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ISSUES IN FEDERAL FINANCE

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BEFORE THE

SPECIAL STUDY ON ECONOMIC CHANGE

OF THE

JOINT ECONOMIC COMMITTEE

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ISSUES IN FEDERAL FINANCE

WEDNESDAY, JULY 25, 1979

TRENDS IN FEDERAL SPENDING

CONGRESS OF THE UNITED STATES,
SPECIAL STUDY ON ECONOMIC CHANGE OF THE
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to notice, at 10:10 a.m., in room S-207, the Capitol, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Present: Senator Bentsen and Representative Rousselot.

Committee staff present: John M. Albertine, executive director; Louis C. Krauthoff II, assistant director-director, SSEC; Charles H. Bradford, minority counsel; and Stephen J. Entin and Mark R. Policinski, minority professional staff members.

Special Study on Economic Change staff present: George D. Krumbhaar, Jr., counsel; Douglas N. Ross, senior economist; Richard D. Bartel, economist; and Michael J. Lockerby, research assistant.

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order. Today marks the first of a 2-day set of hearings on long-term problems of Federal finance. It's being done under the auspices of this committee's Special Study on Economic Change.

A word about the special study itself. The study was formed just about 2 years ago as a major Joint Economic Committee initiative aimed at examining the fundamental economic changes in the United States and world economies and the impact of such changes upon our world today and in the future.

The premise behind the study is that numerous and profound changes in our economy have brought about substantial alterations in how it functions and thus may have rendered ineffective traditional remedies for achieving the aims of the Employment Act of 1946. The Joint Economic Committee is charged by law with the responsibility of carrying on a continuing study of matters relating to the economy and with advising the legislative committees of Congress as to the appropriate course of economic policy.

In this regard, however, we're beginning to find that the examination of fundamental changes is required if we're ever to get at the problems underlying today's inflation and recession-plagued economy. Today's

hearing focuses on trends in Federal spending and the extent that they have influenced and will continue to influence national output.

We know as a fact that the composition of the national output has changed dramatically over the years.

The chart behind me explains that in graphic form. Proportionately speaking, we're spending much less money on defense than we used to, about a third of what we did in 1952. That obviously is a point of controversy at the present time and will be highlighted in debates on SALT which will probably reach culmination some time in October.

Proportionately less of our output is for the provision of basic necessities such as food, clothing, and maintenance of our homes. On the other hand, we're spending proportionately more on education and manpower, on health, on general government, and on such miscellaneous activities as leisure and other types of consumer spending which don't fall under the basic necessities category.

May we have the other chart?

In some cases, the Federal Government has reinforced the long-term trend, and in some cases it hasn't. Perhaps the clearest case is health, where Federal dollars comprise more than two times the proportion of the amount of money which we as a Nation spent on health back in 1952.

One can see the marked effect which medicare and medicaid have had, both on Federal spending itself and on the economy as a whole. But an equally dramatic change can be shown in an area where Federal spending has gone against the tide. The country as a whole has been spending proportionately less on basic necessities. However, the Federal share of that portion has climbed significantly because of expanded social security and unemployment benefits and such new Federal programs as black lung and supplemental security income.

Approximately $1 in every $4 spent in this country on food or clothing originates in the Government. Most of the changes just described have come about through the rapid increase in Federal transfer payments through the enactment of new programs and the liberalization of existing ones.

The level of transfer payments, proportionately speaking, has increased more rapidly over the last 25 years than personal income, GNP, or overall Federal spending itself. The purpose of this morning's hearing is to explore these and related phenomena and to identify some of the economic effects of these changes which policymakers must take into account in charting the future course of the economy.

We're fortunate in having a diversified and experienced panel whose careers encompass 99 years of direct employment or consulting activities with the Federal Government.

I'm sure sometimes you wonder what happens to some of these studies and the results thereof. I'm not sure how much I want to see us acclaimed at Camp David yet, but I must say that during the Camp David meeting studies of this committee and the annual report had constant reference to and input from that report.

Certainly, it's part of the considerations. Now, we have Mr. Paul McCracken, who works for the University of Michigan, Chairman of the President's Council of Economic Advisers from 1969 to 1971. He encouraged the kind of research that we're talking about, allocation of

resources. He was one of the pioneers in that. In addition to his responsibilities at the University of Michigan, he presently serves as chairman of the Council of Academic Advisers of the American Enterprise Institute. He's widely known in the economics and financial communities as a wise student of public finance, and a sound adviser on economic and financial policy.

And we have Prof. Walt Rostow, who is an economic historian who has also specialized in national security policy, and the dynamics of economic growth. An entire generation of students of economic development has read his book "The Stages of Economic Growth." His more recently published works illustrate the direct connection between economic history and the solution of the problems that plague today's economy.

Now, we have one more member of the panel. Mass transit or something failed him, because he missed his plane, but he is coming in, as I understand.

The other member of the panel will be Professor Juster, director of the Institute for Social Research and professor of economics at the University of Michigan. He is widely published in the area of consumer behavior, and in this regard has served as a consultant to many Government agencies and such organizations as the Brookings Institution. Because his approach to the issues at hand differs somewhat from those of the other witnesses, we ought to have a pretty lively debate here.

I would assume from the stories I read today that economic behavior, consumer behavior, is under a course of change at the present time. Professor Rostow, I understand that you're first on the list.

STATEMENT OF W. W. ROSTOW, PROFESSOR OF ECONOMICS AND HISTORY, UNIVERSITY OF TEXAS AT AUSTIN

Mr. ROSTOW. Mr. Chairman, I've prepared in response to the paper you sent to me a 17-page, rather technical paper which I, with your permission, will file for the record with this committee. Since I'm sure that the exchanges and questioning are what really matter, I shall summarize it.

Senator BENTSON. Fine. I might say to you, Professor, that if you have some room this afternoon in your schedule I think they want you down at the White House because I was using some of your statements yesterday, and they said, "Well, we'd like to talk to the fellow himself."

Mr. ROSTOW. That would be fine. Senator Proxmire has got me, but 1600 Pennsylvania Ave. has a certain priority.

The trends in public expenditures, which are the immediate subject of these hearings, were the product of several decades of rapid increase in real income per capita, made possible by relatively low prices for basic commodities. The U.S. terms of trade improved by 25 percent between 1951 and 1969. The relative price of electricity fell by more than 40 percent. Gross real earnings in the private nonagricultural sector increased at an average annual rate of 1.85 percent. American citizens were prepared to divide the expanding pie between increased private outlays, increased public services, and transfer payments to the

less advantaged. A similar pattern is to be observed in Western Europe and Japan. In this setting of cheap energy, food, and raw materials, it was more or less rational for public policy to focus on the task of maintaining an appropriate level of effective demand. Neo-Keynesian doctrines, addressed primarily to fiscal and monetary policy, worked tolerably well; although neither liberal nor conservative practitioners of this approach, in terms of the aggregate level of effective demand, were conscious of the dependence of their doctrines on relatively cheap basic commodities.

The trends in public expenditure would, in any case, have altered with the passage of time; for increased outlays for higher education, health services, and transfer payments were not indefinitely sustainable at the disproportionately high rates of the 1950's and 1960's. Trees don't grow to the sky. But the reversal of the trend in relative prices in the 1970's made a change in course mandatory, due to its effects on real earnings and the consequent changes in political attitude which occurred throughout the advanced industrial world. In the United States the terms of trade deteriorated between 1969 and 1977 to a lower level than in 1951; and real earnings fell at an average annual rate of 1 percent between 1972 and 1977.

I gather from the latest data that in 1979 they're once again declining. Under such pressure, most citizens in the advanced industrial world preferred to keep the marginal dollar—or whatever—as private income rather than surrender it for public purposes. Thus, proposition 13 and all its variants.

We entered, then, in the 1970's, a protracted period when, in the language of the Joint Economic Committee's pathbreaking report of March 19, 1979, the key problems facing the Nation lie on the side of supply rather than demand. The forces which weakened the global supply position for energy, food, and raw materials, including clean air and water, can be traced back into the 1960's or even earlier; but a sharp turning point occurred at the close of 1972. Without burdening you with economic history, I would note that this is the fifth time in the past 2 centuries such a turning point has occurred. Policy for a supply-oriented era requires that we supplement neo-Keynesian analysis with a disaggregated examination of the key sectors; and that we supplement fiscal and monetary policy with policies which would stimulate enlarged investment in the key sectors.

The sentence I've read is quite simple, but it is also, I believe, quite revolutionary in its implications for public policy.

Of all our supply problems, the reduction of dependence on oil imports is the most urgent. A failure to deal successfully with the energy problem will exacerbate our already acute problems of inflation, productivity deceleration, unemployment, slow growth, and balance of payments. It will lead—indeed, it has led—to an erosion of existing public services in important parts of the country. I would also note that, in my judgment, excessive dependence on oil imports is the most dangerous diplomatic and strategic problem we face.

On the other hand, I try to demonstrate, in the longer paper I have filed with this committee, how the enlarged investment requirements of an effective national energy program could, by bringing the economy back to sustained full employment, substantially ameliorate the Nation's acute problems of decelerated productivity, high unemploy-

ment, slow growth, and a dangerously weak balance of payments position. An increase of at least 2 percent of GNP—and probably a good deal more than 2 percent of GNP—allocated to energy investment for both production and conservation is required to reduce oil imports to manageable proportions. The impact of an effective national energy program will be positively felt in all major regions of the country, including the Northeast and industrial Middle West which have lagged in growth in recent years. The national unity and sense of purpose required by such an energy program should also provide a political and psychological setting in which an effective incomes policy, equitably to reduce wage-push inflation, could be mounted.

In such a positive economic setting of high sustained employment, one could expect: A reduction of claims for unemployment insurance and other forms of income maintenance; a resumed rise in real income per capita but quite possible, for a time, at rates slower than those of the 1950's and 1960's; and a radical reduction, if not elimination, of Federal budget deficits. The consequent reduction of Federal borrowing would free capital markets to support the higher investment rate we require in energy and other key supply sectors. The Nation could then, with poise, decide the directions in which it may wish to move with respect to such unresolved social issues as national health insurance and a national rationalization of welfare programs.

Put another way, the foundations for the Nation's economic system are now badly weakened with respect to energy, transport, water supply, raw materials supply, air and water pollution, and research and development. The rebuilding of those foundations is the central task of public policy. It may require an increase in the investment rate to over 20 percent—a figure already typical in Western Europe, much higher in Japan. Without such a supply-side effort, we can expect progressive economic and social deterioration. With such an effort, we can go forward again, although along somewhat different lines than in the 1950's and 1960's.

I take it to be a major function of this distinguished committee to design in some detail policies that will get this country moving again along this new supply-oriented path. Thank you.

Senator BENTSEN. Mr. Rostow, thank you very much.

Obviously that will bring about a number of comments and questions but we'll follow the procedure of letting each of the witnesses make their statement first.

[The prepared paper of Mr. Rostow follows:]

PREPARED PAPER OF W. W. ROSTOW

The two preliminary papers sent to me for study (written by Mr. Ripley and Messrs. Danziger, Haveman, and Plotnick) tell us a good deal about how Americans allocated, through private markets and the political process, the additional resources that flowed to them over a period of growth in real income unique in our economic history. It is a quite dramatic, even revolutionary story. Between 1952 and 1977 we cut the proportion of GNP spent on defense from 13 percent to 5 percent (in current dollars) and, roughly, doubled outlays on education and health. Between them these categories constituted about 8 percent of GNP in 1952, more than 16 percent in 1977. There was an equally dramatic rise in the category of "all other" expenditures which embraces, in the private sector, outlays for consumers durables and recreation; in the public sector, revenue sharing and outlays for national resources. A 13 percent decline in outlays for basic necessities helped cover this shift as well as minor relative increases in a few other

categories. The process was accompanied, as Mr. Danziger and his colleagues document, by a massive increase in transfer payments to the poor—and for more general purposes.

The pattern of outlays in the other advanced industrial nations of the OECD was similar: disproportionate increases in outlays for education, health services, and transfers to the less advantaged.[1] Social welfare expenditures as a proportion of GNP about doubled or more in the period 1950–1972 in Sweden, Denmark, Austria, Netherlands, Norway, Belgium, as well as in the United States.

"Pure" private consumption—that is, consumption minus net current transfers from government—declined from 58 percent to 52 percent of GNP in the OECD countries between 1955 and 1969. So rapid was the increase in real income in the advanced industrial countries that all this proved consistent with a rapid increase in ownership of automobiles and other durable consumers goods, in the migration to suburbia, and in long distance travel. In short, the citizens of advanced industrial countries split the increase of real income between enlarged private and public outlays.

As history goes, I'm inclined to think the allocation of resources made by OECD citizens in the 1950's and 1960's—as among private goods and services, public services and transfer payments to the less advantaged—is rather admirable. It was a reasonable and decent way to behave in an era when the pie available for distribution was enlarging rapidly.

The pie expanded so remarkably for a number of reasons of which one was both important and rarely discussed; namely, the favorable shift in the terms of trade between 1951 and 1972. The relative prices of U.S. exports to imports stood at 91 (1953=100) in 1951; 114 in 1969, at their peak. They were down to 88 in 1977. This 25 percent improvement in the U.S. terms of trade on the 1950's and 1960's lifted real incomes powerfully. The improvement for the other OECD nations was of the same order of magnitude. Domestically, there was a more than 40 percent decline in the price of electricity relative to the price level within the United States.

Thus, gross weekly earnings in the private non-agricultural sector, in 1967 dollars, increased at an average annual rate of 1.85 percent in the 1950's and 1960's. Between 1972 and 1977 they declined at an annual average rate of 1.0 percent. A similar sharp reversal struck in the terms of trade and real earnings of other nations, in particular those which did not successfully discipline wage-push inflation and protect the value of their currencies in a world of floating exchange rates; for a weakening currency means deteriorating terms of trade.

It is not surprising that we have seen, since 1973, a taxpayers' revolt against further expansion of the public sector in virtually all the advanced industrial democracies. Citizens, with their real earnings declining or under severe pressure, wish to retain the marginal dollar (or whatever) as private income rather than surrender it for public purposes. Noblesse oblige comes easier when the pie is expanding than when it is stagnant or contracting. Thus, proposition 13 and all its variants. I would note that more than a taxpayers' revolt, responding to deceleration, stagnation, or decline in real per capita income, has been at work in recent years. In the United States, at least, a sense developed that some kind of rational limit was being reached with respect to the proportion of the population which could productively absorb some form of higher education. Similarly, questions arose about the rationality of providing increasingly sophisticated and expensive ex post medical services versus increased allocations of resources to preventive medicine. And well before the altered course of real income per capita, serious questions were being raised about the extent to which levels of assistance to the poor might reduce their willingness to enter the conventional job market.

In short, trees don't grow to the sky and the trends in public expenditure which marked the 1950's and 1960's could be expected to have altered with the passage of time. But, without question, the altered contours of the world economy in the 1970's raised these questions with a heightened urgency. And it is to the cause of these changes that we now turn.

As I have argued in several recent books[2] the unfavorable shift in the terms of trade for industrialized countries reflected a deeper shift in the balance of demand and supply for energy, agricultural products, and raw materials which began in 1972, against the background of a weakening supply position in the

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[1] See W. W. Rostow, *The World Economy: History and Prospect*, Austin: University of Texas Press, 1978, pp. 278–283 and 360–361 for discussion of these phenomena on an international basis, and comparative statistical data.

[2] "The World Economy: History and Prospect" (1978); "Getting From Here to There," New York: McGraw-Hill, 1978; "Why the Poor Get Richer and the Rich Slow Down," Austin: University of Texas Press, forthcoming 1980.

1960's. Meanwhile, the rise in the real price of clean air and water was belatedly recognized, requiring increased outlays to contain and reduce pollution. Taken altogether, I conclude we have entered, for the fifth time in the past two centuries, a sustained period of relatively expensive basic commodities. Energy is the most obvious and pressing example, but energy is not alone.

