰

²⁰ Changes in interest rates have offsetting positive and negative influences on saving and the net effect is ambiguous. An increase in the interest rate will increase future (lifetime) income of households, prompting an increase in current consumption (the "income effect"). A higher interest rate also implies that forgoing current consumption will yield a higher level of future consumption, thus making current saving more attractive (the "substitution effect"). See B. Aghevli and others, *The Role of National Saving in the World Economy: Recent Trends and Prospects*, IMF Occasional Paper No. 67 (Washington: International Monetary Fund, March 1990), p. 16.

So far, the rise in the average age of the population in industrial countries does not appear to have had a significant negative impact on saving, but it is expected to become a more important factor in the 1990s in Japan and in the European countries; in North America the aging of the population is expected to become a significant factor only after the turn of the century.²¹ From 1990 to 1996 private saving rates are expected to fall in Canada, Italy, Japan, and the smaller industrial countries as a group where these rates have been relatively high; to remain broadly unchanged in west Germany and the United States; and to rise in France, reflecting the projected pickup in the growth of disposable income, and in the United Kingdom, where some unwinding of the effects of asset price inflation and financial liberalization during the 1980s is expected.

In most of the industrial countries, the programs of fiscal consolidation that were initiated in the 1980s are expected to continue in the 1990s. Among the major countries, the net use of saving by the public sector is projected to drop in relation to GNP in those countries

²¹ See "Population Aging: An Attempt to Quantify the Long-Term Macroeconomic Effects" in *World Economic Outlook*, May 1990, pp. 100-13.

Source: *World Economic Outlook* (May 1992) pp. 46-47.

Table 3
U.S. direct investment position abroad and foreign direct investment position in the United States on a historical cost basis, in billion dollars, 1988-90.

Industry	U.S. direct investment position abroad			Foreign direct investment position in the United States		
	1988	1989	1990	1988	1989	1990
All countries	335.9	370.1	421.5	314.8	373.8	403.7
Petroleum	57.8	54.0	59.7	36.0	37.2	38.0
Manufacturing	138.7	149.2	168.2	122.6	151.8	160.0
Food & kindred products	13.3	13.5	16.0	16.5	24.1	22.9
Chemicals & allied products ..	31.4	35.0	38.7	30.9	37.0	41.7
Primary & fabricated metals ..	7.9	8.1	9.8	10.9	13.6	17.6
Machinery except electrical ..	25.7	26.0	28.8	22.5	30.7	29.7
Electrical & electronic equipment	10.7	11.7	13.6	1	1	1
Transportation equipment	19.2	23.0	24.0	1	1	1
Other manufacturing	29.7	31.9	37.3	41.9	46.5	48.2
Wholesale trade	34.1	37.2	41.4	43.7	46.3	52.6
Retail trade	1	1	1	9.9	9.0	9.4
Banking	19.1	20.4	21.4	16.9	18.6	19.1
Finance except banking	63.4	84.3	98.9	8.1	16.8	13.1
Insurance	1	1	1	19.0	22.7	25.3
Real Estate	1	1	1	25.9	30.1	34.6
Services	7.9	8.7	10.8	19.0	22.5	30.5
Other industries	14.9	16.1	21.0	13.7	18.6	20.1

¹ Not available, or suppressed to avoid disclosure of data of individual companies or less than \$500,000.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 1991

Source: See Table 3

Table 4
U.S. direct foreign investment abroad by major investment and major recipients on a historical-cost basis, in billions of dollars, 1990.

Area investment	All countries	Canada	European Community	Other Europe	Germany	United Kingdom	Switzerland	Japan	Developing countries	Latin America & other Western Hemisphere	Middle East	Other Africa	Other Asia & Pacific	OPEC
All industries	421.5	68.4	172.9	31.3	27.7	65.0	23.7	21.0	105.7	72.5	4.8	3.8	24.7	9.8
Petroleum	59.7	10.7	18.8	5.6	3.1	11.3	1	3.4	15.7	5.3	2.0	2.7	5.6	5.5
Manufacturing	168.2	33.2	81.3	2.7	17.5	20.6	1.2	10.6	33.6	23.8	0.9	1	8.4	1.9
Food & kindred products	16.0	2.3	8.0	0.5	1.2	2.1	1	1	3.7	3.1	1	1	0.5	1
Chemicals & allied products	38.7	6.4	19.1	1	3.3	3.5	1	2.5	7.9	5.4	0.6	1	1.8	0.9
Primary & fabricated metals	9.8	3.0	3.9	1	1.3	1.0	1	1	2.1	1.8	1	1	1	1
Machinery except electrical	28.8	2.7	17.9	0.9	4.1	3.1	1	2.9	3.8	2.8	1	1	1.0	1
Electrical & electronic equipment	13.6	2.2	4.5	1	0.8	1.3	1	1.2	5.2	1.5	1	1	3.3	1
Transportation equipment	24.0	8.0	8.7	1	3.4	2.9	1	2.5	4.2	3.3	1	1	0.9	1
Other manufacturing	37.3	8.7	19.2	0.5	3.5	6.7	1	0.9	6.7	5.9	1	1	0.8	0.5
Wholesale trade	41.4	4.1	15.4	9.1	1.5	2.8	7.4	3.8	7.5	2.9	0.5	1	4.0	1
Banking	21.4	1.1	7.5	1.2	1.7	3.6	1.0	1	10.4	7.6	1	1	2.8	1
Finance except banking	98.9	12.0	40.7	11.5	2.9	23.1	11.1	2.2	31.0	27.3	0.9	1	2.6	1
Services	10.8	1.6	5.5	1.0	1	2.3	1	1	2.2	1.7	1	1	1	1
Other industries	21.0	5.8	3.8	1	1.1	1.4	1	1	5.5	3.9	1	1	1.2	0.7

¹ Suppressed to avoid disclosure of data of individual companies, or investments of less than \$500,000.

Note.—Figures may not add to totals because of rounding and data suppression to avoid disclosure of individual companies.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 1991.

Table 5
Foreign direct investment position in the United States on a historical-cost basis, by major foreign investors and major investment category in billions of dollars, 1990.

Investment category	All countries	United Kingdom	Japan	Netherlands	Germany	Canada	European Community
Total	403.7	108.1	83.5	64.3	27.8	27.7	230.0
Petroleum	38.0	15.3	1	10.5	0.5	1.4	30.8
Manufactures	160.0	52.9	15.2	24.5	15.2	9.3	109.7
Food and kindred products	22.9	8.8	0.7	7.3	1	0.4	17.9
Chemicals and allied products	41.7	8.9	3.9	8.1	8.6	0.5	31.1
Primary & fabricated metals	17.6	4.9	2.1	1.5	1.1	1.8	11.4
Machinery	29.7	7.9	4.2	4.5	3.0	1.9	17.0
Other	48.2	22.4	4.3	3.1	2.5	4.7	32.3
Wholesale trade	52.6	4.2	27.6	4.4	6.1	2.4	16.8
Retail trade	9.4	3.0	0.6	2.0	1.4	1	7.1
Banking	19.1	1.9	6.0	2.2	1.0	1.8	8.2
Finance except banking	13.1	3.8	10.4	1.3	1	1.8	1.6
Insurance	25.3	7.4	0.5	4.8	2.8	3.7	15.6
Real estate	34.6	4.1	15.9	5.2	1.0	3.1	10.8
Services	30.5	9.2	6.5	7.8	0.1	0.6	20.4
Other	20.1	6.2	0.8	1.5	0.6	4.3	9.1

¹ Suppressed to avoid disclosure of data of individual countries, not available or less than \$500,000.

Note: Figures may not add to totals due to rounding or suppression of data.

Source: U.S. Department of Commerce, Bureau of Economic Analysis, *Survey of Current Business*, August 1991.

Table 6
U.S. merchandise trade, seasonally adjusted

Item	Exports		Imports		Trade balance	
	July 1991	August 1991	July 1991	August 1991	July 1991	August 1991
Current dollars—						
Including oil	35.2	34.2	41.2	40.9	-8.0	-6.8
Excluding oil	35.2	34.2	38.2	37.4	-3.0	-3.2
1987 dollars	33.2	32.4	39.0	38.8	-5.8	-6.5
Three-month-moving average	35.2	34.8	40.0	40.3	-4.8	-5.5
Advanced-technology products (not seasonally adjusted)	7.8	7.6	5.6	5.3	+2.2	+2.3

Source: U.S. Department of Commerce News, FT 900, October 1991.