Thus far we have experienced a wide range of negative consequences of this change in circumstance:

High, intractable inflation rates.

Decelerated rates of productivity increase.

Lower investment rates accompanied by lowered over-all real growth, high unemployment, low levels of capacity utilization, retarded or diminished private real income per capita.

Chronic pressure on the U.S. trade balance and a dollar weak relative to most other major currencies of the advanced industrial world.

Some analysts also deal with the diminished share of the national income flowing to corporate profits (12.3 percent, 1959–68; 9.4 percent, 1969–73; 8.8 percent, 1974–78); but the return of profits to an average 9.4 percent level in 1976–78 has somewhat dampened discussion of this issue.

These are the phenomena, along with the energy crisis itself, which account for diminishing public support and resource availabilities for social programs in the United States. They also account for virtually the whole of the list of ten major areas marked for investigation on page 3 of Congressman Bolling's Opening Statement of May 31, 1978, outlining the Speial Study on Economic Change.

Against this background, I shall try to do three things in the balance of this paper:

Summarize the conventional analyses focused on rates of inflation, productivity increase, unemployment, growth, and the balance of payments;

Indicate their relation to the energy crisis; and

Describe a path for U.S. domestic policy that might solve or ameliorate this inter-related complex of problems.

First, then, inflation. As we all know, there are three kinds of inflation: demand-pull inflation, which occurs when markets for labor are tight and capacity utilization high; raw materials-push inflation, which occurs when one or more basic commodity prices rise sharply, bringing about a general rise in the price level; and wage-push inflation, caused by average money wage increases in excess of the average increase in productivity. As the Council of Economic Advisers argued in its January Report to the Congress, there may have been some slight elements of demand-pull inflation operating in certain U.S. labor markets in 1978; and the behavior of some agricultural prices in 1978 imparted a marginal element of raw materials-push inflation; but, basically, the United States was gripped by a bad case of wage-push inflation. In 1978 compensation per hour in the non-farm business sector rose 9.8 percent; productivity rose only 0.8 percent; unit labor costs rose 8.9 percent. The consumer price index rose 9.0 percent, the GNP deflator by 8.3 percent. As these phenomena asserted themselves in the second half of 1978, accelerating an inflation rate which had subsided somewhat since the extravagant rates of 1974–75, at a time when the dollar was weakening in an ominous way on the international exchanges, President Carter instituted a voluntary wage-price guidelines policy.

TABLE 1.—RELATIVE PRODUCTIVITY, AVERAGE ANNUAL PERCENT CHANGE IN PRODUCTIVITY, AND CAPITAL FORMATION, RELATIVE TO GROSS DOMESTIC PRODUCT

	Relative productivity,[1] 1977	Average annual percent change in productivity[2]				Fixed capital formation as a percent of GDP, 1961–76
		1950–67	1967–72	1972–77	1950–77	
Japan	62.2	7.4	9.2	3.5	7.0	33.0
West Germany	79.1	5.0	4.8	3.5	4.7	24.3
Italy	53.3	5.3	5.0	1.0	4.4	21.0
France	84.7	4.7	4.5	3.1	4.3	23.2
Canada	91.6	2.5	2.8	.8	2.3	22.2
United Kingdom	55.1	2.2	3.0	1.2	2.2	18.6
United States	100.0	2.4	1.1	.6	1.8	17.8

[1] Measured by real gross domestic product per employed civilian, using international price weights, relative to the United States.

[2] Measured by growth in real domestic product per employed civilian, using own country's price weights.

Source: Department of Labor, Bureau of Labor Statistics; U.S. Chamber of Commerce.

Money wage rate increases had sharply lifted in 1973–75, in a futile attempt to shield real wages from the raw materials-push inflation of those years: compensation per hour increases were 6.7 percent in 1970–72, 9.1 percent in 1973–75. They proved difficult to bring down from their new plateau. And, with a slow rate of productivity increase, these rates translated themselves directly into high inflation rates, exacerbated as 1979 unfolded by further increases in the price of imported oil and the prospect of higher food prices in a year of bad harvests abroad.

President Carter's program of inducing a gradual, year-by-year subsidence in money-wage increases is, evidently, confronting some difficulty. It is unlikely that the 1979 norm of 7 percent money wage increases will be achieved. Without entering into a detailed analysis of the difficulties, I would simply assert here—and return later—to what I regard as the central missing element in the situation: a clearly articulated and persuasive case for rallying the nation as a whole around an economic program within which the rapid subsidence of wage-push inflation would be one element. The perceived common interest in reducing the inflation rate is not now sufficient to overcome the built-in habits of conventional wage and price setting.

As for the element of raw materials-push inflation, there is only one realistic option: to fight that batttle by expanding production, as I shall argue below.

Now, productivity. The deceleration of productivity increases (see Table 1), is, for a number of countries, a phenomenon reaching back to the second half of the 1960's. For the United States, several factors are conventionally adduced to explain the rather ominous figures in Table 1. The reasons can be summarized in Table 2, drawn from the text of the January 1979 Report to the Congress of the Council of Economic Advisers.

TABLE 2.—CONTRIBUTIONS TO DECELERATION OF LABOR PRODUCTIVITY

[Average annual percentage]

	Percent	Year
Lower investment rate (up to)	−0.5	1973–77
Demographic (higher labor force participation by teenagers and women)	−.4	1965–73
	−.33	1973–77
Increased social, environmental, and safety regulation	−.1	1968–73
	−.3	1973–77
Reduction in productivity rate, 1955–65 to 1965–73	−.8	
Accounted for above	−.5	
Residual	−.3	
Reduction in productivity rate, 1965–73 to 1973–77	−1.3	
Accounted for above	−1.13	
Residual	−.17	

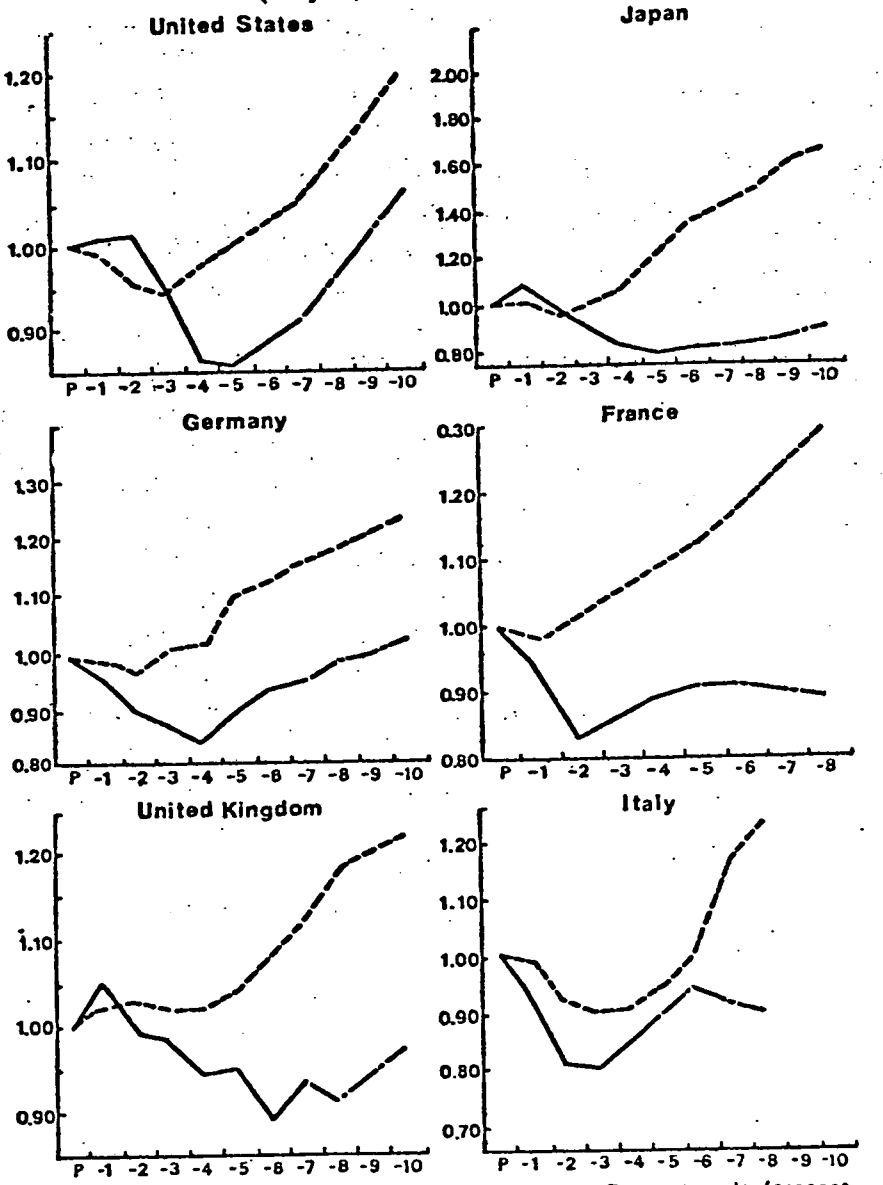
The unexplained residuals appear modest, especially for the 1973–1977 period. And other factors have been adduced which might further explain a portion of this marked deceleration; notably, the reduction in the proportion of GNP devoted to research and development; and, since 1973, the possible effects of higher energy prices on industrial productivity through, for example, the need to replace energy-inefficient plant.[3] But these serious efforts to measure and weight the components of this complex process should be regarded as rough approximations, at best.

[3] For extended discussion of U.S. productivity and its prospects, see W. W. Rostow, "Getting From Here to There," chapters 8 and 9.

Chart 1

Cyclical Behaviour of Non-Residential Investment

in Six Major Countries, 1955–1978
(Half years, volume indices peak 100)



SOURCE: *OECD Observer*, No. 87, July 1977, p. 23.

Taken as a reasonable representation of reality, these figures would indicate that low levels of investment (and low growth rates) are the critical factors likely to determine the path of productivity increase in the future. The reason for this judgment is dual. First, a subsidence of the proportion of teenagers in the working force in the 1980's will follow from the subsistence of the baby boom at the end of the 1950's. The demographic factor will begin to operate positively on the rate of productivity increase. Second, the effects of social, environmental, and safety regulations contribute positively to real GNP, although not in ways we now measure; and, in any case, the burden of such regulations is likely to be gradually reduced by simplification and the weeding out of the less cost-effective forms of regulation.

In short, it is possible to conclude that a resumption of sustained high levels of investment and over-all growth might well lift the rate of increase of U.S. productivity back to more respectable levels.

Proximately, lower growth rates, in the United States and elsewhere, are a result of reduced investment rates, as Chart 1 suggests. But, in part, lower investment (and growth) rates have been induced by policies of fiscal and monetary austerity imposed to deal with the peculiarly acute balance of payments pressures which have emerged since 1973, usually associated with the radical increase in the price of oil. As noted earlier, it was the deterioration in the U.S. balance of payments and the international position of the dollar (as well as accelerated inflation) which helped induce President Carter to set in motion a policy of fiscal and monetary restraint in 1978.

At considerable risk of oversimplification, then, we can conclude this brisk survey of conventional analysis of the U.S. economy with these propositions:

The bulk of the inflation we now experience is wage-push inflation, but we lack the sense of national unity and purpose to discipline it with present measures.

The slow-down in productivity is the product of multiple forces operating simultaneously, but the most important, looking to the future, is an adequate investment level which accounts also for slow growth rates and abnormally high unemployment.

Growth, in turn, is constrained by a weak balance of payments position and a precarious dollar.

What, then, is the route to sustained full employment over the next generation? For the United States, the answer is clear and would be self-evident if the vision of the mainstream economists, public servents, and politicians were not clouded by now misleading neo-Keynesian concepts. The United States is suffering from a series of degenerative resource problems; that is, problems which will be worse next year than this year unless corrective action is taken in the form of enlarged investment in certain particular directions. Those problems include: rising oil imports; a decaying rail transport system; water supply and soil erosion problems which threaten the American food surplus; air and water pollution problems; urban degeneration; a slackened rate of productivity increase and much obsolescent industrial plant, notably, but not exclusively, in the Northeast and industrial Middle West. In addition, I believe the United States ought to increase its investment sharply in research and development.

In a paper summarized last year at a meeting of the American Association for the Advancement of Science,[4] I undertook to measure roughly the contribution to sustained full employment that an effective national energy program might make the United States. An effective program was defined as one which would bring United States oil imports down to 6 million barrels of oil per day by 1985—a minimum required target if the OECD world is to avoid risking a cataclysmic crisis in the 1980's. I concluded that, depending upon whether infrastructure outlays are added to plant and equipment requirements, U.S. investment for energy production for the years 1977–85 would be $770–$1,160 billion (in 1976 dollars); for energy conservation, $200–$365 billion. Roughly speaking, a doubling of the proportion of energy-related investment to GNP is required: from, say, 2.7 percent of GNP in 1974 to an average of, say, 5.25 percent over the whole period 1977–85. The investment gap in the United States, preventing a return to high sustained growth rates, was estimated at about 1.7 percent of GNP. I argued in short, that an effective national energy program would, in the United States, match or exceed the investment gap and bring that economy back to sustained full employment. With the heightened requirement for a massive and urgent program of synthetic energy production, my confidence in this proposition is considerably strengthened.

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[4] This paper appears in full in Charles J. Hitch (ed.), *Energy Conservation and Economic Growth*, Boulder, Colorado: Westview Press, 1978, pp. 59–112.

There are no reliable estimates of investment requirements in the other degenerating sectors except for air and water pollution control. Outlays for that purpose in the United States are expected to rise from 2.1 percent of GNP in 1975 to 3.1 percent in 1984. From fragmentary data on transport, water, and soil erosion investment requirements, I conclude that when the resource issues are confronted the American problem will not be sluggish growth but excessive investment requirements and the need for either a higher investment rate or investment priorities. A higher investment rate (say, 20–22 percent) would simply put the United States in the same range as most of the countries of Western Europe.

Reverting to economists' jargon, the driving force in the next sustained American expansion should be the multiplier; that is, an expansion of income caused by increased investment in resource-related fields. A rise of income thus set in motion will, of course, induce further investment; but the appropriate dynamics for the 1970's and 1980's is quite different from that of the 1950's and 1960's. In a sense, we are back in the pre-1914 world where growth was driven forward in the first instance by investment on the supply side; for example, by investment in railroads, steamships, new technologies in metals and chemicals, the opening up of new areas and sources of food and raw materials.

To return now to the earlier argument, the energy-related investment requirements for a radical reduction in oil imports appear sufficient to set the economy moving at sustained full employment and thus create a setting in which productivity would resume a more respectable rate of increase. Evidently, a radical reduction in energy imports would strengthen the U.S. balance of payments; and the dollar will begin to strengthen from the time foreign financial centers are convinced that the United States has installed a serious national energy policy. In short, three of the four central economic problems delineated earlier would be moved strongly in favorable directions by a program which would reduce oil imports. But what about inflation?

The necessary rise in energy prices required to stimulate increased production and conservation will, of course, impart a degree of raw materials-push inflation to the economy. This would be countered substantially by the reduction in import prices brought about by the strengthening of the dollar. But the key question is: how could a serious national energy plan help reduce wage-push inflation where the obstacle is a lack of national purpose and will?

The answer is that if the present danger to the nation's economy and strategic position, derived from excessive oil imports, were fully understood the nation might, indeed, be prepared to engage in "the moral equivalent of war"; and, in such circumstances, the necessary cooperation of labor and business to bring wage-push inflation under control, rapidly and equitably, might be forthcoming. It is unfortunate and, potentially, tragic that the United States has delayed so long in launching a serious and purposeful national energy program. Commenting on early post-1945 efforts at wage-price agreements in Europe, and American analyst (Mark Leiserson) wrote that such agreements, to succeed, must be "part of a coordinated effort to achieve a clearly defined national objective * * *."[5] A national energy program which engaged the American people, in all regions, in a concerted effort to bring down oil and recapture control over our economic and strategic destiny might well constitute the "clearly defined national objective" within which an incomes policy might effectively operate.

I conclude, then, as follows:

1. The trends in public expenditures, now the object of critical study, were the product of several decades of rapid increase in real income per capita, made possible by relatively low prices for basic commodities. Those price relationships, and the favorable course of the U.S. terms of trade, made it more or less rational for public policy to focus on the tasks of maintaining an appropriate level of effective demand. The trends in public expenditure would, in any case, have altered with the passage of time; for they were not indefinitely sustainable. But the reversal of the trend in relative prices in the 1970's made a change in course mandatory, due to its effects on real income per capita.

2. We entered, in the 1970's, a protracted period when, in the language of the Joint Economic Committee's pathbreaking report of March 19, 1979, the key problems facing the nation lie on the side of supply rather than demand. I have offered an historical explanation for that shift in national tasks and priorities.

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[5] Mark W. Leiserson, *A Brief Interpretative Survey of Wage-Price Problems in Europe*, Study Paper No. 11 for Consideration of the Joint Economic Committee, 86th Congress, 1st Session (Washington, D.C.: G.P.O., 1959), p. 55.

3. Of all our supply problems, the reducton of dependence on oil imports is the most urgent. A failure to deal successfully with the energy problem will exacerbate our already acute problems of inflation, productivity deceleration, unemployment, slow growth, and balance of payments. It will also lead to erosion of existing public services.

4. On the other hand, I have tried to demonstrate how the enlarged investment requirements of an effective national energy policy would, by bringing the economy back to sustained full employment, substantially ameliorate the nation's acute problems of decelerated productivity, high unemployment, slow growth, and a dangerously weak balance of payments position. The national unity and sense of purpose required by such an energy program should also provide a political setting in which an effective incomes policy, equitably to reduce wage-push inflation, could be mounted.

5. In such a positive economic setting, of high sustained employment, one could expect:

A reduction of claims for unemployment insurance and some other forms of income maintenance;

A resumed rise in real income per capita but quite possibly, for a time, at rates slower than those of the 1950's and 1960's;

A radical reduction, if not elimination, of federal budget deficits.

The nation could then, with poise, decide the directions in which it may wish to move with such unresolved social issues as national health insurance and a national rationalization of welfare programs.

6. Put another way, the foundations for the nation's economic system are now badly weakened. The rebuilding of those foundations is the central task of public policy. Without such an effort we can expect a progressive economic and social deterioration. With such an effort we can go forward again although on somewhat different lines than in the 1950's and 1960's.

Senator BENTSEN. I'd like to introduce Mr. McCracken. One of the methods for analyzing economic change in the special study is through the device of the so-called GNP budget. That device tells us how we have been allocating our national output over the last two decades, and it's very useful in showing how the Federal Government has changed our lifestyle and is likely to change it in the future. Our approach is similar to that used in the 1971 annual report of the Council of Economic Advisers, which was written when Mr. McCracken was Chairman.

I understand Mr. McCracken's testimony will examine the further use of this research device.

STATEMENT OF PAUL McCRACKEN, PROFESSOR OF BUSINESS ADMINISTRATION, UNIVERSITY OF MICHIGAN, ANN ARBOR

Mr. MCCRACKEN. Thank you, Mr. Chairman. The invitation to appear here today caught up with me rather late, and I did not have an opportunity to make a prepared statement.

First let me catch up on the point you initially made as to whether the efforts of the Joint Economic Committee have an impact on policy.

I think probably I am well toward the top of the people in this room in terms of the span of years during which I have been observing this committee, going back really to its beginning. It would be my considered judgment that the cumulative impact of the Joint Economic Committee in anticipating problems and in providing that kind of citizen education which must be the underpinning of policy decisions ultimately—that contribution has just been enormous. I think this could be documented over and over again throughout the history of the committee.

As you indicated, it occurred to me that it might be worthwhile to comment briefly on this initial effort which the Council of Economic Advisers undertook at the time I was Chairman. That chapter in the Council's economic report really emerged out of a growing concern about the extent to which our society, largely through Government, was developing programs which carried with them rather explicit commitments for future output.

Now obviously the discipline of economics has emerged because what we would like to do extends beyond the resources that we would have available. So there is nothing new about that. But we have been increasingly taking on programs that carried with them quite explicit commitments of our future GNP.

So it occurred to the Council at that time that it would be worthwhile to try a rather preliminary exercise in attempting to identify these explicit claims and to codify, as best it could be done at that time, where we seemed to be going, both in terms of the implications for fiscal policy in the conventional sense of an instrument of demand management, and also because to the extent that this kind of problem was developing, it would inherently carry with it implications for priorities.

If nature were simply allowed to take its course, Government and society generally might find itself obligating future resources on programs and activities which were fundamentally less important than others. In other words, we pointed out in that initial study—which I suppose in the contemporary parlance would probably have been called a supply-side study, although I think we did not use that term at the time—three implications for the kinds of trends we saw shaping at that time. One of them was that the existing claims on the growing output looked as if they were going to exhaust the probable growth in output for some years ahead.

Second, we do have to bear in mind that fiscal policies and Government programs generally carry with them implications for claims on output, not only in the sense of just Government spending but in a wide array of other ways. Government has or can make decisions which carry with them more or less explicit claims on future output imposed on the private sector.

Now at that time we cited, I believe, the Housing and Urban Development Act of 1968, which stipulated as a housing goal a certain number of housing starts to be built during the decade ahead. Then, we also thought we saw that the level of investment might well be affected by the decisions determining the character of the budget and the magnitude of the deficit to be financed.

When the invitation to appear here this morning came, it occurred to me that it might be interesting to go back and see some of those statistical projections of what then would have been a period 5 years ahead. The base here at that time was actually 1969, but the January 1970 Economic Report carried the study. We were looking then to 1975, which at that time would have been 5 years ahead.

In real terms, the gross national product for 1975 turned out to be about 13 percent below the projection that we made at that time. But interestingly, the magnitudes for Federal, State, and local purchases of goods and services were close to our projections.

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Personal consumption expenditures fell below the projected magnitude by 11 percent, but the major shortfall occurred in nonresidential fixed investment where the shortfall was 21 percent and for housing where it was 31 percent. These, I think, do carry over certain interesting implications for the problems that we face.

Now if I may just make two comments as to what would seem to me to be the implications of these phenomena for policy. It seems quite clear to me that we must push further in the direction of a quite explicit framework for making these decisions to obligate future resources. We must take into account the total gross national product as the available pie, if one may use that term. It will not do simply to look at the conventional budget attempting to fit expenditures within the constraints of what revenues would permit. This is far too partial a picture anymore, because of the extent to which Federal Government decisions of all kinds can carry with them implications for the commitment of resources that do not show up in the budget at all.

A requirement, for example, that automobiles have air bags is a commitment of future resources. It is not a Government expenditure.

The second point that I think is quite important is that as these competing claims for resources increase in intensity, we are going to have to pay much more explicit attention to whether the whole decisionmaking process results in suboptimal patterns of production. The article by John Herbers in the New York Times last Sunday was almost prophetic in the sense of these hearings today. The article was on "Carving Up the National Goals Leaves Very Little." This article would be a good one to add to the record of these hearings.

He points out there that we have tended to move into what he called the special interest state, and as these competitive claims become more intense, we do have to be careful. We must have better processes for evaluating whether claims on resources, whether in the budget or imposed on the private sector, are not only good but good enough to displace other "good" claims within an inevitably limited total. I think Alfred Marshall, the great economist, once said that one of our problems is that the fundamentally important items become the casualties of the pressing items, and this is something we have to watch in this process also.

Well, this will I think do for my preliminary comments.

Senator BENTSEN. Thank you very much, Mr. McCracken, and I will place the article you referred to in the record.

[The article referred to follows:]

[From the New York Times, Sunday, July 22, 1979]

CARVING UP THE NATIONAL GOALS LEAVES VERY LITTLE

(By John Herbers)

In his address to the nation on energy last Sunday night, President Carter spoke repeatedly of a "crisis of confidence" in the United States. The phrase seemed to have struck a responsive chord among many Americans who feel there is something fundamentally wrong in the body politic.

Beyond the failure of leadership, which Mr. Carter confessed to; beyond people's narcissism, which he said was part of the crisis; and beyond deep-rooted cynicism, which he attributed to unhea'ed wounds from the violence of the 1960's, from Vietnam and from Watergate—beyond all that and intertwined with it is the fact that the United States lives under a system of government far different

from only a generation ago. Mr. Carter alluded to the system in his speech, when he spoke of Washington as an island unto itself—admittedly, in part, of his own creation—and of the pressures of competing interest groups. At least partly in coincidence, it is a system that has come to maturity in the Carter Administration.

John W. Gardner, founder of Common Cause, called it the special interest state, a government under which an enormous range of legitimate interests, private and public, are able to bring pressure and influence that can veto action and policy intended to serve a broad national purpose. "The sheer range and variety of interests cancel each other out and the system lies paralyzed," he said in an energy speech. "The fragments of our Government have no effective way of working together or thinking together. The Government is an organization without a cerebral cortex. We cannot think as a nation.

That speech was delivered more than three years ago, on April 21, 1976, to the American Society for Public Administrators. Since then, the phenomenon he described has grown, its effects repeatedly apparent in the nation's inability to formulate strong energy policy. As long as there was economic expansion and abundant resources, the growth in influence and numbers of special interests was little noticed. Business, labor, the professions, farmers, maritime interests, regional groups, the poor, mayors, governors, county officials, Government contractors, consumers, environmentalists and more, each broken down into subgroups, organized to receive grants, credits, guarantees or favorable legislation from the national Government, and in the process gain control of a piece of the bureaucracy or a Congressional staff, and the support of members of Congress and officials in the executive branch.

It took a complicated, overriding issue such as the present energy shortage to bring the fractured nature of national Government to public attention. For, even though Americans are lining up to buy gas, inflation is rampant and the economy threatened, interest groups frequently are able to block general purpose remedial action, precisely because each acts only in its own interest. Each is prepared to receive more, none to make a sacrifice.

There's no better example of this than the failure of the Administration earlier this year to get a standby gasoline rationing plan through Congress. Regional interests, each armed with computers, research staffs and lobbyists, documented how motorists in a particular state or area would not get as much as those in another. When the White House would change the plan a different group would arrive with similar facts and figures.

In some instances, however, the process has been going on for years. There's more oil and gas in Alaska than can be moved out, yet a proposal of the 1960's, to build a pipeline to the Middle West, is still on the drawing board. Last year, conservationists and the railroads teamed up to defeat construction of a coal ferry pipeline that woudl have increased domestic coal use. The energy program Mr. Carter submitted in 1977 with the declaration that the shortage amounted to "the moral equivalent of war" was slowly picked to pieces. The legislation that emerged was, by most accounts, a weak remedy at best.

Fragmentation is no greater anywhere than in Congress, which has permitted a dazzling proliferation of subcommittees, each attuned to one or more of the special interests. Two years ago, House Speaker Thomas P. O'Neill, Jr. managed to fashion as ad hoc committee to deal with the President's energy package rather than see it split among warring committees. But when Senator Henry M. Jackson of Washington proposed a new omnibus energy bill last month that would give Mr. Carter the power to override delay and fragmentation in production of synthetic fuels, the measure was sent to eight House subcommittees.

The fragmentation has been seen in the Administration itself. The creation of a Department of Energy, bringing together many units concerned with energy, was intended to foster unity. By most accounts the conflicts have increased. John A. Hill, Deputy Administrator of the Federal Energy Administration under President Ford, said the other day that there are more now because there is more diversity in this Administration than in past ones.

In other words, Carter has tried to accommodate a broad range of interests, but he has not yet found a means of resolving the differences. In fact he helped make accommodation harder, by pushing in his campaign and then in his early Presidency for a balanced budget, which meant less for them all.

Some who are distressed by the rise of the special interest state say that sufficient public distress many well galvanize the Government into taking action even if it steps on the toes of some of the powerful interests. When Mr. Carter

proposed a windfall profits tax on oil a few weeks ago, the immediate reaction in Congress was to oppose it. After members returned home during a break, however, when the constituents were inconvenienced by the gas shortage, there was a change of mind and the proposal is now expected to become law.

At the least, the energy situation has exposed a flaw in government that many had not noticed before. The causes and effects of the special interest state are beginning to be debated. And some political scientists are discussing ways to replace or curb it. But what Mr. Carter seemed to be trying Sunday night, through his philosophical and moral tone, was to echo the great debate over "national purpose" prompted in the 1950's by Sputnik. It is too early to tell whether such a debate has even been launched. But it is not too early to ask what kind of political and economic resources remain in the country to meet a newly perceived juncture of crises.

Senator BENTSEN. Professor Juster, we very much appreciate you interrupting your vacation to come down and join us. Cape Cod might be a little more pleasant than it is here. We are appreciative of your contribution.

Professor Juster is the director of the Institute for Social Research and professor of economics at the University of Michigan.

Professor Juster, I have a competing engagement I have to go to—the Finance Committee. Congressman Rousselot will chair.

STATEMENT OF F. THOMAS JUSTER, DIRECTOR, INSTITUTE FOR SOCIAL RESEARCH AND PROFESSOR OF ECONOMICS, UNIVERSITY OF MICHIGAN, ANN ARBOR

Mr. JUSTER. There's very little wind down at the bay this morning, so I feel I'm missing very little. My comments are also extemporaneous, as Cape Cod is famous for sailing but not for xerox machines.

Let me make a few comments on the general thrust of the GNP budget notion with a few illustrations of where I think it conveys an essentially useful and correct notion, but a notion which in my view needs to be expanded even beyond where it has taken Government budget approaches to national goals.

First: Let me just note that I think it is very clear, for the reasons that Mr. McCracken has just pointed out, that if you were concerned about national priorities, it is very difficult to get a handle on that from looking at the actions of Government alone, simply because what happens in the private sector in terms of resource use and responsible incentives is fully as important as the way in which the Government uses resources which are obtained by transfer of taxes.

If you view it in the Ripley, GNP budget framework, he would note some dramatic shifts in priorities over the period of the early 1950's to the late 1970's. Essentially, these are a very substantial decline in resources used for basic necessities, most of which had occurred by about 1966 and not throughout the 1970's: Very large increases in education and health resources, very large declines in defense, and substantial increases in which he calls all other resource categories.

And if you look at "all other," it is really leisure kinds of activity plus environment. That's what seems to me to be a better description than all the others. They're basically cultural, leisure kinds of activities which not surprisingly have grown a great deal during a period in which real income has grown a great deal.

Now, one way to summarize the GNP budget shifts in the Ripley paper over the last two and one-half decades is to say that what really

happened is that the Government has assured the maintenance of a high minimum consumption standard for the disadvantaged, the poor, the elderly, the less fortunate generally.

But despite that stronger emphasis on Federal resources, national resources used for basic consumption have declined enough to enable a very sizable rise in leisure and environmental outlays. If you look at the sum of basic necessities plus what I call leisure and environmental, they are essentially about the same over this 25-year period of time. And that to me is simply a trade-off, partly underwritten by the way the Government has underwritten some basic, minimum level of sustenance and support of the disadvantaged.

The other thing that's happened in the Ripley data which I think is quite striking and not generally known, massive increases in education and health care have been financed largely by a decreased investment in national defense. That's a straight trade-off on the data. Again the sum of the categories—education, health, and defense—are just about the same in 1952, in the early 1950's, as they were in the late 1970's. So you can say that one has financed the other, if you want to put it in those terms.

Now, those are useful insights that tell you more about what's going on in the society than looking at a government budget. But they don't tell you all that I think one needs to know.

Let me put it this way. It is clearly better to judge the way in which various priorities are shifted, if you combine private sector priorities measured by consumptions, spending, which is what Mr. Ripley does in the paper with the public sector priorities measured by Government expenditures. But it seems to me it's obviously better still to measure national priorities in the way society is using resources by combining measures of all private sector resource use decisions, not just the ones that happen to go through the market as reflected by consumption spending.