NO. 177. GENERAL IMPORTS, BY SELECTED COMMODITY GROUPS: 1970 TO 1987—Continued
 (In millions of dollars, See footnote p. 763)

COMMODITY	1970	1975	1980	1981	1982	1983	1984	1985	1986	1987
Other manufactured goods—Con										
Metal and manufactures	4,808	8,844	18,717	22,323	18,227	18,711	24,984	23,824	23,814	25,426
Fig iron and ferroalloy	729	559	678	982	429	452	564	468	621	548
Iron and steamed products	1,922	4,027	8,982	10,247	8,187	8,168	10,509	10,291	10,150	10,396
Bari, coils, sheets, and strips	486	820	1,420	1,747	1,468	1,307	1,865	1,775	1,803	1,806
Plates and sheets	808	880	1,263	1,689	1,509	1,221	1,685	1,523	1,550	1,575
Steel wire	119	222	392	386	242	267	298	236	286	266
Tubes, pipes, and fittings	349	485	858	832	624	614	702	536	536	528
Nonferrous base metals	1,902	2,063	818	1,072	918	1,368	2,622	2,445	1,582	1,520
Copper	527	119	1,470	1,279	960	913	2,008	1,341	1,512	1,140
Aluminum	211	456	680	662	565	622	876	913	828	815
Magnesium	236	415	974	1,353	1,328	1,229	1,600	904	916	872
Lead	74	483	81	90	37	85	80	57	61	137
Tin	100	313	778	841	376	431	478	818	815	270
Platinum group metals	83	274	329	837	798	1,329	548	889	883	648
Miscellaneous	86	244	1,107	142	912	703	1,082	862	1,134	1,134
Iron and steel	825	1,789	2,732	1,170	4,294	4,584	1,822	6,580	7,129	6,058
Textile fibers, n.e.s.	1,125	1,219	2,486	3,048	2,807	3,225	4,821	4,806	4,788	6,111
Textiles	227	129	184	271	260	355	523	534	648	728
Textile fabrics	172	219	423	607	488	669	878	827	1,008	1,283
Cotton fabrics	68	129	408	572	528	546	702	1,000	840	986
Textile fabrics, woven, exc. cotton	35	122	114	104	82	87	95	78	94	88
Woolen and worsted	63	48	293	306	377	322	391	449	608	663
Fur coverings	1,296	2,582	4,320	7,537	818	933	13,487	14,888	17,268	20,488
Clothing	426	1,275	2,908	3,018	3,427	4,010	4,834	5,895	6,475	7,238
Professional, scientific, photographic, and computing instruments ¹	256	278	2,854	3,701	3,132	3,528	3,986	3,211	1,598	4,509
Clocks and watches	135	158	1,127	1,275	981	1,056	1,254	347	1,536	1,702
Musical instruments, sound recorders and reproducers and parts ²	805	781	468	621	726	827	1,068	1,784	2,286	3,227
Printed matter	180	254	446	622	684	884	838	821	915	938
Articles of plastic and rubber, n.e.s.	236	478	918	1,008	1,102	1,252	1,881	1,631	2,823	3,184
Toys, games, and sporting goods	427	673	1,928	2,015	2,486	2,412	2,188	4,075	4,526	3,722
Articles and articles	182	377	2,872	2,058	2,024	2,011	2,487	2,198	2,911	1,932
Other transactions	1,274	2,518	7,226	7,296	7,786	7,742	8,826	11,441	14,814	12,374

¹ Value on a cost-plus basis, and freight basis. Cost for U.S. imported commodities is portion of importation plus presence of freight in U.S. customs port of origin. ² "Carroll, coolant, and bonded." Prior to 1987, aluminum is listed as "metallic." ³ Machinery, n.e.s., electrical, electronic, and electronic instruments. ⁴ "Professional, scientific, photographic, and computing instruments" prior to 1980, classified under "Machinery." ⁵ Depreciated 1980, sound recorders included in "Machinery." Source: U.S. Bureau of the Census, U.S. General Imports and Exports for Consumption, Schedule A—Commodity by Country, FT 5 monthly.

NO. 137B. IMPORTS FOR CONSUMPTION—VALUES AND DUTIES: 1960 TO 1987

Note: As on customs value basis. Beginning 1985, includes uranium, thorium, and related products, beginning 1970, includes coal and coke, and beginning 1980, includes trade of type labels with foreign countries. For least of dollar values and for area coverage, see last section 2. See also Historical Statistics, Colonial Times to 1975, series U-27-121.

YEAR	VALUES				RATIO OF DUTIES TO VALUES		
	Total (\$ mil)	Free (mil)	Dutiable (mil)	Percent free	Total imports (mil)	Dutiable imports (mil)	Duties (percent)
40	14,450	8,180	6,249	56.6	1,064	7	10.00
41	21,282	7,234	11,839	34.0	1,962	9	10.00
42	16,022	11,124	10,320	69.4	2,446	15	10.00
43	49,418	18,246	26,889	36.9	4,913	9	10.00
44	62,429	32,518	47,748	52.1	5,284	8	10.00
45	89,024	38,918	38,378	43.7	5,391	6	10.00
46	99,616	40,058	48,006	40.2	5,371	4	9.15
47	181,121	67,008	83,281	37.0	6,484	4	17.83
48	171,918	37,190	83,319	21.6	7,033	4	10.00
49	252,012	51,201	105,442	20.3	7,913	4	9.97
50	177,818	81,827	125,442	46.0	9,485	4	9.81
51	241,007	102,276	102,845	42.4	7,022	3	7.98
52	250,012	78,238	182,874	31.3	6,893	3	9.37
53	242,246	75,928	188,483	31.3	6,822	3	9.57
54	256,878	82,387	177,282	32.1	6,932	3	9.40
55	322,848	102,717	200,141	31.8	7,496	3	9.30
56	342,552	106,029	237,818	31.1	13,087	4	10.00
57	368,637	121,624	246,113	33.0	13,213	4	10.00
58	402,086	122,182	259,814	31.0	13,213	4	6.15

¹ Customs duties (including import excise taxes) calculated on the basis of imports of quantity and value of imports of quantity and value. ² Based on imports of quantity and value. ³ Based on imports of quantity and value. ⁴ Based on imports of quantity and value. ⁵ Based on imports of quantity and value. Source: U.S. Bureau of the Census, Foreign Commerce and Navigation of the United States, Quarterly Summary of Foreign Commerce of the United States, Highlights of U.S. Export and Import Trade, FT 990, monthly, and unpublished data.

NO. 137B. DOMESTIC EXPORTS AND IMPORTS FOR CONSUMPTION OF MERCHANDISE, BY SELECTED SIC-BASED PRODUCT CATEGORY: 1977 TO 1987

Values in dollars. Includes nonmonetary gold, beginning 1980, includes trade of type labels with foreign countries. For 1981, imports are foreign port acquisition, exclude "Carroll, coolant, and bonded." Customs value basis. Beginning and export data are not strictly comparable to previous years due to changes in the Schedule B export classification.

SIC-BASED PRODUCT CATEGORY	1977	1980	1981	1982	1983	1984	1985	1986	1987
(1) Domestic exports, total ¹	117,963	216,959	228,981	207,150	186,949	212,937	208,938	206,274	212,689
(2) Agricultural, forestry and fishery products	18,756	30,091	31,483	29,486	29,812	27,357	26,073	18,881	17,717
(3) Agricultural products	10,592	20,223	20,821	19,820	19,510	18,100	17,510	15,068	14,176
(4) Livestock and livestock products	438	718	792	711	688	646	725	740	655
(5) Forestry products	826	1,550	1,870	1,950	1,614	1,551	88	18	155
(6) Fish, fresh or chilled, and other marine products	81	26	35	36	34	26	18	20	30
(7) Mineral commodities	4,206	8,226	8,144	8,820	8,178	8,411	8,284	5,598	5,058
(8) Metallic ores and concentrates	400	1,370	1,462	1,664	1,468	1,644	1,606	1,040	987
(9) Anthracite coal	27	96	102	53	43	63	82	56	37
(10) Bituminous coal and lignite	2,828	4,578	6,112	6,328	4,913	4,961	4,400	3,864	3,211
(11) Crude petroleum and natural gas	210	87	81	787	482	440	478	206	271
(12) Nonmetallic mineral fuels	782	1,418	1,354	1,182	1,130	1,182	787	714	832
(13) Manufactured commodities	84,470	171,254	184,225	186,378	189,008	173,284	179,790	179,401	208,438
(14) Food and kindred products	7,279	12,124	12,833	11,922	11,233	11,233	10,558	11,233	12,320
(15) Textile mill products	1,607	2,880	2,888	2,888	2,888	2,888	2,888	2,888	2,888
(16) Tobacco manufactures	1,407	1,400	1,338	1,768	1,538	1,441	1,482	1,553	1,891
(17) Apparel and related products	981	1,885	1,931	1,711	1,114	1,065	1,103	1,213	1,310
(18) Lumber and kindred products	2,132	2,893	2,628	2,862	2,822	2,899	2,888	2,988	3,981
(19) Furniture and fixtures	231	470	534	593	522	546	645	666	550
(20) Paper and allied products	2,432	4,474	4,755	4,210	4,152	3,422	3,988	4,478	4,976
(21) Printing and publishing	116	206	454	454	454	454	454	454	454
(22) Chemicals and allied products	10,854	21,051	21,058	20,221	19,588	22,848	21,787	24,382	26,900
(23) Petroleum and coal products	1,329	2,826	2,826	2,826	2,826	2,826	2,826	2,826	2,826
(24) Rubber and plastic, synthetic materials	1,548	2,879	3,070	3,325	3,112	3,325	3,228	3,478	4,070
(25) Leather and leather products	284	310	318	456	337	326	476	321	268
(26) Stone, clay, and glass products	1,156	1,822	1,822	1,822	1,822	1,798	1,822	1,723	2,048
(27) Primary metal products	2,812	11,491	8,780	5,462	4,982	5,260	4,747	4,803	5,808
(28) Fabricated metal products	4,527	8,227	7,947	8,892	8,732	8,226	8,785	9,542	9,859
(29) Machinery, electrical, electronic, and optical	1,868	3,684	4,824	38,203	33,180	37,266	37,478	36,358	41,054
(30) Electric and electronic equipment	8,820	16,338	16,382	16,144	16,828	20,188	18,808	20,415	21,818
(31) Transportation equipment	18,700	23,222	23,222	23,222	23,222	23,222	23,222	23,222	23,222
(32) Instruments and related products	1,151	2,800	2,828	3,271	3,271	2,844	2,822	2,822	2,822
(33) Misc. manufacturing	1,348	2,896	2,726	2,208	2,165	1,855	1,722	2,080	2,191
(34) Imports for consumption, total ²	148,467	279,648	338,318	342,240	336,860	322,949	343,581	336,887	402,066
(35) Agricultural, forestry and fishery products	19,041	30,534	31,918	29,892	30,743	28,203	16,732	14,001	13,401
(36) Agricultural products	6,182	8,221	8,692	8,221	8,221	8,221	7,852	8,762	7,444
(37) Livestock and livestock products	1,484	2,408	2,408	2,408	2,408	2,408	2,408	2,408	2,408
(38) Forestry products	782	964	964	964	964	782	830	786	834
(39) Fish, fresh or chilled, and other marine products	1,908	2,337	2,620	2,785	2,385	2,411	3,558	4,183	5,026
(40) Mineral commodities	39,920	70,711	70,015	62,705	62,973	64,500	59,101	27,780	32,818
(41) Metallic ores and concentrates	1,848	2,312	2,287	1,918	1,321	1,436	1,253	1,318	1,130
(42) Anthracite coal	10	50	53	32	43	14	50	34	24
(43) Crude petroleum and natural gas	35,278	68,827	68,581	50,118	40,670	39,862	35,672	24,453	30,812
(44) Nonmetallic mineral fuels	1,652	2,817	2,706	1,821	1,539	1,589	1,819	1,586	1,940
(45) Manufactured commodities	84,187	180,842	171,280	176,480	184,025	252,843	280,008	314,128	321,142
(46) Food and kindred products	1,168	2,064	2,064	1,821					

REPRESENTATIVE HAMILTON. Thank you, Mr. Ray.

We'll begin with questions with Congressman Armev.

REPRESENTATIVE ARMEV. Thank you, Mr. Chairman. Let me thank you also for your courtesy. Our conference is about to convene, and I want to attend. So I appreciate your allowing me to go first.

Gentlemen, let me thank you all. This is a fascinating subject area and you've all submitted excellent testimony.

Mr. Ray, I want to check with you, since you identified yourself as an economist. Are all you gentlemen economists?

REPRESENTATIVE HAMILTON. Well, they sure fooled me. I thought they were.

REPRESENTATIVE ARMEV. I thought you were all economists. With any of you gentlemen, you might want to see if I got it right.

It strikes me that what you said is that it makes a difference as to how we analyze overseas investment—either us abroad or them here—whether or not it would be equity investment or plant and equipment investment. And if we observe that it is equity investment, it is likely to have the impact that you observed, Mr. Cooney, with respect to manufacturing of increasing employment in that manufacturing sector in the investing nation, and actually decreasing employment in the host nation. Is that a fair observation?

MR. COONEY. No.

REPRESENTATIVE ARMEV. Am I correct that your observation was that American manufacturing and direct investment abroad has resulted in increased employment at home and actually decreased employment in the host nation?

MR. COONEY. No, not exactly the way you stated it.

What I said is that the increase in U.S. investment abroad has occurred at the same time as employment by U.S. manufacturing companies decrease in Europe. But the reason is the same as that causing the level of manufacturing employment in the United States to decrease in the same period of time. If you go trough to trough, or crest to crest in the cycle, we are employing roughly a million people less directly in manufacturing production today than we were 10 or 12 years ago.

What I'm talking about is the total employment effect in the U.S. economy as a result of exports, at least the direct employment.

REPRESENTATIVE ARMEV. Not necessarily in your—

MR. COONEY. Not necessarily in the company making the investment overseas.

REPRESENTATIVE ARMEV. So there were—

MR. COONEY. There are two different trends there.

REPRESENTATIVE ARMEV. You would have an increase in employment in the U.S. economy and a decrease in employment abroad.

MR. COONEY. I think, probably, as a matter of fact, if you have the investment abroad, the net effect will probably be increased employment in the host country as a result of the total activities created.

However, I was trying to counter the idea that U.S. companies are directly moving the job from the United States to overseas, because they're also decreasing their direct employment over there as well.

REPRESENTATIVE ARMEY. My impression, though, was that the equity investment would be most likely the kind of investment that would take place in order to circumvent a trade barrier; that is, so we could have an intra-corporate transfer of our inputs to our assemblage center, perhaps in Europe.

MR. RAY. But the problem is that you don't find evidence that it's stimulated by the existence of those trade barriers, at least on the in-bound side. And I can tell you, I know the historical literature that has been done on U.S. foreign direct investment abroad, going back to the mid-1950s when the phenomenon was first paid attention to. There is no systematic evidence of trade barrier jumping forces playing a major role in determining FDI activity, either on the out-bound or the in-bound side.

Can I come back to this business that you were just asking about, in terms of the employment effects?

REPRESENTATIVE ARMEY. Yes. I'm very much interested.

MR. RAY. There is an issue there. You want to start with the first observation that unless you're a dope, you don't invest in something unless you expect to make money, and you expect it to be a productive, growing venture.

That's why we invest abroad. That's why they invest here. And one would hope that it's not a begger-thy-neighbor outcome, that, in fact, it's job-creating in the host country, regardless of whether it's the United States or Europe or wherever we're investing.

So the first effect is that the job creation ought to occur if that investment is contributing to the expansion of that host economy.

The second effect is that the linkages between that subsidiary and its home market gives home-market suppliers, in the early stages of development, an advantage in getting contracts as suppliers to that subsidiary, and that's where some of this complementarity between foreign direct investment and export sales comes from.

REPRESENTATIVE ARMEY. Well, you see, I am confused, because I believed I read in Mr. Cooney's paper that our direct foreign investment in Europe resulted in increased employment here and decreased there.

That is not what I would have suggested. I should have thought it would have been job-creating in both the host—

MR. COONEY. Yes.

REPRESENTATIVE ARMEY. But you're saying I have not read your paper correctly.

MR. COONEY. Well, maybe I didn't write it correctly. That's a better way of looking at it.

REPRESENTATIVE ARMEY. Well, let's go with that thought.

[Laughter.]

MR. COONEY. I see the confusion. I see the reason why it's easy to confuse those two points.