With both private spending and with public sector analysis, if you think about it in terms of total national resources, what I'm really suggesting is that there are three kinds of elements about to go into an analysis of how we are using societal resources. One is what the Government does with those resources transferred to it by taxes. That would be the dimensional focus of the Ripley paper.

Mr. McCracken's comments strongly suggest, and I agree, that it is much more sensible to add to that notion of public sector priorities an idea of private sector priorities, as reflected by consumer expenditures, and then GNP accounts, and that's what the Ripley paper really does.

It seems to me to be even more sensible to go a step beyond that and to recognize then that in the private sector, only about 13 percent of total available time, if you want to use chronological time as a measure, goes into the market and is reflected in the GNP monetary trend action as far as output. The other 87 percent isn't used that way at all. And these are resources.

Now, of course, you recognize we are counting sleep as one of those resources. We're not getting much out of sleep as a resource unless we cut down on it. But my point is that in the nonmarket sector, there are a great many activities that trade off against other kinds of measured activities in both the public sector and in the private sector.

There are a great many uses of household time, if you like, household production, which are important national resources and do, in fact, reflect the priorities of a national sort and, which if ignored, can give you I think a confusing and sometimes a quite wrong result in terms of judgments about what is being done with societal resources. What I'm really saying is one wants to get a total notion of how society is using resources, and the available resources aren't just those that go through the market—either the public or the private sector.

They are also resources which go through the household on which no monetary transaction or no monetary counterpart exist, and it is important to get a notion as to how those resources are being used and for what purposes.

The other thing that I think is relevant is that most of the discussions along these lines talk about priorities, and they really talk about them in terms of input. In the Ripley paper and almost all discussions that I"ve seen on priorities, people are essentially talking about the way society is using resources. We talk about increased priorities for health or education, and what that means is we are using more resources in the health care industry or the education industry.

Unfortunately, it doesn't mean we're getting higher results, and it seems to me what needs to be coupled with inputs on the priority side is some systematic sense of accomplishment on the outcome side or output side. And that is not quite so simple.

GNP, after all, is not really an output measure, although we often use it that way. The outcome measures that we're interested in are better health, better education, a safer society, a more stable society, a larger amount of leisure time. Those are the outputs that societal efforts are attracted toward and pushed toward, and it is simply not satisfactory to measure societal efforts by looking simply at what we are trying to accomplish. We ought to try to get some kind of measure of what we have, in fact accomplished—whether we have improved on the actual levels of skill and education, on the levels of the national health status, and not worry so much over whether we're using more resources either in hospitals or doctors or teachers.

Now, let me illustrate with two kinds of things where I think the GNP budget approach can give you a misleading picture. The Ripley data suggest that we have a massive investment in education and manpower. What those data say is that we put more research into various sorts of secondary and higher education. If you look at the studies that have been done which ask how does one get educational outputs, how does one get educational attainments, one answer that you consistently get from those studies is that the very important input into the educational process is not what happens in schools but what happens in homes.

The studies done—the Coleman report, the Jencks studies, and any number of others—seem to come to the conclusion that it is very difficult to find any sizable impact of school differences on educational skills. Most of those studies conclude that the biggest differences in educational skills are explainable out of parental background level. One of those kinds of resources that has, therefore, an impact on skill development is the amount of effort, time, and energy devoted by parents to the training of children, preschool and during school.

The GNP budget approach does not take account of that, because that's not a market transaction and isn't measured that way.

If you ask yourself how we could be misled, suppose you imagine the world, which we are not in yet, but which we are approaching, in which essentially all adults work full time, and instead of having children trained at home by parents, children were sent to nursery school from the age of 6 weeks, and from then on either are in nursery schools or kindergartens or schools.

If you use the GNP budgeting kind of data, what you would show is a very large increase in "investment," quote, unquote, in education resulting from this large increase in nursery schools. But the data really would show, if you measured it properly, a big decrease in parental investment and a big increase in public investment, and perhaps no change at all in total investments in child care and training and education. It would simply be unclear, looking at the public sector data or looking at the expenditure data, whether you did or didn't have any large increases in the investment.

Now, that's a hypothetical case. There are a little data on it which show that the figures I just suggested about the misleading aspects of data, like the one in the Ripley paper, that that happens not to be true in the case of child care, because there are some data that suggest that if you look at the differential amounts of time spent with young children by married women who work compared with married women who don't, the differentails are not in fact very large. Married women do take time away from other activities when they work, but they take it away, as far as we can tell, from television viewing time and sleep. It does not get taken away from child care, which on the whole sounds to me like a healthy phenomenon.

Now, those data and those results essentially come out of the study which is designed to measure all of the inputs into priorities. It's essentially a time allocation study conducted at the University of Michigan in 1975, financed by the National Science Foundation in part.

Let me give a second illustration, and then just a few concluding comments before opening up the discussion generally. Let's take a look at what happens when you start to use budget priorities a la Ripley to ask about care of the elderly. Three or four decades ago, many elderly people lived in homes with families. There was a great deal of elderly care going on, but it was unpaid, it was within households, it was done by children, it was done by their relatives. It was not paid for. It does not show up in the GNP.

Suppose, as is increasingly true, elderly care moves to the commercial sector. It moves to nursing homes, it moves to hospitals, it moves out of private homes. What the Ripley data will show is that a very large emphasis, much larger emphasis on nursing care and on health expenditures focused on the elderly.

That may simply not be true at all. The level of health care received by elderly people may be not one whit better and the amount of resources devoted to elderly health care may be not one whit larger than it was three decades ago, when the same kind of custodial and support and psychological help given to elderly people would have been received, but not in hopsitals and not in nursing homes, but in other homes, in homes where there were extended families.

So what I'm suggesting in these two cases—and there are many others—is that the focus on where people spend their money, whether it is people or governments, may on some occasions give you a very seriously misleading picture of what is actually going on with respect to total societal resource use and with respect to societal priorities; and to do the job fully and properly, one needs to go beyond expenditures of money and to go into expenditures of time which happen not to be compensated because they happen to take place within households.

My two final comments—some are partly just a reiteration of what I have been saying. It seems to me that in public policy discussions, it is very important to be concerned about priorities and about resources. We have a long history, at least so it seems to me, in this country of having large and expensive governmental programs designed to accomplish certain objectives.

Many of the studies attempt to evaluate what change has taken place as the consequence of manpower programs, of educational experiments, of a variety of programs. Many of those studies have a lot of difficulty in finding any impact at all. As a matter of fact, in the social experimentation literature, if you start out knowing nothing of what the experiment consisted of and simply make a guess that the experiment, when you got through with it, would show no effect, we'd be right about 95 percent of the time.

Partly that may be because our measurement tools aren't very refined. These experiments are designed to have impacts. They may not be enormous impacts. They may be hard to identify. And it may be that there really is an impact of various manpower and other kinds of programs. But it's just awfully hard to find, given the crudity of the data that we have to do the tests on.

But it is also possible that one thing that goes on when governments adopt policies is that private priorities change. And if government is going to take over a particular kind of activity, the private sector goes out of that activity and in fact there isn't any more resources being used to accomplish the result. It's just that you've created public resources for private resources, except that you don't know it because you don't know how the private resources were being used previously and how they're being used now.

That's really the major reason, it seems to me, why this committee ought to be greatly concerned about insuring that when it talks about social priorities, it really does have a comprehensive handle on all social resources that can be used to address priorities, and not simply the ones that happen to be the most easily measurable or most immediately measured. Of course, those are all the ones that are measured in dollars, because that's the kind of data we all have. The ones that can't be measured in dollars we have a lot of trouble with. They're much harder to get hold of. But they are very large and they can, and sometimes in the past perhaps have, offset priorities that are denominated in dollars.

And the second thing is—let me just reiterate once more that it does seem to me that if one wants to be concerned not simply with priorities in terms of resource use, but with outcomes in terms of what we've been getting for it, that is, one does want to know not just whether there are more investments in health but whether the population is

healthier and whether we have produced better health. Those are questions that are simply not addressed in most discussions of these kind.

We usually content ourselves with assuming that if you put more resources in you'll get more results out. That is not an assumption that I would choose to make for a variety of programs which are in the public sector, where the market tests to be met are rather weak, where the competitive forces are not very visible and sometimes nonexistent, and where the usual assumptions that underlie—you put more resources in, you get more out—they simply do not hold up in many kinds of public sector activities.

So it would be very useful to know quite explicitly whether we are getting improvements in health status, improvements in skill levels, and not bigger investments in health costs and bigger investments in educational input into children and across a wide spectrum of other kinds of public programs.

Thank you.

Representative ROUSSELOT [presiding]. Thank you, all three of you, for presenting your comments. And we will certainly leave the record open for the two of you in case you want to submit some kind of a followup paper in line with what you said, and maybe some additional comments.

Do any one of the three of you want to comment on the others' statements or thoughts?

Mr. ROSTOW. I'd like to ask Mr. McCracken—the projections done in 1975 are obviously colored by the fact that 1975 was a year of rather acute recession. Have you extended them forward, let's say, to 1977–78, where we've had a degree of recovery? My guess is that the figures would be modified marginally if you got a year cyclically closer to 1969 but not extravagantly. It would be interesting to know.

Mr. MCCRACKEN. My answer is no, I did not try to simulate what the actual figures would have been had that recession not occurred. That's a very important point. Indeed, when I went back to read this chapter in the 1970 Economic Report again, after a lapse of several years, there were two or three things which occurred to me. One of them was, of course, that we were not trying to make any guesses or forecasts as to where we would be in the business cycle in that terminal year of 1975. And so in a sense, we were making a kind of a standard volume projection for 1975.

But another aspect of this that I found quite interesting was the overly optimistic assumptions which had been made concerning things which I think would not really be called cyclical in character. Our projections of the labor force and of employment were, if anything, too conservative. We have got more in the labor force than had been assumed at that time. Indeed, I think our assumption was that man-hours would have gone up about 1½ percent per year. Obviously, they have gone up more than that.

We were, however, so optimistic about gains in productivity that we projected growth capability of the economy at 4.3 percent per year. Obviously, it didn't do anything like that.

I think in looking at these figures without trying to attach significance to small figures, the key thing was that the economy, in a quite fundamental sense, apparently was redirecting priorities in a way such that our capital outlays, investment outlays, including housing, fell

far below what seemed to be shaping up as we moved into the decade of the 1970's. While that was the result of our decisionmaking about priorities, I doubt if that was our intention.

Representative ROUSSELOT. Do you want——

Mr. MCCRACKEN. You indicated, Mr. Rostow, I believe a 20-percent investment rate in your introductory statement; isn't that correct?

Mr. ROSTOW. Well, yes, sir.

Mr. MCCRACKEN. I just wanted to ask to clarify, is that just the conventional, nonresidential fixed investment percentage in June?

Mr. ROSTOW. Yes, sir. In other words, I think an increase of 3 to 4 percent.

Mr. MCCRACKEN. Well now, these figures, of course, the Ripley figures show 10 to 12 percent. So I wondered.

Mr. ROSTOW. I guess this includes housing.

Mr. MCCRACKEN. Oh, this includes housing.

Mr. ROSTOW. That's right. I'm taking a conventional figure—say 16 to 17 percent is our current investment rate. And my estimate of what we require in terms of control of pollution, energy, which is a big increasing item—there are no reputable transport figures, although this new Commission study may supply them. I haven't seen the investment figures for transport required. So it's just a rough approximation.

I would say that if you look at the whole sweep of the American investment rate over the period since we've measured it—it's interesting, we've had a low investment rate in our history from the time we industrialized, around 16 to 17 percent. There is one period in which it rose to over 20 percent, and that is when we were laying down the continental railroads, the transcontinental railroads, and that held up after the Civil War and through the 1980's. And then it subsided through the 1990's again to the old and current level.

And my feeling is that the challenges on the supply side we face in energy, transport, and getting the underpinnings of our economy fixed are just about, relative to the size of our economy, like the challenge of making that transcontinental link.

But one of the things I very much hope this committee will do is to lead the revolution in producing disaggregated investment figures for the society.

I struggled with the Department of Energy, and they can now produce somewhat out of date plant and equipment expenditures for certain conventional types of energy production investment. There is no reputable figure for energy conservation investment and energy conservation is extremely important, and, contrary to the common view, is capital intensive.

Mr. MCCRACKEN. Very much so.

Mr. ROSTOW. Once you start fussing with the thermostat, close the icebox door and so on.

None of the infrastructure is given, and we ought to be watching very closely, in my view, not merely housing, which is about all that's broken out here, but energy-related investment, transport investment, investments to control levels of pollution.

Being for more than 10 years now a citizen of the Southwest and knowing something about what's happening with the drying up of the Ogalallah water basin, I think water investment ought to be isolated. And all the habits with respect to handling of investment which

emerged from the Keynesian revolution, just treating it more or less like a demand aggregate with a special item for housing, I think that has to be changed.

I think that the Council of Economic Advisers' reports have to be changed. I think this committee is in a position to lead that revolution in the intellectual organization of data.

I would also say that we have got to begin to look at this economy in terms of its regional differences. On a page I footnoted in my longer testimony on the relationship between energy, employment and regional development, I got from the Department of Commerce some rather interesting data on rates of growth of real earnings. We can't get gross State product uniformly, but we have extraordinary differences in the rates of growth of different parts of this economy, ranging from six-tenths of 1 percent over a period of 5 years down to over 5 percent.

Now, you never expect growth in a big continental society to be uniform. But we ought to know much better what the regional disaggregation looks like. And things that we toss out so glibly, like 3½ percent rate of real growth, 4½ percent rate of real growth, these rates may be very different in Alaska or the mountain States than it is in New York or Pennsylvania.

There are a number of those things, including—I don't know in your time, Mr. McCracken, whether the terms of trade were regularly published. I didn't check on it. But to my astonishment——

Mr. McCracken. What time was this?

Mr. Rostow. In the time when you were chairman of the Council of Economic Advisers.

But to my astonishment, one of the most important pieces of data about the American economy was dropped from the 1979 Council of Economic Advisers submission to Congress. There's no terms of trade figure in there. One cannot really understand the 1950's, 1960's, and the benign environment of that time, and one cannot understand all the forces that are constraining us, twisting us in the 1970's, unless one looks very carefully at the terms of trade and the movements of relative prices.

Mr. McCracken. Could I make a further comment on that?

Representative Rousselot. Certainly. I don't know why it was dropped.

Mr. McCracken. I don't either. But there has been a persistent difficulty in the United States in remembering that the rest of the world exists. [Laughter.] Nowhere more clearcut than in our economic analysis.

I was about to say, at least when I was Chairman of the Council of Economic Advisers, I think we were aware that the rest of the world existed. But then I noticed that in this chapter, that we don't even have the net export figure. [Laughter.] I may have to delete that from this record.

Representative Rousselot. No need to do that. [Laughter.]

Mr. McCracken. Mr. Rostow made a point here that I'd like to underscore, because it may have had more significance than was first evident. That was the great importance of having a cross-breakdown of investment in terms of the objective of the investment. Now we have defined equipment spending in terms broken down by manufacturing,

mining, autos, airlines, and all this sort of thing. But I think if we had good data, we would find that not only has there been a very substantial shortfall in total investment, but that the reallocation of investment toward objectives which, however socially desirable, do not either expand capacity or improve measured productivity, have been even greater. And that has been a significant part of the trend that we now seem to be in an era when, for all practical purposes, the American economy is incapable of delivering any gains overall in real income and productivity.

And getting much better data on investment broken down by these objectives is very important.

Representative ROUSSELOT. Professor Juster.

Mr. JUSTER. Just a comment that really falls along the track of the previous discussion.

I think economists have tended over the years to have what seems to me an excessively narrow view of what they mean by investment.

My impression of most of the studies that have asked, why does country A grow faster than country B? What accounts for the 2-percent rate of growth in the United Kingdom and the 4-percent, or whatever, asked that kind of question.

They don't explain much of it by the differential rates with which we conventionally explain investment. You explain a lot more of it with essentially differential investments of a different sort, a lot of which has to do with labor force skill upgrading, some of which is education, but not all.