REPRESENTATIVE ARMEY. Let's assume that you wrote it correctly, which is most likely going to be the outcome. Then we would say that the foreign direct investment will, perhaps with some exceptions, tend to be job-creating for both the host nation and the investing nation.

Now, the other thing that I want to focus on, there's also the whole question of technology transfer. It strikes me that technology transfer is only called transfer if it happens to be an innovation put in place by a foreign owner.

If it were the same innovation put in place by the domestic owner, it would be called innovation.

So I'm just not sure. Incidentally, I consider technology to be any refinement and sophistication of the degree of specialization and productive effort. It may be in science and engineering, but it may be a reorganization of the work force—something less tangible.

Is there a tendency for there to be more technological gain in the production process as a result of direct foreign investment in plant and equipment, as opposed to equity investment?

Has there been any indication of the numbers there?

MR. RAY. I think, when you deal with the sort of broader issue of what you mean by innovation or whether it's in techniques or management style or whatever—

REPRESENTATIVE ARMEY. No, productivity increases.

MR. RAY.—productivity-enhancing phenomenon, I don't think we can determine whether there is a split between equity and plant and plant creation.

What I was trying to get at is, to the extent that people differentiate industries on the basis of R&D effort associated, and use that to identify high-tech versus low-tech industries, I wanted to see if that played a role in helping us to understand why equity investment would occur in one case versus plant and plant creation in another case.

And it seemed to me that the R&D measure picks up that part of productivity-enhancing activity that's embodied in new capital.

REPRESENTATIVE ARMEY. That's right.

MR. RAY. And so it made sense to me to say that R&D originating within an industry would likely be associated with plant expansion activity because the only way you can get that productivity-enhancing effort in place is by bringing the new capital in.

And it was interesting to me to observe that by taking that tact, the Japanese investment in plant and plant expansion, as the major player, has exactly that characteristic.

That's the only point I was trying to make.

REPRESENTATIVE ARMEY. Right. Yes. But whether you're talking technology transfer or technological innovation, domestic or international, the quickest, perhaps most frequent incident in the history of the evolution of technological growth has been through new plant and equipment, where we embody the new science and engineering and then labor adjusted.

Did you have a point, Mr. Sauvant?

MR. SAUVANT. Yes, if I may, sir. Just to remind you that one of the principal reasons explaining foreign-direct investment, in the first instance, is that the companies that invest abroad often tend to have a technological lead in the products they are producing, and bring that superiority to the foreign market.

REPRESENTATIVE ARMEY. Right. That's what Ricardo called "comparative advantage," I believe.

MR. SAUVANT. Comparative advantage, exactly. I also wanted to underline something you said about the distinction between hard and soft technology, the organizational type of technology being soft technology. Soft technology is extremely important for modern production and processes, and it is particularly important in the services sector. You shouldn't forget that when we talk about foreign direct investment, half of it today is in the services sector, and the type of technology that is being transferred there is typically of a soft technology nature.

And the third point I wanted to make is that we shouldn't forget that foreign affiliates also very often engage in R&D; that is, generate technology in the host country in which they are established.

REPRESENTATIVE ARMEY. Thank you. Soft technology is very useful. I appreciate that nomenclature.

In general, we could say that whether we have American firms investing abroad or foreign firms investing in the United States, the upshot has tended to be that you have gainers, employment effects, gainers in both host and ... we have this mythology that is afoot in the polemics of politics in America of our heartless firms shipping our jobs overseas. There are no numbers to sustain that.

MR. RAY. There is a vast literature in economics that was generated during the 1970s, doing empirical analysis of U.S. outbound foreign direct investment—people like Lipsy and Weiss and Lipsy and Kravass who have built careers partly on this stuff—that says definitively, there is a complementarity between U.S. foreign direct investment and U.S. export performance.

I think what we've come to understand, it's this kind of linkage that I've suggested.

When you enter a new market, what you want to do is guarantee yourself reliable sources of high-quality inputs to produce your product, and if you don't know that market well, you're going to go back to your traditional suppliers and that's going to stimulate their ability to get export sales as your first source of supply for the intermediate inputs you need to sell your output in the foreign market.

REPRESENTATIVE ARMEY. One last, final point, and I appreciate everyone's patience. If, in fact, soft technology is important—and I believe it is—then it is quite likely for a firm that would wish to make direct investment in plant and equipment, such as the Honda plant in Ohio, they could not in fact make that investment pay off, to the degree investment must, in order to be made, if they did not have the personnel practice or the organizational process that they've innovated in soft technology. In fact, if we're going to make that investment, we cannot innovate our soft technology in this plant and conform with the union practices that prevail in that industry, in that nation.

So, I guess, one of the things that bothers me, do you have any evidence that there has ever been a foreign investor in this country that made that investment for the purpose of breaking an American union?

MR. COONEY. I can't recall of any decertification of, for example, Japanese-owned plants in the United States. There have been a number

of cases where there have been attempts to unionize and they have failed. There were, of course, a number of cases, such as the Fremont and Mazda plant, where Japanese companies have agreed to use a unionized work force.

REPRESENTATIVE ARMEY. But you could say that some foreign firms might have determined that the economic value of the hard and soft technology that we wish to put in place would be mitigated against by conforming with the standard union requirements, to the extent that the investment would not be worth making, if we had to make that compliance.

MR. COONEY. Right.

REPRESENTATIVE ARMEY. That would be a rational, sane, responsible business decision.

MR. COONEY. I would also say, if I could reverse this just for a moment, I think one of the reasons why we have some European and Japanese investors here, and interest here, is because it's possible to have, in some cases, more flexible work practices than in Europe. I could cite some specific cases on that.

As I mentioned in the paper, I think we're underinvested in Germany, bearing in mind the size and activity in the market. And part of the problem is that there are very inflexible laws in Germany, and in other countries in Europe as well. You tend to have that problem.

Just recently, for instance, I toured a Japanese plant in France. They could go immediately to three shifts at that plant, except for the fact that French law bans night work for women. The plant manager told me, we're stuck with a single shift. I can't do it. I have too many female employees." He said, "I just can't have all night workers, all men, all female workers on the assembly line for daytime. It won't work. I've got to be able to shift them around. I can't do it."

This is a French factory.

REPRESENTATIVE ARMEY. Without the third shift, there would be underutilization of plant capacity.

MR. COONEY. That's right, yes.

REPRESENTATIVE ARMEY. Thank you, Mr. Chairman. I do again appreciate your patience with me, and yours, too, Chalmers.

Thank you, gentlemen.

REPRESENTATIVE HAMILTON. Mr. Wylie?

REPRESENTATIVE WYLIE. Thank you, Mr. Chairman.

Mr. Ray, in our discussion before the hearing, we mentioned the fact that there is a substantial reduction in funding for higher education going on in Ohio, and I'm going to see if I can say this right.

I mentioned that in developing technology, we ought to make funding available to higher education, maybe make it a higher priority, from the defense budget. We don't have to say that the Russians are coming any more, so there will be a reduction there.

You mentioned that the transfer of technology development from defense-related spending as being significant and that we should be careful about being over-simplistic about educational benefits of such funding transfers.

I wonder if you would explain for the Committee and for those present what you meant, where you're coming from.

MR. RAY. Well, I guess, I don't want to take us too far afield on the issue at hand, but we were talking, for example, about the observation that seemed cogent at the time of the late 1960s, when our cities were faced with situations not unfortunately terribly different from what we've seen most recently in Los Angeles. People started second-guessing our commitment to the space program and so forth, relative to other domestic issues.

The question was, what does all that have to do with things here on earth? And what we've discovered, I think, over the last two decades, is that a lot of technology that was developed, in part, in relation to the space program, certainly with respect to the military buildup, had a peculiar quality relative to the private sector. And that was, since it wasn't developed for a particular industry for a particular purpose, it tended to be more generic.

We developed various optical techniques, tracking techniques, communications capabilities, that we developed obviously with some military objective in mind. But to the extent that businesses then competed on a more open basis to find ways to take those technologies and make a profit, that broad-based commitment to technology played a very major role in a lot of the success that we've had technologically over the last couple of decades.

And so the point I was trying to make is, if we're thinking about the idea of redirecting resources from military to domestic uses, and I know that one of the issues that has to be involved is what about the R&D effort that used to be attached to the military? How should it be reattached to the domestic economy?