So what I would like to suggest is that although it's certainly true that if Mr. Rostow's view of the world is right, and I think it generally is, you're not going to solve energy kinds of problems with skill upgrading of the labor force.

You do require certain kinds of hard hardware-oriented kinds of investment programs. That's got to be done. But if you want to ask yourself, why the U.S. economy is sluggish in productivity growth and how that relates to a failure of capital investment to grow, you really have to have a different view of capital investment than contained in the GNP figure.

And that's not just a matter, as I pointed out before, a nonmeasure, nonmoney kind of thing. That's really a matter of a very basic thing, such as research and development outlay, which for many years ran along a substantially higher proportion of GNP than it is now running.

Now you do get an economic return from basic investment in research and development. It is hard to measure. It is not immediately a consequence of this year's R. & D. outlays. But over the long haul, that kind of investment may make more difference than upgrading the overall investment rate without regard to composition from 16 percent to 18 percent.

And there is a spectrum of things which really are investment-oriented and growth-oriented which simply aren't measured in the 17 percent customary ratio.

Virtually all education outlays are in some measure investments. They're not counted in there. All R. & D. outlays in some measure are investment. They're not counted in there. Many kinds of training and

manpower-related kinds of things are thought of as investments. They aren't counted in there.

There are reasons for it. We don't know how to measure the outcomes of those very well and it's sort of hard to deal with. But I do think that you have to take a little broader view of what society needs in terms of investment programs than simply looking at the hardware, which is really what the investment notion in the GNP budget is focused on.

It really consists of, you know, machines. That's what it is. And that, historically, has not been the driving force behind many differentials in growth rates. It's been other kinds of investment or other factors which we don't understand very well.

You know, rates of technical change which are observed to exist and which we have no good explanation for.

So the problem, I think, is more complicated than simply saying you can cure it with a thump in the investment ratio. I'm not at all sure that that's true. It may be true, but I guess that I'd be skeptical.

Representative ROUSSELOT. Well, do you have some suggestion on how we could measure research and development?

Mr. JUSTER. There are measures of it.

Representative ROUSSELOT. To include it.

Mr. JUSTER. Sure. This is just a matter of recasting the data is all that requires. There are a variety of data, not terribly good, but they're adequate, on research and development outlays.

What I'm really suggesting is that if you want to get a fix on what's been happening to investment ratios, you really should recast the definition of what you mean by "investment," and many of the things that could be simply done that one would think of are things which, you know, people have done that before.

It's not a new idea, and there are data around which are not perfectly adequate because it's hard to disentangle market research kinds of R. & D. from basic R. & D. One may not have much productivity enhancing effect and the other does.

But there are sufficient data around to where one could recast a definition of how the GNP is focused, whether it be current-oriented or future-oriented, which would, to my taste, be vastly better than conventional use of investment measured by plant equipment.

That could be done for any period of time when one could do it for, with varying degrees of difficulty, depending on how far back one could go.

That's not something new. It has been done. It could be done.

What I'm saying is that I think you get a better sense of where we have been in order to make a go if you take a broader view of what you mean by "investment," which, after all, simply reflects a notion that society is trying to do something to effect future outcomes and not present outcomes.

That's really what investment means.

Representative ROUSSELOT. Do either one of you want to comment on that?

Mr. ROSTOW. Yes, I should like to because I have found Professor Juster's presentation appealing. I think all of us who have lived and worked with GNP data are aware of its limitations. Indeed, you get

curious results if you switch the care of elderly people from the home to a nursing home, and all that.

I think with respect to investment rates and productivity, we've got—well, let's put it this way—in accepting the Juster amendment and refinements and elaborations, we shouldn't throw the baby out with the bath water because you can see by comparing, let's say, the story of Britain and Germany in recent decades, or even Britain and France, where some of the more pedestrian, if you like, McCracken-Rostow analyses are relevant.

What the British did was to run a low investment rate and shift radically large portions of their resources, measured conventionally, into the social services.

This attenuated their investment rate and slowed down the rate of productivity increase.

The result was to put them into a chronic situation of stop-and-go legal policies where, because of the weakness in their balance of payments, they had to contract in order to keep some sort of order in their balance of payments. That kind of irregularity further slowed down investment, including R. & D. investment by industry, a large part of which depends on the assumption that over a considerable period of time, you're going to be operating close to full capacity.

I take the German-British case as a good case to examine outside our context, the issue which concerns this committee. Is it possible that you can overallocate the public services in ways which undermine the productivity of your society, and ultimately undermine the base on which your social services depend?

I believe that a careful comparison of Britain with France versus Germany will give you a rather sharp illustration of that process.

Now, bringing it back to our own country and the work of this committee, I give, in my longer submission, a table which I derived from the text of the Council on Economic Advisers report in January. I broke this table out from their prose.

They make an estimate of the contribution of various factors to the deceleration of labor productivity. The biggest one from 1973 to 1977 is a lower investment rate.

Then you have a demographic phenomenon which, so far as teenagers are concerned, is going to shift in the 1980's in a way favorable to productivity, as the effects of the end of a baby boom, at the end of the 1950's, project themselves over the course of the 1980's.

Then we have a measure of the increase in social, environmental, and safety regulations. They account for a significant part of productivity deceleration. A residual remains, mentioned in my prepared paper, which may be connected with the declining portion of GNP devoted to R. & D.

I have examined the literature, Mr. Juster, in two chapters of "Getting From Here to There," and I despair of getting a single productivity figure representing the contribution to productivity of our R. & D. outlays.

I agree with you that it is relevant. I don't know how to get an average rate of return over costs for R. & D. because the returns are so wide spectrum.

But you're right in bringing it in. As a historian and someone who has dealt with public policy, I don't believe that because you can't measure something, you should drop it from your consideration.

That sometimes tends to happen with modern econometricians.

I don't think we're going to account for all of the productivity deceleration, but my argument, both here and in my prepared paper, is that if we face up to our energy problem and to some of these other resource problems, we'll certainly take this country back to sustained full employment. The investment gap between full employment and where we are will be covered, I think, by that investment. The 2 percent I gave you is plant equipment. The infrastructure investment in coal is about 40 percent more; and infrastructural requirements will be high in other lines of energy production and conservation.

With sustained full employment, we could expect more R. & D. on the private side, and we might wish to allocate more on the public side as well.

I think you'd find the investment rate rising. Our great problem then would be, if we try to run this wage-push inflation type society, at sustained full employment. We now have built in an 8-percent gap between money, wages, and the average rate of increase in productivity.

I commend the committee to greater sensitivity to the Juster modifications and elaborations and subtleties, but I think a good deal of our remedy must come from rather more conventional economic analysis.

Mr. JUSTER. I have no quarrel with that. Let me just, by way of passing, turn to your table 2 in your prepared paper and review your negative productivity residuals.

You're talking about subtleties. In the study that many of my comments were based on, one always runs an interesting—we're interested in studying nonmarket activity in the study.

As a byproduct, we found out how much time was devoted to work. It turns out that if you find out, from much better measures than the Bureau of Labor Statistics has, what time people actually get to work and what time they leave, and compare that, weight it up properly and compare it to what they tell CBS when they ask how many hours did you work last week, there's something like a 15-percent differential between the amount of time paid for and the amount of time actually on the premises.

Well, maybe that's always true and there's no trend in that.

Representative ROUSSELOT. A 15-percent deficit?

Mr. JUSTER. Yes; that is, people report x hours of work a week, like 40, and they actually are there 36½ or 34½, or whatever.

Well, you may say that's always true, you know. Life is just like that, but we have some data from 10 years ago, the mid-1960's, and the differential there is not nearly as large, as best we can tell. We can explain something like three-tenths to five-tenths of 1 percent per year of productivity change simply as a consequence of the fact that the denominator, labor hours, is badly measured; that is. its greater growth is exaggerated. People are not putting in enough. They're not in the workplace as many hours as the BLS says that they're in the workplace.

That's not very subtle; that's just brickbat. And that will turn around, that negative minus 0.3 differential or the minus 0.17 into a positive.

We've overexplained it.

Of course, all these explanations of reproductivity differential, as I'm sure you know from listening to the other testimony, they're all really pretty chancey. They don't quite come out of the air. They do not have a high degree of accuracy. They have big standard errors around them.

Representative ROUSSELOT. I wonder if our managers can admit that they're paying for less work than they're getting.

Mr. JUSTER. That is, in fact, what happened.

Mr. ROSTOW. We professors work longer. [Laughter.]

Representative ROUSSELOT. We do in Congress from Monday through Thursday. [Laughter.]

Do any of you see a connection between the rise in transfer payments and the shortfalls in the industrial sector cited by Professor Rostow, and is it economically valid to put the issue in these terms?

Mr. JUSTER. I wouldn't see it as having a direct effect on investment. I do think that it is possible to make a case which says, a transfer system which essentially gives people very little incentive to move back from a dependency to a nondependency status also tends to lower productivity generally.

The transfer system does two kinds of things. There is a class of people that are permanently entitled to, and recipients of, transfer—children, the elderly, people who are ill, et cetera. Those are set transfers which no one argues about.

People have earned their rights. They have to be taken care of, and they are taken care of with the transfer system. Maybe they should be taken care of better, maybe worse, but that part of the system doesn't really affect productivity.

Another part of the system is an incentive system. People are subject to temporary inconveniences, loss of income. The system is designed to tide the people over. Unemployment compensation is that part of the transfer system. If you make that system attractive enough and people have a reluctance to get off, it has to have an effect on the productivity, I would think, although no one has a number for it. I don't have.

But you think that it must have some tendency to make people less inclined to worry about temporary job loss.

Now I'm not suggesting the system is too lucrative. I'm not suggesting that it's lucrative enough. All I'm suggesting is, if you want a link between economic problems and the transfer system, it seems to me that it's likely to be found in the notion that for that part of the transfer system where you're dealing with people who are in and out of dependency, if you make the system attractive enough, you will encourage them to continue in dependency.

Representative ROUSSELOT. Do you think that we've done that at the Federal level?

Mr. JUSTER. No one has got a number, and I haven't got a number. I simply suggest a conceptual possibility.

Representative ROUSSELOT. We're debating that subject right now in our Ways and Means Committee.

Mr. JUSTER. I simply don't know.

Mr. MCCRACKEN. I have no quantative evidence to try to pin that down. It seems to me the judgmental answer would have to be, yes, it does probably skew our country into a higher consumption-type economy.

Representative ROUSSELOT. SSI recipients, for example.

Mr. MCCRACKEN. Exactly. To the extent that it takes some people out of the labor force, the growth capability is thereby reduced.

Mr. ROSTOW. Let me take the question head on. You might look at the table in my prepared paper which comes from an OECD report which shows the cyclical behavior of nonresidential investment: From 1955 to 1978, its average behavior cycles, and then how it behaved in the most recent cycle involving a rise in oil prices, et cetera.

As you will see, in all six of these cases, investment failed to show the resilience in the last cycle in the upswing from 1975 that it showed in the average of previous cycles.

Now why is that?

The answer is that when we had favorable terms of trade and cheap basic commodities, real private incomes were rising.

In our private economists' jargon, the dynamic force pushing the economy forward on the investment side is the accelerator. The accelerator is the investment that relates to the rate of growth in real income, real expenditures, consumers' expenditures.

Now we've got a switch in the terms of trade, exacerbated by counter-inflationary policy. In any case, the rate of real income in all these countries decelerated. That turned off the accelerator which is based on the rate of change of consumers' expenditures.

And that is why you see uniformity even for Japan, a much lower rate of investment, a different response.

Now what I've been arguing is that in a supply-oriented era with chronic pressure on private real income due to high food. energy, et cetera, prices, you cannot expect investment to be driven by the rate of increase in private consumers' expenditure, or even public expenditure.

Therefore, to maintain full employment and to get the investment rate up, you've got to address these supply side resource areas, which we have to address in any case because they are degenerative; that is, they will be worse next year than this year.

Again, in economists' jargon, we shall be relying, as a detonating force on the multiplier. The multiplier measures the increase in income due to an initial extra unit of investment.

Now, the multiplier and accelerator interact. But I think it's useful to stare at those gaps because it's not just a U.S. phenomenon; it's a phenomenon of all the major economies of the advanced industrial world, and I think that the trick that we've got to learn is how to use the incentives that government can set up through taxes, and I believe with respect to synthetics, through public/private collaboration, to bring about this higher level of investment on the resource side to set in motion a process through the multiplier that would get us back to sustain growth, but on a different basis.

Those charts show you what the nature of the transition was from a time when the relative prices of basic commodities was supporting

a rapid rate of growth into a time in which they were depressing the rate of growth.

If you run the economy at really full employment you are going to find that not all, but a substantial part of the ghetto unemployment that is so distressingly high, and where we have come to regard young people in the ghettos as a sad but intractable socioeconomic problem, that they will be looked upon as potential members of the working force and be pulled out to help in district heating, to help build the infrastructure for some of our synthetic plants in the East and industrial Middle West.

If you run the economy at a higher rate of growth, then the attitudes of the private sector towards manpower changes quite rapidly. I watched this. I was working on foreign policy but President Johnson had me around once in the mid-1960's when he addressed about 100 businessmen on what they could do to help these young people to work. We were then running under 4 percent average unemployment. And they said, "Lo', just give us access to them, and we'll train them. We may have some hard cases, and the Government can train them; but we need labor."

I think that is the optimum way to bring down this margin, which exists but none of us can measure, of those who on the whole marginally prefer welfare to going out and getting a job. If the jobs are there I think you will find a reasonable portion will opt for them.

Representative ROUSSELOT. I have to go vote, so I'll leave the hearing to George Krumbhaar and the committee staff who have some questions.

Mr. KRUMBHAAR. Perhaps the single most interesting statistic to come out of our examination of this allocation of national output is the fact that for every dollar this country spends on basic necessities such as food, clothing, and maintenance of housing, more than 25 cents comes from government. This government money comes from such programs as food stamps, social security, SSI, and State and local welfare programs.

The chart we showed at the beginning during Senator Bentsen's opening statement, showed an upward sloping line, starting from way back in 1952 when only 6 cents out of every dollar were spent on such basic necessities. Now it's up to about 25.9 cents.

So I have a couple of questions here. What would be the economic consequences of a continued trend on the chart? It is practically straight from 1952 to 1978. What would be the consequences of a continued trend in this direction?

In asking this, I cite an article that appeared in the New York Times on Monday. "The National Advisory Council on Economic Opportunity said today that because of high inflation in the necessities, food, housing, households in the lowest 10 percentile income group are spending 119 percent of their after-tax income on these basic necessities. And they say that the combination of inflation and unemployment makes the suffering of the poor more severe than ever before."

This is one of the most important moral issues of our time. So certainly by any moral sense, and by any political sense, this line might well be going on the same way.

What would be the economic consequences of that, Mr. McCracken?

Mr. MCCRACKEN. I suppose one consequence will be it will go over 25 percent. [Laughter.] One is always reluctant to say, of course, that

anything can't go any further without adverse consequences. We've had too many cases where ruin was predicted if some threshold were reached, and it turned out that it was not as much of a barrier as we had expected.

I have no doubt that our society has the resources to provide adequately for people at the low end of the income scale, and still, at the same time, maintain the kind of incentives to work and produce which can sustain the vitality of our economy. I do think, however, we have to face the fact that as we expand these programs there is an awful lot of ingenuity out there. We see it on the college campuses. And the more generous food stamp programs are, the more you are going to find, shall we say, unusual arrangements for taking advantage of it.

And this is one of the problems that we face. It does tend to loosen the connection between what people put into the economy and what they get back out. And there is the dilemma, I think, that we face.

So, it's a combination of trying to devise programs that adequately take care of genuine need; but also constrain the improper use of these programs. It ought to be possible, but the history on this is rather checkered.

Mr. KRUMBHAAR. This is a question of a pie, of not necessarily declining size, but it is certainly growing at a slower rate. Is the provision of basic necessities through government only something that we can afford, as a practical matter, with higher levels of productivity growth? Do you see a clash?

Mr. MCCRACKEN. The higher the levels of productivity growth, really the more we can afford.

Mr. KRUMBHAAR. The point I am trying to make is that if we see this line going in the same direction at the same rates of growth, these rates of growth were set largely at a time when productivity growth was higher than it is now. I'm trying to get some kind of an assessment of whether you see some kind of clash in priorities between people who think that we must maintain our commitment to liberalizing social programs and people who see that the lower growth in productivity has to be cured by devoting more resources to, say, capital formation.

Mr. MCCRACKEN. I think there is a trade-off there.

Mr. ROSTOW. May I add a word to that in relationship to energy?

Since the increase in oil prices in 1973 we have been able to overcome the incapacity of our society to come politically to terms with energy. If we had a serious energy policy we could produce anything. But we preferred something painful, but manageable; namely, a rising level of oil imports. But we've now come to a stage where I think the world is going to force on us something like President Carter's ceiling on oil imports.

The oil is not going to be there. We can only take it away from others, with great inequity.

Therefore, the balancing item, if we fail to increase energy production, will not be increased imports. It will be unemployment. And the orders of magnitude, which are quite predictable, would be very large. Perhaps not as large as they were in the great depression of the 1930's, when they came up to about 25 percent unemployment; but we could easily, if we are not attentive to energy production and conservation, get ourselves into protracted periods of 10 to 15 percent unemployment as the only way to balance an inadequate energy supply.

There you would have real disintegrating forces at work. We would have to put more in to salvage those who are unemployed, those with low and inadequate incomes. Your investment rate would fall, your proudctivity would further decelerate. And you can ceonceive of a degenerative situation which would certainly be the worst economic circumstance since the 1930's. It would be inherently degenerative. It would require, to maintain any kind of decency in the society, even larger allocations to unemployment insurance and all the rest.

I think that the energy implications of the calculus that concerns it should be explored by this committee, just as I believe it should explore the positive potentials of radically enlarged energy-related investment in both production and conservation. Because in my view, at least, that would ameliorate some of the social and budgetary problems that greatly concern us.

Mr. JUSTER. Just in terms of the committee's ability to understand what the problem is, it seems to me that you would know more of whether you do or don't have a problem if you took those basic necessities that are financed by government and divide them into those that represent some kind of social security payments, payments to the elderly, and payments to everybody else.

In some sense, a large part of that growth must be a consequence of what's happened to the social security system over the last couple of decades. I think my own view of whether that's a priority issue, or whether that economically portends disaster, really would portend on what that thing looks like if you pull people over 65 out, or pulled government contributions to that dimension.

I think the problem is very different. It shades into the other; that's true. But nonetheless, it is a very different problem. And I think you would get more illumination from looking at the two pieces of that, the contributions of the elderly and the contributions of all other kinds of transfer economy, food stamps and all that.

Mr. MCCRACKEN. Could I pursue a little bit what Professor Rostow is talking about?

It seems to me we have an interrelated set of things here. Our economic jugular vein does seem to go across the Arabian desert. And if that gets stepped on—our imports of oil are drastically reduced—the impact on the unemployment level will be enormous.

If we had somehow the political and the social will to start facing this problem, there is no doubt in my mind that another dimension of adaptivity will be the enormous capability of industry to alter production functions—to increase output per unit of energy used.

On the other hand, to the extent that their investment activity, perhaps by virtue of the fact that energy prices are now higher, or because of uncertain availability is directed there, there will tend to be less investment going into improving output per unit of labor, because we are trying to get output per unit of energy improvement.

If that's true, then the conventional measure of economic progress, gains in real income, at least during an interlude here, are not going to look so good. If that is true, then we may find growing pressures on the part of people who are in their midsixties, but still, in general, in good working condition to continue in the labor force.

And this starts then to help out in this transfer payment problem and related matters that you are talking about. I do think, myself, that sometimes the energy conservation problem is put in terms of well, you turn the thermostat down to 65.

I find myself just amazed that all kinds of effort is going on on the part of companies to restructure their production in ways so that they can reduce energy input per unit of output, or increase "energy productivity." But if that is the direction of their capital budgets and their ingenuity, then that activity is not going in some other direction. We have to face that.

Mr. ALBERTINE. Improving energy productivity and labor productivity are not necessarily mutually exclusive, though?

Mr. MCCRACKEN. They're not necessarily mutually exclusive, but we can't make the comfortable assumption that there is no trade-off.

If the energy terms of trade, to use Professor Rostow's term, had not changed, the character of the capital budgets of the typical company would be different from what it now is. I think it would be.

Mr. ROSTOW. No question.

Mr. MCCRACKEN. I am sure that through the years, the conventional improvement in output per unit of labor would be lower. Now, they're not 180° apart, but they're not absolutely congruent either.

Mr. JUSTER. That also suggests that energy-related kinds of things—one way to think about their impact on productivity is that there is a transition involved. The way I would think about it is, in the household sector, Americans have about 110 million vehicles designed to run on 30-cent gasoline. They've turned about 20 million of those into somewhat more efficient ones. And in 10 years they will have turned the whole stock over.

Well, you have got hundreds of billions of capital equipment designed to run on cheap energy. No one is investing now in equipment designs run on cheap energy. And that transition of the whole capital stock of this society to a much higher energy price, just a higher price load, that transition is going to take some time because you don't turn over a whole capital stock in a year. You turn it over in a decade, or a few decades.

But once that transition is out of the way, then whatever the costs in labor productivity gain or incurred by a diversion toward energy, that will be by the board. And it's a one-time loss. And there is nothing you can do about it. It's an investment required to make up for that change in natural resource availability.

Once that's out of the way the future doesn't look quite as grim as the recent past would appear. That's one way to look at the more comforting side of the energy problem.

Mr. ROSTOW. I might just supplement that remark with a note from economic history. People have often said you are proposing investment in things which wouldn't ultimately increase real income. I'd say, well, yes, that has happened before, in the middle of the 19th century, in Europe, after the Irish potato famine, there were severe troubles in Germany and Scandinavia, centered around shortages of food. The wheat price went up; and capital poured out of the American Northeast and out from London to build the railroads; first out to Minneapolis and then out to the coast. That was a diversion of real resources

while it was going on. We didn't get any more food immediately; but the world had to do it in order to balance its books. And that's the sort of thing we have to do now with respect to energy, both on the conservation and the production side.

I say this because we have got a little spoiled in the world of the 1950's and 1960's when the relative prices were shifting our way. Now economists and others say, isn't it awful that we have to invest now to make sure we have these supplies. That's always been the case. This is the fifth time it has happened.

And the result has generally been some restraint on the rate of increase of real wages during the period basic supplies were being expanded. But they have not been periods of mass unemployment or great economic disaster. They have been periods when real income moved forward at a lesser rate for urban societies than when energy, food, and raw materials were cheap.

Mr. BRADFORD. I just have one question on that. How much of this energy investment is just simply the switching type of investment, where you move from oil to gas or from oil to coal? Where's the net new capital coming from for much of this?

Mr. ROSTOW. That's a good question. I think I made available to the committee a paper I gave before the American Association for the Advancement of Science. It shows by two or three different measures where that investment would go. You have first a big bloc of investment in the accelerated drilling for oil and gas. The net effect of such drilling would slow down the rate of decline of production. You would add reserves, but almost certainly not a rate to give you a constant rate of output. But you have to do it—slow down the rate of decline of conventional oil and gas output, because if you don't do that, the failure will translate itself into increased requirements for oil imports.

On the nuclear side, for politicians, at the moment, nuclear is a subject to be avoided. But being a professor, I have no problems with it. The balance sheets that have been gotten up by anyone I know require the United States to be producing by 1990 something like the equivalent of 4–5 million barrels of oil per day equivalent from nuclear as opposed to the 1.4 at the present time. We now have some 73 plants. That means we have something like 230 plants on line——

Mr. MCCRACKEN. By 1990.

Mr. ROSTOW. By 1990. But we'd better begin them soon, because the leadtimes are that long. But if you don't build nuclear plants, you'd better build more synthetic plants. As for coal, on any reasonable balance sheet, you ought to get from where we are—about the equivalent of 7 million barrels of oil per day—up to somewhere between 11 and 13. We must invest to expand coal, so we can back out fuel oil and some natural gas, that is a switch. But it's a switch that cuts your imports.

The balancing item, even with an extremely good conservation performance, has to be synthetic oil and gas from coal and shale. And that turns out to be, in my judgment, a much bigger figure than Mr. Carter's. That's what I shall lay out for Senator Proxmire at 2:30.

Mr. KRUMBHAAR. Dick Bartel has a question.

Mr. BARTEL. Professor Rostow, I was intrigued by the role you give to terms of trade, the central role that's linked to the country's economic growth and price performance. We've talked to many econo-

mists over the last year about the problem. I don't seem able to excite anyone's interest in research in the area, and you seem to have done some. I'd like to get at the underlying forces that seem to explain that trend. Have you in your past research tried to distinguish the extent to which the prices of exports, the prices of imports, or the price of oil, or depreciation, contributed to the trends you see taking place, or if it is possible to do that?

Mr. ROSTOW. Yes, sir. I have written a book entitled "The World Economy—History and the Prospect," which I don't recommend that you buy because it's very expensive. But I'm sure you can get it through the Library of Congress.

Mr. MCCRACKEN. He's absolutely right. I bought it. [Laughter.]

Mr. ROSTOW. Part III of that book traces, I think in more detail than its ever been traced before over the past 200 years, the role of these swings in terms of trade and the relative prices of basic commodities versus industrial prices. I try to interweave with that factor—and the causes that led to it—the rhythm of the great innovations, what one might call the Schumpeterian strand in that story. But part III of "The World Economy" will give you the best survey down to the present that I'm capable of organizing.

Mr. JUSTER. I was very impressed—if you could only buy it for a third of the price. [Laughter.]

Mr. ROSTOW. There are others incidentally who have worked on this problem. You will find that W. Arthur Lewis has taken apart the period from 1870 to 1914 and then extends it a bit down through the interwar years to the present. I guess down to 1972, in very much the same way—tracking the consequences for real wages in industrialized areas and also for the stimulus or lack of stimulus to development in the regions which supplied, historically, a good deal of the world's food.

Colin Clark worked on this earlier. There's quite a literature. But my contribution is summarized in "The World Economy."

Mr. BARTEL. Thank you.

Mr. KRUMBHAAR. Did you have a question? Professor Rostow, you have a luncheon appointment at 12:30. I just have one final question, and that is: It seems that we hear two types of themes—one theme is the "we must reduce government spending," and I cite Mr. McCracken's recent testimony before the Joint Economic Committee, that we should begin to move the demand management policy now, should begin to move the economy toward steadily smaller rates of expansion, until in nominal terms the money demand is rising 5 to 6 percent per year. That's one theme—balancing the budget and so on.

On the other hand, Professor Rostow and others recommend a massive investment program, and here Government must be assumed to play a leading role. You talk about the railroadization of the West—the Government played a leading role by giving away land which didn't involve direct outlays, but I assume that this investment impetus would involve direct outlays. I just wondered, are these two themes contradictory?

Mr. ROSTOW. Oh, no. We will have to do something. As we set up our national budget, we should separate out the authentic investment components, from transfer payments, et cetera. I think that's long

overdue. I think you've got to be hardheaded and not slip into the investment budget the non-productive or low-productivity items. But having come at this period from the adventure of pulling together the story of the last 200 years, one of the things that struck me about the nature of the debate among my colleagues and the political life of our country is how undifferentiated it is. Either you're for public expenditure expansion, or you're against it.

Well, in energy, for example, I'm all for getting some honest prices and getting the competitive system working to the maximum, but I'm also for certain kinds of public-private partnership. And, I'm all for constraining and being very tight on transfer payments, within the limits of humanity—encouraging people to get into the working force.

We are in a time when we have to be very conscious of the limits on our resources. But I'm also for a large Government role in certain directions. One of the distinctions we have to make is between an enlarged Government role in encouraging investment—through, let's say, something like the old RFC, a bank, or using investment guarantees, or being prepared to guarantee a minimum price for 10 years after the new processes are set in motion—and other aspects of Government outlays that ought to be constrained.

That kind of distinction I think is important.

Mr. KRUMBHAAR. Mr. McCracken.

Mr. MCCRACKEN. I wholly share what Professor Rostow has said, and there's no question that we have to work in this proposed direction, precisely because of the new demand on the economy, especially in the energy area. I think we do have to take a harder look at just the conventional forces which tend to give rise to increased Government spending.

Mr. Juster suggested that it is possible, of course, that in many of these areas such as education or health where the resources from Government may just essentially be replacing nonmarket resources, we can't rule out the possibility that society has been putting a lot more in the way of resources into our industry, and we haven't been doing a very good job of converting it into real output. I think it's quite possible.

So Government is going to have to face up to some of these things in spite of the fact that you're taking on formidable interest group pressures which can be particularly effective in the Government sector. The best fundamental solution is what I think you called an honest pricing system—in other words getting our pricing system out here so that we can take care of as much of this problem as possible without having to funnel it through Government.

Because if we take this route of going through Government, I think we are going to find hard going to keep up with the need.

Mr. KRUMBHAAR. Our second day of hearings will be on Friday, July 27, at which time we'll hear from Rudolph Penner, American Enterprise Institute: Don Summa, Arthur Young & Co.; and George Break, professor of economics, the University of California at Berkeley.

[Whereupon, at 12:20 p.m., the committee recessed, to reconvene at 10 a.m., Friday, July 27, 1979.]

ISSUES IN FEDERAL FINANCE

FRIDAY, JULY 27, 1979

THE IMPACT OF INFLATION ON THE FEDERAL TAX SYSTEM

CONGRESS OF THE UNITED STATES,
SPECIAL STUDY ON ECONOMIC CHANGE OF THE
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 10:10 a.m., in room S–207, the Capitol, Hon. Margaret M. Heckler (member of the committee) presiding.

Present: Representative Heckler.

Committee staff present: Charles H. Bradford, minority counsel; Stephen J. Entin and Mark R. Policinski, minority professional staff members; and Mark Borchelt, administrative assistant.

Special Study on Economic Change staff present: George D. Krumbhaar, Jr., counsel; Douglas N. Ross, senior economist; Richard D. Bartel, economist; and Michael J. Lockerby, research assistant.

OPENING STATEMENT OF REPRESENTATIVE HECKLER, PRESIDING

Representative HECKLER. The meeting of the Joint Economic Committee will come to order.

Today marks the second in a set of hearings on selected issues in Federal finance. At our first day of hearings on July 25, we examined the dramatic changes which have taken place in the economy since the 1950's and assessed the ways in which Federal Government spending has brought about these changes.

In general, we found that the Government has had a substantial influence in tilting the economy in certain ways toward more spending in health and education, for example.

In addition, there has been a marked increase in the amount of money the Government spends that eventually ends up going toward basic necessities. The increase in the amounts paid out through such programs as social security and unemployment compensation is responsible for this.

At the same time the country as a whole is spending less for food, clothing, and other basic necessities as a proportion of its total income than before. We are spending less on defense. To compensate, we are spending more on leisure activities and in pursuit of national goals such as workers' safety and clean air and water.

According to one of our witnesses, the major factor enabling us to use our resources in this way was a relatively stable inflation rate

including a marked relative decline in the price of energy during the fifties and sixties.

The same witness concluded that we have now entered a sustained period of relatively expensive basic commodities. This is a more sophisticated way of saying we are now being socked by excessive and protracted inflation.

The purpose of today's hearing is to take this major change in our economy and see how it has affected the tax system.

As a matter of policy, we would like to see the tax system as neutral as possible except where we expect tax incentives to promote certain types of behavior.

However, we have not looked enough at what inflation does to the tax system. If we had been free to legislate tax changes rather than let inflation do it for us, would we have the same system as we do now?

We know, for example, that inflation pushes persons into higher tax brackets. It must be disconcerting to someone who thinks he or she is too poor to be paying marginal tax rates of 30 or 40 percent or more.