I would submit an argument, which we should have learned from the spillover effects we got from the military R&D expenditure, that the more broad-based and generic you can make programs of support to technology so that market forces come into play in making businesses compete for profitable adaptations of that technology, the better off you're going to be.

The more games you play in terms of picking winners and losers, the more likely it is that you're going to get away from market fundamentals and the more likely it is you're going to get it wrong and waste a lot of money.

REPRESENTATIVE WYLIE. I understand your skepticism about picking winners and losers, but I do think this is related to the subject at hand today—foreign direct investment—in this regard.

NASA and the Defense Department have developed some discoveries in their research. Are those discoveries patented by the companies which make the discoveries, the contractors from NASA and the Department of Defense? Or does the Department of Defense and NASA have those patents?

MR. RAY. I'm really not equipped to address that. My sense would be that the companies do not maintain proprietary rights to those discoveries, but I'm not sure.

REPRESENTATIVE WYLIE. Does anybody on the panel know about that?

[No response.]

Mr. Cooney, any response?

MR. COONEY. I was just going to say, this is certainly an issue within NAM. I think that there's a balance in that situation, but I'm not sure. I'm certainly not the specialist on it. I can certainly get you an answer on it.

REPRESENTATIVE WYLIE. The point I want to make is that we ought to find out if they are available to Americans in the private sector. If not, should they be made available to Americans in the private sector, and maybe even foreign investors abroad, in developing these technologies which we have developed through these programs.

Is that a fair observation? Mr. Ray?

MR. RAY. It certainly has intuitive appeal. If this is something that collective resources have financed, that ought to be available for collective competition for adaptation.

REPRESENTATIVE WYLIE. I think this is an area where we have been pre-eminent and that maybe there is some technology there that we could stand on.

Now, Mr. Cooney mentioned that direct investment has increased substantially abroad, and Congressman Arney suggested that there is a tie-in between our U.S. investments abroad.

I know this is repetitious, but do you agree that our exports from the United States must have substantial U.S. direct investment abroad if we are going to increase those exports?

MR. RAY. Well, it's pretty clear. If you look on the outbound side, what are the industries in which we have a strong export presence now, say as opposed to 20 years ago. They are areas in which we also have a strong foreign direct investment presence.

That's also true for imports into the United States and foreign direct investment activities in the United States. If you look at these various source countries, they're investing in industries within the United States in which they have a comparative advantage, or one might argue they have a comparative advantage in trade.

And so, that can be overlaid on top of a very large literature which, hopefully, in your leisure, you might want to look at. It would take a while. But it tends to suggest a complementarity between foreign direct investment activity and export performance.

In fact, there are some studies that have looked at the United States relative to other industrialized countries and at our ability to sell in third markets. The evidence seems to suggest fairly clearly that having foreign subsidiaries and foreign direct investment in those third markets works to the advantage of your own export capability and to the disadvantage of your competitors.

I would submit that the connection that makes some sort of sense is this business that I talked about, that when you set up a production facility in a remote location, the first sources of regular supply of reliable quality, intermediate inputs that you're going to turn to, are your traditional domestic suppliers.

It's the same kind of thing that, in fact, has gotten people mad at the Japanese here, the argument being that the Japanese buy disproportionately from Japanese suppliers from Japan.

Well, the reason they do that is because until they've established who the reliable, capable, high-quality producers of intermediate goods are in the United States, it makes perfect sense for them to rely on those who haven't let them down in the past.

But, over time, that process changes and their purchases of intermediate inputs will look just like those of domestic producers. They'll buy from reliable sources and not buy from unreliable sources.

REPRESENTATIVE WYLIE. Mr. Sauvant, you raised your hand as if you wanted to comment.

MR. SAUVANT. Yes, thank you. I just want to comment on this question of the complementarity of investment and exports.

To the extent that it exists, it does so, of course, only in the manufacturing sector, because it is difficult to trade most services. So I think we should see that in perspective.

But more important, I think, is the broader perspective. We are witnessing a globalization of firms and industries, regardless of whether that occurs through exports, or foreign direct investment, or a combination of both. And we are witnessing that competitiveness and competition are shifting to a regional level in the European Community, in North America and in Asia, or to a global level, and that firms have to be competitive on that global level, be it through trade, through foreign direct investment, through licensing or whatever, other mechanisms can be found. And the interesting thing that we are seeing is really the emergence of an international production system which is not focused on individual states any more, but more and more involves activities which are linked at the equity level, at the foreign direct investment level, in many states.

Reference was made earlier by Mr. Cooney to Boeing subcontracting part of its production all over the globe. That is precisely an example of international production which, and that is my guess, will become more important in the future, and therefore transcends, to a large extent, the question of complementarity or noncomplementarity of foreign direct investment and exports.

Thank you.

REPRESENTATIVE WYLIE. Well, I think that this is another issue. Mr. Kline, you've indicated you want to comment.

MR. KLINE. One follow-up to that, in the sense that the relationship between exports and investment is certainly there. But because exports are easier to count, because traditionally we have counted them as they go across the border, we tend to focus on them perhaps disproportionately. And if we look at the kind of internationalization that Karl was talking about, you need investment in place, certainly at least in the major industrialized countries, to stay up-to-date on technology, to get a cross-fertilization of ideas, and also to profit from the scope of your international operation.

If we take a look at something like our automobile industry, if we had not had in place profitable, competitive plants in Europe in the last

few years, I would suggest our U.S. automobile companies would have been in much sorer shape than in fact they were.

So it's important to look beyond just the trade figures to what else is gained through global scope and integration.

REPRESENTATIVE WYLIE. Good point. Mr. Ray, in your testimony, it is in the *Economic Indicator* for April 1992, where I found this data.

But, in any case, between 1986 and 1989, our trade deficit set records. Foreign direct investment in the United States surged alarmingly. In 1990 and 1991, there was a sharp improvement, if I may use that word, advisedly, in both accounts.

How would you explain this and put it into perspective of the world economy, and maybe even as it related to the Gulf War in 1990 and 1991?

MR. RAY. Well, again, this is a tough issue. But to the extent that there was an economic slow-down in the United States beginning in 1989, and that there were financial problems in the U.S. financial markets and subsequently in the financial markets in countries like Japan, those forces worked in the direction of discouraging foreign direct investment, or certainly dominated equity acquisitions, both by the United States abroad and foreigners in the United States.

So there's been a dramatic downturn in foreign direct investment in the United States, and that has had to do the softening in the U.S. market and in the resource base that the Japanese and others have had to use for the investment funds that they've brought into the United States.

Why the balance of trade has turned around? The dollar has diminished somewhat, certainly in the late 1980s and into the early 1990s, and at least one element of the turnaround, in the relative export performance of the United States, could be associated with the relative decline in the U.S. dollar exchange rate.

It's hard to explain this in a way that doesn't make people either dizzy or bored, but the bottom line is when the dollar's cheap, that serves as a stimulus for U.S. exports and as a discouragement through its price effects on imports.

One would expect a cheapening of one's home currency to have, over some period of time, a beneficial effect on the balance of trade.

REPRESENTATIVE WYLIE. Just one further question, Mr. Chairman, if I may.

REPRESENTATIVE HAMILTON. Go right ahead.

REPRESENTATIVE WYLIE. You stated that Japanese investment was transferring technology into the United States rather than removing American technology. Could you elaborate a little bit on your findings here?

MR. RAY. Well, I don't know, it certainly doesn't prove it, but it's a tantalizing possibility.

The logic you have to follow, as I mentioned briefly in the statement, if I were a Japanese entrepreneur and I wanted to steal high-tech secrets from a U.S. firm, I wouldn't be fooling around going through two- and three- and five-year gestation periods in order to build a plant or expand an existing plant. I'd get my financial resources together and go out and buy the high-tech firm.

And if I did that and a lot of my entrepreneurial colleagues did the same thing, I'd expect to see a strong, positive relationship between equity FDI in U.S. manufacturing and that high-tech quality on an industry-by-industry basis. It does not exist.

If you look for a relationship between high-tech/low-tech and foreign direct investment, you find it primarily in the new plant and plant creation area. Remember, I said that virtually 50 percent of all plant and plant expansion investment in U.S. manufacturing was sourced in Japan during this ten-year period.

If you look at that plant and plant expansion investment, you find that there is in fact a strong, positive relationship between that kind of investment for the Japanese and the relative importance of R&D expenditures in the United States on a private basis by industry.