We also hear that the tax system affects the business treatment of capital spending. We hope to get at some of these issues in today's hearing.

Our panel today consists of three eminent authorities on tax policy: Don Summa is a partner in the accounting firm of Arthur Young & Co. and has served for many years as an adviser on tax practice and policy. The committee sought out a leading tax accountant for this hearing because we want to explore in some detail the real tax costs to firms and individuals of rising prices.

Rudolph Penner is a resident scholar of the American Enterprise Institute. He has served as a senior staff economist at the Council of Economic Advisers, as Deputy Assistant Secretary for Economic Affairs at HUD, and as assistant to the Director for Economic Policy at the Office of Management and Budget. He has published widely on the subject of tax policy and tax reform.

George Break is a professor of economics at the University of California at Berkeley. He, too, has written widely on the subject of tax policy. His book on Federal tax reform, coauthored with Joseph Pechman, is a leading work in its field.

I am very delighted to welcome this panel of experts. Since the agenda of both Houses is as crowded as it is, I am not certain of how many members will be present at this hearing. Nonetheless, the documents which will be published at the conclusion of the hearings will be valuable for the whole Congress; and so our colloquy today and your testimony will have enormous significance in terms of the consideration of the issues which you will discuss which are in the forefront of all of our minds.

As a means of proceeding, I would like to ask Mr. Summa to testify first.

STATEMENT OF DON J. SUMMA, CERTIFIED PUBLIC ACCOUNTANT AND PARTNER, ARTHUR YOUNG & CO., NEWARK, N.J.

Mr. SUMMA. Thank you. Good morning. Let me take a few moments to give you some of the highlights of my prepared statement which I

tried to prepare in fairly brief form, and then I will obviously be happy to answer questions and participate in the discussion with my fellow panelists on a variety of other subjects.

I am Don J. Summa, a certified public accountant and a partner in the international accounting firm of Arthur Young & Co. For many years, I served as national director of tax practice for my firm. I am pleased to have been invited to give the following comments and recommendations regarding the subject of your hearing today.

I believe the question of the impact of inflation on the tax system is very broad. Unfortunately, time limits the range of subjects to be discussed today. Consequently, I have limited my remarks to the effects of inflation on the ability of business to maintain and increase its productive capacity. My basic recommendation will be for an improvement in the depreciation allowance for all businesses, based on a constant dollar adjustment and conformed to the financial accounting records of the enterprise.

I believe we must, as a nation, increase capital investment. Many studies demonstrate that capital investment in the United States is far behind that of other countries competing with us in world markets. Enormous amounts of investment are needed if we are to keep the industrial system operating efficiently. Studies by the Tax Foundation and the Conference Board have indicated that the amount of capital needed to support a production worker in the average manufacturing job exceeds $40,000. This will undoubtedly increase as industry converts to use of new sources of energy, and that additional investment will not add materially to productivity but simply will be the cost of converting to new energy sources.

I expect that the changes made last year, in reducing taxes on capital gains, will stimulate investors to invest capital in business. What is also needed is an awareness by the Government that business must not be hindered in its ability to reinvest the capital which it has accumulated.

The way business income is taxed influences the productive capability of the economy. Business will not invest in production facilities unless it believes it can recoup the cost of, and realize a fair return on, the investment. Investment decisions are made on the basis of capital budgeting which measures the differences between expected revenues and cost with allowances made for the difference in timing.

While I share the belief that accelerated depreciation has a larger impact on capital investment than corporate income tax rate reductions, the linkage between lower tax and the investment in new plant and equipment is a loose one. Our goal is to increase capital investment rather than consumption; tax relief should be linked directly in my view to capital expenditures.

While many factors affect capital expenditure plans, availability of funds is one of the most significant. Cash flow also has a beneficial impact on the amount of outside capital which a business may obtain.

Inflation undermines economic activity because it diverts business capital otherwise available for investment into the U.S. Treasury on an unplanned basis. Furthermore, inflation dissipates the tax incentive of accelerated depreciation which was enacted into law to provide stimulus to the economy.

The historical cost method of depreciation causes a major overstatement of taxable income in a period of inflation such as that in which we now find ourselves. Our present cost recovery system is based on an annual deduction of a percentage of the cost of property over its useful life. The basic problem with depreciation is that by the time business recovers its historical dollars, inflation has eroded its real value and the company has actually lost a portion of its invested capital. This historical cost approach during periods of high inflation understates period charges for writing off capital expenditures. Revenues are expressed in the inflated dollars of the current period but the depreciation charged in the current period is expressed in dollars of a prior period.

In the next paragraph I try to give an example of that without putting it into tabular form. I would like to point out in addition to the basic factor of using depreciation as a cost recovery method, another justification for the historical method of recovery is that business should recover the money it invests over the useful life of an asset so that the asset may be replaced. Under present law, the average waiting period for the full recovery of such capital investments is about 10½ years. The overall ratio of inflation for the decade ending December 1977 was 79 percent. If you compress that 10-year period, that's the equivalent of saying if you invested $100, you only got a $20 deduction. It would be a bit more than that because inflation takes place during the entire period, but the deduction would be less than the equivalent of the $100 originally invested.

It should also be noted that some have argued that monetary items counterbalance the adverse effects of inflation to some extent in this situation since nonfinancial enterprises as net debtors profit by repaying debt with "cheaper" dollars in inflationary times. That is a separate subject but one that I think needs to be addressed. The booklet I submitted addresses that subject. I will not go into that in detail in my statement.

I do believe that the overstatement of business profits because of inflation has serious implications for business and investment decisions, taxation, price and wage controls, and economic forecasting.

In the interests of saving time, I will pass over the next paragraph and point out the same kind of concern was expressed at the time I served on the Task Force of Business Taxation, a report of which I have here. Unfortunately, I do not have additional copies to provide for the use of the committee.

I would like to make a few other comments. Attempting to correct the tax system for the effects of inflation by use of accelerated depreciation is inadequate because of the anticipated versus the actual inflation levels experienced. Consideration should be given to the development of an indexing mechanism to provide automatic and measured relief from inflation. For the future, I foresee a comprehensive system incorporating constant dollar depreciation to be the answer for our long-term capital needs.

The attached material, particularly the blue book, describes that. If you wish, we could go into that in more detail later.

In the meantime, however, I think an acceptable alternative solution for the near term would be a capital cost recovery system similar to

that contained in House bill H.R. 4646 and Senate bill S. 1435. Enactment of this property cost recovery legislation should go a long way to improve the climate for capital formation.

I would like to add I don't favor capital cost recovery as an approach rather than depreciation, because I believe that if we have an income tax system, we should be working to maintain the integrity of the income tax system based on income; and to do that, I think you have to maintain the integrity of the definition of "income."

I believe you can do that using historical costs adjusted for a constant dollar adjustment. I think if you go to capital cost allowances, it's another erosion of that income base.

This year—and the material I provided deals with that—the accounting profession has moved significantly in dealing with the distortion of historical cost financial information brought on by changes in the purchasing power of the dollar. I hope that the constant dollar approach will soon become the accepted standard.

Since our purpose is to improve the equity of the tax system, it is also time to restudy the proposals made in the task force report regarding conforming the tax base with financial accounting, since this would also affect the depreciation deduction.

In summary, I recommend that taxation be based on financial statements which reflect constant dollar adjustments. Taxable income and financial accounting income are based upon the same information about transactions of a business. Accordingly, both taxpayers and taxing authorities benefit to the extent that taxable income and financial income conform because conformity reduces the effort and cost of tax law compliance and administration and both financial and tax accounting would reflect results more realistically.

Thank you for the opportunity to present this statement. I would be prepared in addition to questions on the capital cost question, to which I patterned my prepared statement, to express my views on other matters such as indexing, which I think will come up in the course of our deliberations.

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

PREPARED STATEMENT OF DON J. SUMMA

A New Look at the Depreciation Allowance

I am Don J. Summa, a certified public accountant and a partner in the international accounting firm of Arthur Young & Co. For many years, I served as national director of tax practice for my firm. I am pleased to have been invited to give the following comments and recommendations regarding the subject of your hearings today.

The question of the impact of inflation on the tax system is very broad. Unfortunately, time limits the range of subjects to be discussed today. Consequently, I have limited my remarks to the effects of inflation on the ability of business to maintain and increase its productive capacity. My basic recommendation will be for an improvement in the depreciation allowance for all businesses, based on a constant dollar adjustment and conformed to the financial accounting records of the enterprise.

We must, as a Nation, increase capital investment. Many studies demonstrate that capital investment in the United States is far behind that of other countries competing with us in world markets. Enormous amounts of investments are needed if we are to keep the industrial system operating efficiently. Studies by the Tax Foundation and the Conference Board have indicated that the amount of

capital needed to support a production worker in the average manufacturing job exceeds $40,000. This will undoubtedly increase as industry converts to use of new sources of energy.

I expect that the changes made last year, in reducing taxes on capital gains, will stimulate investors to invest capital in business. What is also needed is an awareness by the government that business must not be hindered in its ability to reinvest the capital which it has accumulated.

The way business income is taxed influences the productive capability of the economy. Business will not invest in production facilities unless it believes it can recoup the cost of, and realize a fair return on, the investment. Investment decisions are made on the basis of capital budgeting which measures the differences between expected revenues and cost with allowances made for the difference in timing.

I share the belief that accelerated depreciation has a larger impact on capital investment than corporate income tax rate reductions. Although lower tax rates would improve after-tax profits, the linkage between this increased cash flow and spending on new plant and equipment is a loose one. With a goal to increase capital investment rather than consumption, tax reduction should be linked directly to capital expenditures.

While many factors affect capital expenditure plans, availability of funds is one of the most significant. Cash flow also has a beneficial impact on the amount of outside capital which a business may obtain.

Inflation undermines economic activity because it diverts business capital otherwise available for investment into the U.S. Treasury. Furthermore, inflation dissipates the tax incentive of accelerated depreciation which was enacted into law to provide stimulus to the economy.

The historical cost method of depreciation causes a major overstatement of taxable income. Our present cost recovery system is based on an annual deduction of a percentage of the cost of property over its useful life. The basic problem with depreciation is that by the time business recovers its historical dollars, inflation has eroded its real value and the company has actually lost a portion of its invested capital. This historical cost approach during periods of high inflation understates period charges for writing off capital expenditures. Revenues are expressed in the inflated dollars of the current period but the depreciation charged in the current period is expressed in dollars of a prior period.

One theoretical support for the tax depreciation deduction is that business should recover the money it invests over the useful life of an asset so that the asset may be replaced. Under present law, the average awaiting period for the full recovery of such capital investments is about 10½ years. The overall rate of inflation for the decade ending December 1977 was 79 percent. Accordingly, if business is required to wait 10 years to recover all the money it has invested in equipment, the dollar received in the 10th year will be worth about 20 percent of what was invested. It should be noted that some have argued that monetary items counter-balance the adverse effects of inflation to some extent in this situation since nonfinancial enterprises as net debtors profit by repaying debt with "cheaper" dollars in inflationary times.

The overstatement of business profits because of inflation has serious implications for business and investment decisions, taxation, price and wage controls and economic forecasting.

The concern about a fair system of cost recovery allowances has been with us for many years. In 1969, President Nixon established a Task Force on Business Taxation, on which I was privileged to serve, which made recommendations for long-range goals of business tax policy concentrating on economic growth, full employment and a strong progressive economy. A substantial portion of its deliberations was devoted to the effect of the tax system on modernization and growth of the Nation's production facility. In recommending a capital cost recovery system, the task force believed that such a system would moderate the effects of inflation on the real value of cost recovery allowances and on the capacity of business to finance additions to production facilities.

Attempting to correct the tax system for the effects of inflation by use of accelerated depreciation is inadequate because of the anticipated versus the actual inflation levels experienced. Consideration should be given to the development of an indexing mechanism to provide automatic and measured relief from inflation. For the future, I foresee a comprehensive system incorporating constant dollar depreciation to be the answer for our long-term capital needs. (See attached material regarding constant dollar accounting published by my firm.)

In the meantime, however, an acceptable alternative solution for the near term would be a capital cost recovery system similar to that contained in House bill H.R. 4646 and Senate bill S. 1435. Enactment of this property cost recovery legislation should go a long way to improve the climate for capital formation.

This year, the accounting profession has moved significantly in dealing with the distortion of historical cost financial information brought on by changes in the purchasing power of the dollar. I hope that the constant dollar approach will soon become the accepted standard.

Since our purpose is to improve the equity of the tax system, it is also time to restudy the proposals made in the task force report regarding conforming the tax base with financial accounting, since this would also affect the depreciation deduction.

I recommend that taxation be based on financial statements which reflect constant dollar adjustments. Taxable income and financial accounting income are based upon the same information about transactions of a business. Accordingly, both taxpayers and taxing authorities benefit to the extent that taxable income and financial income conform because conformity reduces the effort and cost of tax law compliance and administration and both financial and tax accounting would reflect results more realistically.

At present, inflation is at a totally unacceptable rate. Although my remarks have centered on policy matters that would mediate the devastating effects of inflation, I would hope that the Congress would concentrate its greatest efforts not on how to live with inflation but on how to eliminate it.

Attachments: An Analysis of The FASB's Proposed Statement, Arthur Young Client Memorandum of June 25, 1979, and Arthur Young Client Memorandum of July 9, 1979.

FINANCIAL REPORTING AND CHANGING PRICES

AN ANALYSIS OF THE FASB'S PROPOSED STATEMENT

ARTHUR YOUNG

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Introduction

The Financial Accounting Standards Board recently exposed for comment a proposed Statement of Financial Accounting Standards entitled "Financial Reporting and Changing Prices." If it is issued as an FASB Statement in anything close to the form exposed—the vote to expose it was unanimous—it would require companies to report information that differs significantly from information required by either present generally accepted accounting principles or the SEC's replacement cost rule, Accounting Series Release No. 190 (ASR 190). The effort companies would have to expend to comply will vary depending in part on their previous experience with general purchasing power accounting and ASR 190. For some companies, this effort could be substantial.

At this time, it is too early to predict whether adoption of the proposed Statement or one similar to it would cause the SEC to withdraw its replacement cost rule. However, the SEC has publicly expressed its desire to avoid two sets of reporting requirements and to withdraw its replacement cost rule in favor of a suitable FASB pronouncement.

This booklet is intended for executives responsible for accounting policies and for other interested members of management. It analyzes the principal provisions of the proposed FASB Statement, suggests actions which clients that would be subject to its requirements might take to prepare for its issuance in final form, and describes ways Arthur Young & Company can help.

Briefly, the FASB proposal would:

- Apply to certain large, publicly held companies, including financial institutions, and to any other company voluntarily presenting information of the kind required.
- Require supplementary disclosure in annual reports (but not necessarily in the financial statements) of certain financial information, including income from continuing operations, restated on one of two bases:

  —Historical cost in units of general purchasing power (referred to in the proposed Statement as the "historical cost/constant dollar" basis),

  or

  —Current value (referred to in the proposed Statement as the "current cost" basis).

  The extent to which a company has a choice between these two bases is uncertain (see the discussion on page 12).
- Be effective for fiscal years ending on or after December 25, 1979.

Since most of the companies that would be subject to the proposed Statement are already subject to the SEC's replacement cost rule, it is useful to compare the requirements of the proposed Statement with those of the SEC. This comparison is presented in the table on the next page and in the discussion that follows.