And what that tends to suggest is that capital capacity is being expanded and created in areas that are high-tech. And unless you're perverse, you're going to be going into those high-tech markets with the best resources that you have, and that must be high-tech capital. Or, in effect, they must be investing in high-tech capital and capital expansion in the United States for those two things to have the relationship that they do.

Again, there are many other aspects of this that one might go after, but in a broad sense, it certainly tends to suggest that it's the embodiment of new technology in plant and plant expansion and high-technology in that capital that's associated with those Japanese plant expansion and creation investments.

REPRESENTATIVE WYLIE. Mr. Chairman, I want to compliment you for putting together an excellent panel this morning. This has been a most fascinating hearing for me. I think the panelists have added considerably to the consideration of the issue of foreign direct investment.

I thank you for the opportunity. I have no further questions.

REPRESENTATIVE HAMILTON. Thank you, Congressman Wylie. I certainly agree with your comment about the panel. To open my questions, I want to ask about the importance of foreign direct investment. I'm having a little trouble getting some of your statements clear.

Dr. Kline, you make the statement that foreign direct investment is the most important force shaping the world economy, which will lead us into the 21st century.

And Mr. Sauvant, you make a similar statement—the most important international economic transaction is foreign direct investment.

Now, most people don't even know what foreign direct investment is. And all of a sudden, you're telling us that it's the most important thing out there.

I'd have a tough time defining it. What do you mean by that? Nobody talks about foreign direct investment, except the experts. Why is it so important? You have a lot of things happening out there—exports, imports, trade, technology, all kinds of factors. Why is this the most important?

MR. KLINE. Mr. Chairman, I think I'll take a shot at answering that, since I guess I was the one who said it was the most important.

You're right. We don't talk about it. I guess that's also why I said in my opening statement that we're ill-equipped to deal with it, because we don't recognize its importance.

If you look at exports and trade, which we generally focus on, investment used to follow trade. But now the investment is in place and trade is taking place much more within and among globally invested corporations. With foreign direct investment, 80 percent of U.S. trade is associated with international corporations; 33 to 40 percent occurs on an intra-firm base, meaning it goes from a parent corporation to, therefore, an affiliate, not even leaving the confines of that single enterprise.

So what has happened is that as the stock of foreign direct investment has grown, the structuring of trade relations has occurred on the basis of where the investment has gone.

Foreign direct investment—what is it? We define it as anything over 10 percent equity which signifies for the United States some aspect of control, as opposed to the portfolio investment below that 10 percent level, where you are essentially just investing in the stock of the enterprise and hoping to benefit perhaps from its dividends, but not taking any direct controlling interest in it.

REPRESENTATIVE HAMILTON. Foreign direct investment is going to be the driving factor in the international economy—is that what you all are saying to us today? The driving factor, the most important factor.

MR. KLINE. The structuring and the driving factor.

MR. RAY. Chairman Hamilton, I'm getting older all the time, but I still feel that I'm not old enough to make cosmic observations about the most important thing in any particular domain.

I think if we're going to distinguish most important from biggest measured—the fattest guy on the block isn't always the most important. I think it's worth going back to something I said, and that is that there is empirical evidence. There's a paper by Anita Benvignati entitled, "Industry Determinants and Differences in U.S. Intra-firm and Arm's-Length Exports," in the *Review of Economics and Statistics*, August 1990, in which he looks at this very question: Can we differentiate intra-firm from arm's length export trade?

Does it at the margin seem to have different characteristics? And it's only one study and maybe it's flawed in some ways, but the answer she has at this point is no, it's not different.

REPRESENTATIVE HAMILTON. You say in your testimony that the figures for 1990 indicate that both in-bound and out-bound flows of foreign direct investment were only about 10 percent as large as exports and imports of commodities.

MR. RAY. That's right. The earlier statement had to do with the total value.

REPRESENTATIVE HAMILTON. But if that's the case, then how can this foreign direct investment be all that important?

MR. RAY. We got into this discussion earlier. There are two elements. One was, as Mr. Cooney already said, there's the issue of whether you're double-counting or triple-counting foreign sales, when you're comparing subsidiary sales versus parent sales. That's one element of the statistics.

A second is whether you're talking about stocks or flows. If you're talking about the stock value of U.S. foreign direct investment holdings in 1990, on a historical cost basis, they amount to about \$420 billion. And I would submit, at market value, they're probably much, much larger than that, because they were made, many of them, a terribly long time ago.

If you're looking at what's happening to the flow of new capital in 1990—equity and plant and plant expansion investment—the U.S. outbound stuff was about \$33 billion, and the inbound stuff was about \$37 billion in 1990, and the export and import flows are closer to \$400 billion.

So, on a flow basis, it is a much smaller figure.

REPRESENTATIVE HAMILTON. Mr. Sauvant, you wanted to comment on this.

MR. SAUVANT. Yes, sir. Thank you.

When the current institutions of the international economic system were put in place after World War II, foreign direct investment didn't really play a role. It was really trade which mattered. As a result, for financial flows, we got GATT, IMF and the World Bank. In the meantime, we have experienced, thanks to the Bretton Woods system and the open world economy which it created, a cumulative flow of foreign direct investment, of equity investment across boundaries, which has reached considerable proportions. And the \$1.7 billion of investment-stock, as was just pointed out, is measured as book-value; in terms of market value, foreign direct investment would simply be much more important than that.

These investments are beginning to structure, or are structuring, other flows which are associated with production—trade, technology, finance, and so on. And it is for these reasons that we are now saying, and I think seeing, that it is the investment relationship, which is really the most important one in terms of structuring international economic relations. Trade is one expression of that, and technology transfer is another expression of that.

REPRESENTATIVE HAMILTON. And we don't have any comprehensive guidelines or rules for foreign direct investment.

Is that correct?

MR. SAUVANT. That's correct. We have them in the area of trade; we have—

REPRESENTATIVE HAMILTON. The United States has been resisting it. Is that correct?

MR. SAUVANT. I think there is general agreement in the business community, and I think also, in many governments, an international framework for foreign direct investment is desirable.

Reference was made already to efforts underway in various fora to establish such a framework, part of it in the GATT, part of it in the OECD, and some discussion in the United Nations.

REPRESENTATIVE HAMILTON. I was under the impression that the United States and Japan, if not resisting it, had been cool to it. But we promote it, do we? Nobody has ever talked to me about U.S. interest in this.

MR. COONEY. Let me say this. In fact, the United States has strongly supported for a long period rules relating to the treatment of investment by host countries as they impact trade.

I think that there is, I would say, confusion here, or we've mixed two things up here, with respect to a specific code on the framework of how transnational companies behave and how they're treated. That's one issue.

REPRESENTATIVE HAMILTON. Yes.

MR. COONEY. We supported the initial agreement on this, signed in the OECD in 1976. The second aspect of the issue is what are legitimate and illegitimate rules for governments in how they treat multinational companies in order to improve their own trade positions.

I think that those are the two things that we have that are perhaps both being brought into this discussion.

REPRESENTATIVE HAMILTON. Are we moving towards some kind of an agreement, an international code here? Dr. Kline, you talked about that in your statement. Are we moving towards something like that soon?

MR. KLINE. We are not certainly moving very fast, Mr. Chairman. I think the difference is—

REPRESENTATIVE HAMILTON. What is the resistance to it? It sounds like a pretty reasonable idea to me. What's the resistance to it?

MR. KLINE. The resistance, I think, is primarily institutional and with some historical context.

REPRESENTATIVE HAMILTON. Well, what institutions are you talking about?

MR. KLINE. The resistance is primarily to deal with this kind of a subject in the United Nations context. The United States and the other industrialized nations have signed a code. They also call it a set of guidelines. They have other principles on investment which have been arrived at in the OECD.

But because of the historical antagonisms between developing and industrialized countries over multinational corporations in the 1970s, there has been resistance to addressing this broader subject more inclusively in the United Nations framework.

REPRESENTATIVE HAMILTON. So our position in the United States is it's okay. We want to have a code in the OECD, but we don't want to have one in the United Nations. Is that it?

MR. KLINE. I think, if we could get the same OECD code in the United Nations, we would sign it.

REPRESENTATIVE HAMILTON. Is that your view, Mr. Sauvant?

MR. SAUVANT. I'm not entirely convinced that that would be the case, because the draft instrument which is being discussed at the UN, as far as I can tell, to a large extent, is similar to what has been put together in the OECD. But certainly, it's a draft still, and requires further work. At the moment, there are no countries that are really pushing this particular code or this particular instrument.

REPRESENTATIVE HAMILTON. Why not? I mean, this is the most important international economic transaction. Why wouldn't you have people pushing a code here?

MR. SAUVANT. Well, I would agree with what Mr. Kline said about perhaps a certain feeling that the United Nations is not the right forum.

REPRESENTATIVE HAMILTON. But the OECD is.

MR. SAUVANT. But the OECD perhaps is, or the GATT perhaps is.

MR. KLINE. Mr. Chairman, we're also looking backward rather than looking forward.

The primary hang-ups that we have at the United Nations are connected with things such as expropriation rules, which we worried about a decade or two ago when they were occurring, and we're trying to work out rules and legalistic terminology on that, rather than projecting ahead to the problems that are associated with foreign direct investment and business-related activities into the next decade.

REPRESENTATIVE HAMILTON. Dr. Cooney, you said that those UN code negotiations were moribund, didn't you?

MR. COONEY. Yes, that's the word I used in the statement.

REPRESENTATIVE HAMILTON. Are they, Mr. Sauvant?

MR. SAUVANT. I think—

MR. COONEY. That's okay.

REPRESENTATIVE HAMILTON. I'll come back to you. I just wanted to check what the United Nations says about this.

MR. SAUVANT. It's a fair characterization of the current situation, unless action is taken.

REPRESENTATIVE HAMILTON. It is. Go ahead, Mr. Cooney. You wanted to say further.

MR. COONEY. No, no.

REPRESENTATIVE HAMILTON. He confirms what you said.

MR. COONEY. He confirmed what I said.

REPRESENTATIVE HAMILTON. You'd better let it alone.

MR. COONEY. I didn't want to insult him, I know.

REPRESENTATIVE HAMILTON. What is accounting for the rapid growth in foreign direct investment? What's driving that growth?

MR. COONEY. I would really say two things. The first thing that's driving it is the increasing need to be international, to be competitive. And international means not just even within one region any more.

Virtually all of our member companies that I talk to, not just the large multinational companies but also even the smaller sized companies, have to cover three different markets. Even if they don't export, even if they don't have an investment in one of those markets, then they at least have to know what's going on there and be able to respond to developments there that might impact the markets where they are selling.

And those three markets are Europe, North America—basically, the United States and Canada right now—and the Far East—Japan and the Pacific Rim nations, basically.

So I think that's one of the things that is driving this, certainly from the corporate perspective.

And the second thing that's driving it is that it is a phenomenon. It's a phenomenon that tends to drive itself, that as you become more involved in other markets, first, with an export, then you customize

through local production, then you generate earnings and then you reinvest those earnings.

There is a synergy or an enrichment process in a successfully managed international company in the market.

REPRESENTATIVE HAMILTON. Do you think this trend will continue?

MR. COONEY. Yes, I do. Let me tell you a couple of reasons why. I'll try to be specific about it and not just global.

First of all, virtually everybody underinvested in Japan because of government restriction and informal restrictions. So there's a lot more money to be made from investing in Japan. That's a specific target.

Second, I hope we're beginning to see in Mexico what we'll begin to see in some of the other Latin American developing countries and elsewhere in the world, which is to say, closer tying of those nations into world trade, opening up those markets to world trade competition; therefore, increasing growth and increasing the local living standard.

So there's a lot of potential. Huge markets like India and China have just barely been tapped so far.

REPRESENTATIVE HAMILTON. Dr. Kline?

MR. KLINE. Mr. Chairman, I would cite cost and technology as the factors that are driving it and that will continue to drive it.

When you have companies citing a \$2 billion need in research and development to generate the next generation of digital switching equipment, you have to be global to market the product simultaneously in order to get a return on that investment. And that means that you are not going to trust to just exports. You're going to have to have a presence in all of the major market economies.

That is really what is behind my theme, that investment is the most important force rather than trade, because if you asked all of us what is the stock of world trade, I think we would have a tough time responding.

Trade does not build up. Investment does. And as the stock of investment is built up, driven by cost and technology, it is structuring the yearly trade flows. In year-to-year totals, trade flows are still more important than the investment flows, but it is the investment that is shaping where the trade is going.

MR. RAY. Chairman Hamilton?

REPRESENTATIVE HAMILTON. Yes, Mr. Ray?

MR. RAY. If I could, just very briefly. To go back, you were asking, why is this a big deal now? Where is it going?

What's useful to point out, as I did in my written statement, if you look at European Community investment in the United States during this period of explosive foreign direct investment, it accounted for 48 percent of all equity FDI activity and 60 percent of manufacturing.

The bottom line is, during the 1950s and 1960s, the United States was a major player investing in the rest of the world. The rest of the world was recovering, in large part, from the devastation of World War II, and it wasn't until the 1970s and 1980s that major players like Germany and Japan began to tip into contributing to that overall pool of foreign direct investment activity. And there are other players now, like Korea and Brazil and so forth, who are starting to move into it.

So one would expect that as more countries achieve a certain level of economic well-being, they're in fact going to look for opportunities to reach distant markets through lots of activities, including, and especially, perhaps, foreign direct investment activities.

So there's certainly no reason to expect it to abate any time in the future.

REPRESENTATIVE HAMILTON. As I listen to you, one of the things that impresses me is the concentration of foreign direct investment in the Triad, I guess you call it, and the fact that most foreign direct investment is made in the United States or in the European Community and, I gather, to a lesser degree, to Japan.

Is that a good thing? Is that a bad thing? What are the implications of that, anyway?

You said, I think, Dr. Kline, something about your concern about the north-south split. Maybe you ought to elaborate on that.

But is the fact that you have so much concentration in these three markets, natural, good or bad? Just how do you characterize that?

If I were sitting here as a Third World member, I'd say, well, that's an exclusive club you have over there, all the direct investments flowing to these three areas.

MR. KLINE. I think it's certainly explainable why it has happened. But I think it is not a good thing that you do have this increased isolation, because even with the investment going to the developing countries, with three-fourths of it concentrated in ten of the newly industrializing countries, that leaves everyone else further behind.

If my thesis is correct, the increasing stock structure of investment is going to determine commercial relationships, financial flows, trade and technology. Then, essentially, we're leaving the vast majority of the world outside of the global trading system. Unless they have access to that system, they will not grow, they will not progress. That means a need for more direct investment in those countries.

MR. RAY. I think there is an interesting analogy, and it does, I think, address your concern. And that is the observation, for example, that to the extent there is foreign direct investment activity outside of the major industrial countries, it's in the ten newly industrializing countries.

And what that tells you is that people invest to make money. They don't invest to do good. They invest to make money. And they invest where they expect it to be profitable.

And what that suggests is the possibility, as indicated by these kinds of figures, that maybe there's an international underclass, just as we worry about a domestic underclass. And the issue is, if that creates political, moral, social concerns for us, how do we address that division of the house?

It may not be through foreign direct investment activity or regulation of foreign direct investment activity, but I think, at base, what you're expressing is that there is a reason to care about that. And is it something that stands apart as a problem in its own right?

But I'm not sure that foreign direct investment activity, or regulation of it, or manipulation of it, is in fact the way to address that deeper and, I think, very genuine concern.

REPRESENTATIVE HAMILTON. Mr. Sauvant?

MR. SAUVANT. Just to interject a slight note of optimism into the discussion. While it is true that the lion's share of foreign direct investment stays within the Triad because that's where the markets are and that's where the profits are, we shouldn't forget that the absolute amount of foreign direct investment that has gone to developing countries has increased considerably, too. Developing countries get about \$30 billion now, which is the total of all investment flows some 15 years ago. And for many developing countries, the little bit, so to speak, they get actually plays a very important role in their economies.

REPRESENTATIVE HAMILTON. We talk all the time now about the only way to get the countries in Eastern Europe and Russia and the other republics moving is to get private, direct investment in there, that the government, whatever it does, is going to be on the margins, and that if you're really going to change it around, you have to have direct investment.

Are we going to get that in Eastern Europe and Russia and the other republics of the former Soviet Union?

MR. RAY. I think you have the same problem there that you have with this code business in dealing with developed and developing countries. And that is, you need rules of the game that are going to make it attractive for private investors to move in.

So Russia has got to come up with some sort of property rights scheme that makes some kind of sense before somebody's going to commit their capital there. It's the same issue that developing countries are facing. Unless they can give certain guarantees that attempts at expropriation, that peculiar restrictions on ownership shares and so forth will not be imposed, private capital is going to stay shy about going in there, just as it is now, in terms of Russia and Eastern Europe.

MR. SAUVANT. I think the regulatory framework in practically all of Central and Eastern Europe for foreign direct investment is as liberal and as favorable as one can imagine it. The problem is that the economic conditions, beginning with ownership questions, but also extending to supply and other issues, are simply not as favorable as in other regions of the world. But having said that, there is clearly a tremendous potential to attract foreign direct investment into these areas. By now, we have seen already that there are over 20,000 foreign affiliates registered in Central and Eastern Europe—even if only a quarter is operational. Investment in-flows or committed capital is approximately \$10 billion. Again, maybe, a quarter has been invested. Over this decade, we are estimating that some \$50 billion would actually be invested in those areas.

So, clearly——

REPRESENTATIVE HAMILTON. Those areas being Eastern Europe?

MR. SAUVANT. Central and Eastern Europe, meaning especially Central Europe, Russia, Ukraine, Belarus.

REPRESENTATIVE HAMILTON. So you think the trends are fairly good.

MR. SAUVANT. Yes. The expectation——

REPRESENTATIVE HAMILTON. In terms of investment.

MR. SAUVANT. Yes. The trends are in the desired direction——

REPRESENTATIVE HAMILTON. Why are they so good if the situation is so bad?

[Laughter.]

MR. SAUVANT. Well, the trends are good, and the expectations are even higher. In fact, all of these countries expect much more from foreign direct investment than it is possible to deliver. One of the reasons these countries are looking to foreign direct investment is not only because of the capital, but precisely because of the technology, the training, and the access to market which comes along with foreign direct investment. The capital is not the most important thing. It's managerial capacity to bring the various factors and conditions of production together.

REPRESENTATIVE HAMILTON. And another thing that impressed me is that there seems to be fairly limited foreign direct investment in Japan.

Is that correct, as compared to the other two areas? And is that because Japan discourages it, keeps it out, has all kinds of rules and regulations against it? Is that why you don't have foreign direct investment going into Japan?

MR. RAY. Yes. Historically, they had restrictions on ownership positions in Japanese businesses.

REPRESENTATIVE HAMILTON. Is it in our interest to permit, to encourage Japanese investment in this country if they don't encourage investment in their country?

MR. COONEY. Myself, personally, and other representatives of NAM, and the executives from our member companies have testified on this point. We don't really think two wrongs make a right.

Just sticking to that specific question, Japan is more liberal today than it was ten years ago. I think pretty much everyone agrees with that.

REPRESENTATIVE HAMILTON. It's improving.

MR. COONEY. It's improving. So let's not justify backward steps in third countries against U.S. investors by taking our own steps against Japan because some people look at us as being pretty competitive in their countries for our investment.

REPRESENTATIVE HAMILTON. So there should not be, then, some kind of rule of reciprocity involved here.

MR. COONEY. No. On national treatment, with respect to investment—and I'm just speaking for the organization here—NAM has supported national treatment on a general basis and not linked specifically to reciprocity.

Now, in bilateral investment treaties, when you get to that, talking about direct negotiations with the country, that's a different matter. But with respect to the general subject of national treatment, we believe that, as I said, two wrongs don't make a right, or by restricting other people's national treatment, you don't necessarily assure that you're going to get it yourself in their market.

REPRESENTATIVE HAMILTON. Now, one of the things that impresses us, I guess, more and more is the difficulty of determining the nationality of a product—components assembled all over the place and brought together in one country.

How should an average person view that? Is that good, on the whole, bad, or not? The average American, the average taxpayer, the average consumer—is that something he or she ought to be worried about, or should be encouraged or indifferent to?

MR. COONEY. The origin of a product?

REPRESENTATIVE HAMILTON. Yes, these hybrid products we have. You read about it with respect to automobiles, but I guess it's true of a lot of other products as well.

MR. COONEY. Yes, it certainly improves the consumer's standard of living to have products sourced at the most efficient place and then combined together in final assembly.

On the other hand, we've always said at NAM, this doesn't mean that you waive the U.S. trade laws. There are unfair practices out there. And, by the way—and I just confirmed this a few months ago in discussing this with somebody in detail—U.S. trade laws apply to U.S. companies just as much as to foreign companies.

A U.S. company can't take advantage of a dumped product and bring it into the United States. Trade laws can be used against a U.S.-owned company as well as a foreign-owned company.

REPRESENTATIVE HAMILTON. I want to go back just a minute. Do all of you think that we need some kind of a code or comprehensive guidelines for foreign direct investment. You all support that idea. Is that correct?

MR. COONEY. Yes.

REPRESENTATIVE HAMILTON. You won't go into the details?

MR. RAY. I'd want to see it first.

REPRESENTATIVE HAMILTON. You want to see it.

MR. RAY. It would be nice in the abstract, but in the particular, I'm not so sure.

REPRESENTATIVE HAMILTON. The devil's in the details. Is that it?

Now, we do have some restrictions, do we not, on investment in this country, with respect to national security? How do you react to that? That's an appropriate restriction for us to have these national security constraints on foreign direct investment?

MR. COONEY. Well, specifically, Mr. Chairman, the NAM has supported the Exon-Florio law in 1988 as part of the Comprehensive Trade Act. Yes, our view was that they are appropriate.

REPRESENTATIVE HAMILTON. Does the EC and Japan have similar restrictions?

MR. COONEY. Yes, they do.

REPRESENTATIVE HAMILTON. So that's a common feature of direct investment.

MR. COONEY. Yes, I think so.

REPRESENTATIVE HAMILTON. Yes?

MR. SAUVANT. Yes, I agree entirely. That's a common feature for practically all countries.

If I may, Mr. Chairman, can I add a note on the discussion on Japan?

REPRESENTATIVE HAMILTON. Sure.

MR. SAUVANT. I think all indications are that as far as regulatory impediments to inward investment in Japan are concerned, these have

been pretty much liberalized. In fact, JETRO—the Japan External Trade Organization—is now assisting small- and medium-sized foreign enterprises to invest in Japan. So I think there seems to be a clear change in the offing.

As far as the question of whether the United States, or any country, for that matter, should encourage or discourage Japanese inward investment, I think that that should strictly be an issue decided on the basis of economic merit.

We have heard, and I think we all would subscribe to that view, that inward investment is beneficial to your economy for a number of reasons. And I think it's that consideration which should determine whether or not a policy framework should restrict inward flows.

REPRESENTATIVE HAMILTON. We've had you here quite a while. I just want to check on one other thing, which I'm not sure I understood. It was discussed when you were having a conversation with Congressman Arney, concerning the business of exporting jobs that all politicians hear a lot about. If I understood you, you were saying something to the effect that when a company decides to make a foreign direct investment, that doesn't detract from jobs in this country.

MR. RAY. We're both old enough to remember in the late 1960s that the AFL-CIO took a position against U.S. foreign direct investment on the outbound side. The issue was that it constituted sending jobs abroad.

There is a vast literature developed during the 1970s, where people tried to pull together empirical evidence to look at the issue. To the extent that there is a clear answer, it is that foreign direct investment activity and subsidiary activity does not displace exports, but in fact it seems to have a net stimulative effect.

REPRESENTATIVE HAMILTON. So, when a company decides to invest abroad, that obviously creates jobs in that country, wherever they invest, but it also helps create jobs here at home.

Now, there are decisions, of course, where a company says, I'm going to close this plant in Indiana and we're going to take it down to Mexico. There is a case where you do export jobs, at least in a specific case.

You're talking about gross figures, and yet it does occur that certain plants are closed, and a decision is made to re-establish the operation elsewhere?

MR. RAY. Yes.

REPRESENTATIVE HAMILTON. But, overall, the point you're making is that it's beneficial and that we create more jobs that way than we lose. Right?

MR. RAY. Yes. And I think the policy issue is, are you going to do anything about those local effects to get the broader, more general gains? Do we need policies of job retraining or worker relocation or other?

REPRESENTATIVE HAMILTON. It's tough on the workers if they're the ones who have the plant close down.

MR. COONEY. It's a problem.

REPRESENTATIVE HAMILTON. We've had a good discussion. Thank you very, very much. We appreciate your contribution. Good to have you with us.

We stand adjourned.

[Whereupon, at 12:30 p.m., the Committee adjourned, subject to the call of the Chair.]

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