COMPARISON OF THE SEC'S ASR 190 AND THE FASB'S PROPOSED STATEMENT

		SEC's ASR 190	FASB's Proposed Statement
COMPANIES SUBJECT TO REQUIREMENTS		Public companies with inventories and property, plant, and equipment exceeding $100 million AND exceeding 10% of total assets	Public companies with inventories and property, plant, and equipment exceeding $125 million OR with total assets exceeding $1 billion
			Public or nonpublic companies voluntarily presenting information of the type required
MEASUREMENT APPROACH		Current cost of certain assets that might replace those owned	Current value (focus on current cost) or historical cost (in constant dollars) of certain assets owned
OBJECTIVE		To reflect the effects of changes in specific prices	To reflect the effects of changes in specific prices or in the general price level
INFORMATION REQUIRED	Income	Cost of sales and depreciation expense (restatement of income discouraged)	Information on income from continuing operations, including cost of sales and depreciation expense
			Inflation gain or loss on net monetary items
			Foreign exchange gain or loss, net of income tax effect
			Holding gain or loss on inventories and property, plant, and equipment, net of inflation and income tax effect of realized gains and losses (arises only under current value approach)
	Assets	Inventories and property, plant, and equipment (gross and net) with various exclusions, including land and assets not expected to be replaced	Inventories and net property, plant, and equipment with no exclusions (presented only under current value approach)
	Other	Explanatory information	Explanatory information
			Consumer Price Index at year-end
PERIODS FOR WHICH REQUIRED		Latest two fiscal years	Latest fiscal year, plus five-year summary of certain financial data
WHERE TO PRESENT INFORMATION		Footnotes to annual financial statements filed with the SEC or in a separate section of these annual statements	In annual reports to stockholders but not necessarily in financial statements or notes
AUDITOR'S RESPONSIBILITY		Information is unaudited, but the auditor is required to perform certain limited procedures and to expand the audit report under certain circumstances	Not yet determined

Companies Subject to the Requirements

Only publicly held companies that meet the size tests and that prepare their financial statements in U.S. dollars would be required to present the information called for by the FASB's proposed Statement. However, the proposed Statement stipulates that "All presentations of historical cost/constant dollar information and of current cost information shall be consistent with the requirements of this [proposed] Statement." Read literally, that stipulation means that any company voluntarily disclosing, anywhere in its annual report, any historical cost/constant dollar or current cost information would have to comply with all provisions of the proposed Statement.

The most significant difference between the size tests called for in the proposed Statement and those called for in ASR 190 is that the former includes a gross asset test while the latter includes a test based on the percentage that operating assets bears to total assets. Consequently, many financial institutions that are not subject to the requirements of ASR 190 would be subject to the requirements of the FASB's proposed Statement.

Measurements for purposes of the proposed size tests would be based on the amounts reported in a company's basic financial statements (consolidated, if applicable) at the beginning of the fiscal year. In this respect, the proposed Statement agrees with ASR 190.

The Two Measurement Approaches

The proposed Statement provides a choice between current value accounting and constant dollar accounting in order to encourage experimentation. The FASB expressed the hope that experimentation will help to develop techniques for accumulating, reporting, and analyzing data on the effects of changing prices. In the preface to the proposed Statement, the Board states:

> "The measurement and reporting of information on changing prices will require a substantial learning process on the part of all concerned. The Board makes no pretense of having solved all of the implementation problems. Rather, it encourages experimentation within the guidelines of this [proposed] Statement and the development of techniques that fit the particular circumstances of the enterprise and of the user. The proposed Statement has been written to provide more flexibility than is customary in Board Statements, in the belief that those involved will help to develop techniques that further the understanding of the effects of price changes on the enterprise."

The FASB has already taken steps to foster that experimentation by organizing task forces to work with the FASB staff to develop techniques for applying current value accounting and constant dollar accounting to certain important types of assets and to several industries in which implementation is expected to present particular problems. Approaches to compliance with the proposed Statement are likely to develop voluntarily in other industries, as was the case with ASR 190.

The current value approach, the historical cost/constant dollar approach, and the choice between them are discussed below.

THE CURRENT VALUE APPROACH

Like ASR 190, the FASB's proposed current value measurements would be limited to a company's major operating assets—inventories and property, plant, and equipment—and the related charges to income. However, unlike ASR 190, application of the FASB's current value alternative would:

- Restate income from continuing operations for the effects of changing prices on cost of sales and depreciation expense. ASR 190 calls for information that is not designed for alternative computations of income and, for that reason, it strongly discourages income restatement.
- Measure inventory and fixed assets at the *lower* of either "current cost" or of "net realizable value" or "value in use." The SEC's rule calls for only one measure—replacement cost—with separate disclosure of net realizable value for inventories (not fixed assets) when lower than replacement cost.

- Emphasize measurement of the assets that are currently owned. The SEC's replacement cost measurements focus on the assets that might replace those owned.
- Require all operating assets to be restated on a current value basis. ASR 190 excludes several kinds of operating assets from its restatement requirement.
- Permit depreciation methods and estimates of useful lives and salvage values that differ from those used in the basic financial statements. ASR 190 requires all depreciation calculations to be based on the straight-line method, generally using the same assumptions as to lives and salvage values used in the basic financial statements.

The restatement of income required by the proposed Statement, the first of the five differences listed above, is described on pages 13 and 14 of this booklet. The other four major differences between the FASB's proposed current value approach and the SEC's replacement cost approach are discussed below.

Three Measures of Value

The FASB believes that current cost is normally the most appropriate measure of the current value of an asset to a company, primarily because current cost represents the cash outlay the company avoids by owning the asset. The proposed Statement indicates, however, that the value of an asset to a company would be less than its current cost if the asset's net cash flow potential is less than its current cost. In that case, the FASB concludes that a better measure of value to the company would be net realizable value or value in use. Reporting net realizable value or value in use in excess of current cost would not be permitted because, in the Board's view, a company could obtain the same cash flow potential by purchasing an identical asset for a lower price. Accordingly, the proposed Statement would require a company choosing the current value alternative to measure its inventories and plant assets at current cost or, if lower, net realizable value or value in use. It is important to understand what the FASB means by each of these three measures of value.

Current cost is the price that a company would pay to buy, or the cost that it would incur to manufacture, an asset identical in kind, age, and condition to the one that is owned. For example, the current cost of raw materials inventory would be the current purchase price; the current cost of work-in-process and finished goods inventory would be the current price of the inputs required to produce the goods on hand, including an allowance for current cost depreciation and other current overhead costs. Similarly, the current cost of fixed assets would be either (1) the current price that would be paid to purchase identical assets of the same age and in the same condition as the assets owned or (2) the current price to obtain new assets identical to the assets owned, less an allowance for depreciation. Unlike the SEC's replacement cost of fixed assets, which requires estimates of both new and depreciated replacement cost, the FASB's current cost would be based solely on depreciated cost. The proposed Statement would not require disclosure of the current cost of fixed assets as if they were new.

Net realizable value is the amount of cash or its equivalent expected to be derived from selling an asset, net of costs expected to be incurred prior to sale. It would be considered as a basis of measurement only for assets about to be sold. It would not be used to value assets not expected to be sold immediately, such as aging wine, inventories related to long-term construction or engineering contracts, and fixed assets currently in service.

Value in use is the present value of future net cash flows expected to be derived from using an asset, including proceeds from ultimate disposal. Unlike net realizable value, it recognizes the time value of money; that is, cash flows would be discounted to present value. Value in use would be considered as a valuation method only for those inventories and fixed assets not intended for immediate sale or other disposal. As the proposed

Statement acknowledges, calculating the present value of expected future net cash flows from fixed assets would be one of the more difficult tasks required. In addition to the difficulties inherent in forecasting, cash inflows (revenues) and outflows (operating costs) are usually a joint result from the use of groups of assets: amounts attributable to individual assets seldom can be identified. For this reason, it would usually not be feasible to calculate value in use for each asset. Companies would more likely focus on groups of assets (cost centers, whole plants, etc.) that are unprofitable or marginally profitable on a historical cost basis and calculate a combined value in use for each group.

By way of contrast, ASR 190 requires disclosure of the replacement cost of inventories and fixed assets and the related charges to income regardless of how replacement cost may compare to net realizable value or value in use. However, it requires separate disclosure of the net realizable value of inventories (but not of fixed assets) when lower than replacement cost.

Focus on Assets Owned

Current cost is the current purchase price or current manufacturing cost of assets owned, whereas replacement cost is the current purchase price or current manufacturing cost of assets with which a company might replace those owned. To calculate replacement cost, management must first hypothesize how the company's assets might be replaced if replacement were to occur currently. Such speculation would not be necessary to determine current cost.

This fundamental difference is not as significant for inventories, where replacement in like kind is usually assumed, as it is for fixed assets, where there are often many opportunities to replace older assets with newer, more modern ones not at all like those currently owned. Even for fixed assets, however, replacement cost and current cost measurements will not necessarily differ. The extent to which a company would have to modify the way it calculates replacement cost for purposes of complying with the FASB proposal would depend in large part on asset replacement assumptions. If a company is basing its replacement cost calculations on the assumption that existing assets will be replaced with identical assets, the replacement cost calculation under ASR 190 would largely suffice for purposes of computing current cost under the FASB proposal. However, if it is assumed that existing assets will be replaced by different assets, replacement cost calculations are based on the current price to buy technologically superior assets, while current cost calculations would need to be based on prices of assets of like kind.

Estimates of current cost could be made using many of the same techniques currently used to estimate replacement cost. A company could, for example, estimate current cost using (a) latest invoice prices or supplier quotes to obtain current prices of individual assets (direct pricing), or (b) latest construction cost per unit, such as cost per square foot of building space (unit pricing), or (c) price indexes applied to the acquisition costs of groups of similar assets to obtain the current aggregate price of each group (indexation). The proposed Statement expresses a preference for direct pricing and unit pricing over indexation. As with estimates of replacement cost under ASR 190, a reasonable approach might be to use the preferred methods to estimate individually the current cost of the more valuable assets and to use indexation to estimate the cost of all others.

If an asset identical to one owned can no longer be purchased, current cost would be estimated by using the current price to purchase a substitute asset—one that performs the same function—and deducting allowances for differences in output capacity, useful life, and operating costs. To illustrate in the simplest terms, assume a company cannot purchase a machine identical to obsolete Machine A, but it could purchase technologically superior Machine B to perform the same function. The current cost of

Machine A would be estimated beginning with the current price of Machine B. If Machine B (a) has a useful life that is one-third longer, (b) produces 50 percent more output, and (c) costs less to operate than Machine A, the current cost of Machine A might be estimated as the price of Machine B reduced (a) by one-fourth to account for the difference in useful life, (b) by another one-third to reflect the lower output of Machine A, and (c) by the present value of the net operating cost differential (assuming linear relationships between the purchase price, on the one hand, and useful life, output, and operating costs, on the other).

This method is similar to approaches used by appraisers to estimate the effects of obsolescence on assets and is also similar, but to a lesser degree, to calculations required by ASR 190 when it is assumed that obsolete assets would be replaced by more modern ones. Under ASR 190, however, replacement cost estimates are based only on differences in the output capacity of the two machines; no allowances are made for differences in useful life or operating costs.

The table presented below compares the calculation of replacement cost and current cost under various assumptions as to asset replacement.

Assumption as to Replacement	Price to Be Used to Calculate	
	Replacement Cost	Current Cost
Replacement with identical asset	Price of asset identical to that owned	Price of asset identical to that owned
Replacement with technologically superior asset—asset identical to asset owned **could** be obtained	Price of technologically superior asset, less an allowance for difference in output capacity	Price of asset identical to that owned
Replacement with technologically superior asset—asset identical to asset owned **could not** be obtained	Price of technologically superior asset, less an allowance for difference in output capacity	Price of technologically superior asset, less an allowance for differences in (a) output capacity, (b) useful life, and (c) operating cost

Operating Assets Included

Under ASR 190, the following assets are excluded from replacement cost calculations: land, assets that are not to be replaced, unique assets (motion picture films), intangible assets (rights-of-way), construction in progress, certain mineral resources, and inventories under long-term construction or engineering contracts. Under the proposed Statement, no fixed assets or inventories would be excluded.

Flexibility as to Depreciation Assumptions

As with ASR 190, the proposed Statement would require depreciation to be calculated using the average restated cost of the asset during the year. In order to calculate depreciation expense in the first year, therefore, companies would be required to calculate the current cost of plant assets twice, as of the beginning and as of the end of the year.

The proposed Statement would take a more flexible view of the depreciation method, economic life, and salvage value used in calculating depreciation than does ASR 190. If a company considered inflation when choosing depreciation methods and estimating useful lives and salvage values for financial statement reporting purposes, the proposed

Statement would permit different methods and estimates in calculating current cost depreciation. Such flexibility would be allowed to avoid double-counting the effects of inflation by those companies that have selected accelerated depreciation methods or that have made, within limits permitted by generally accepted accounting principles, cautiously lower estimates of useful lives to compensate for inflation. However, to the extent that rapid depreciation methods and short lives were chosen to reflect usage or maintenance patterns or technological obsolescence, different methods and lives would not be permitted for purposes of calculating current cost depreciation.

In contrast, ASR 190 requires all calculations to be based on the straight-line method, generally by using the same assumptions as to life and salvage value used in the basic financial statements.

THE HISTORICAL COST/CONSTANT DOLLAR APPROACH

The historical cost/constant dollar approach is easier to comprehend and simpler to apply. Its underlying theory and the techniques for applying it were developed many years ago and are well documented in the accounting literature. The FASB spelled them out in its December 31, 1974 Exposure Draft, "Financial Reporting in Units of General Purchasing Power." Although that Exposure Draft envisioned comprehensive restatement of financial statements instead of the piecemeal approach of the FASB's current proposal, the techniques set forth in the 1974 publication would apply with only a few changes (described below) to the current proposal. In the paragraphs that follow, we discuss the historical cost/constant dollar approach and compare it with the current value approach in order to provide a basis for choosing between them.

Comparison with Current Value Approach

The differences between the two approaches stem from the difference between their objectives. The objective of the current value approach is to present some measure of the effects of changes in the prices of the specific goods and services used or held by a particular company. To do that, it must abandon historical cost measurement and replace it with another measurement, one derived from current prices. The objective of the historical cost/constant dollar approach is limited to removing the effects of inflation, represented by changes in the general price level, from historical cost financial statements. Thus, it would retain historical cost measurement but restate it in dollars having constant purchasing power. This restatement is analogous to translating financial statements from a foreign currency into U.S. dollars.

Because the current value approach seeks to measure value changes, it would require a new measurement each time financial statements are prepared. Some data accumulated in prior years would usually be useful for making the current year's measurement, so the current value approach would not require a company to make a fresh start each time. Nevertheless, the frequent "trips to the market" entailed by the current value approach is one of the major practical objections to it.

The historical cost/constant dollar approach, on the other hand, would usually require a significant effort the first time it is used, but thereafter could be updated relatively easily. Certain assets and liabilities to be restated would initially be analyzed to identify the years in which they were acquired, which would often be time-consuming. However, once that initial effort is complete, subsequent restatement would be a routine task.

It is important to recognize that the two approaches are not mutually exclusive. The FASB proposal encourages, but would not require, companies to make both kinds of adjustments.

Distinguishing Monetary and Nonmonetary Items

In order to restate historical cost amounts in constant dollars, it is first necessary to classify balance sheet items as either monetary or nonmonetary. Monetary items are those whose dollar amounts are fixed, regardless of changes in the general price level. Monetary assets are cash and rights to receive fixed sums of cash; monetary liabilities are obligations to pay fixed sums of cash. Other assets and liabilities do not represent rights to receive or obligations to pay fixed sums of cash and are classified as nonmonetary.

Restating Inventories and Fixed Assets

Once balance sheet items have been appropriately classified, the restatement of inventories and property, plant, and equipment (nonmonetary assets) in constant dollars requires analysis to determine their ages or the ages of their components. The aging furnishes the basis for restating the amounts originally paid for the assets to dollars of common purchasing power.

The general purchasing power of the dollar varies inversely with the general price level—a composite measure of the prices of individual goods and services. Index numbers are used to express changes in the general price level. The price level index specified by the FASB proposal is the Consumer Price Index for All Urban Consumers. It is used to restate inventories and fixed assets for the changes in the general price level that have occurred from the dates the assets were acquired to the current balance sheet date.

Computing the Inflation Gain or Loss on Net Monetary Items

By their nature, monetary items do not require restatement at the current balance sheet date; they are already stated in dollars of current purchasing power. However, holding net monetary assets or liabilities during a period of changing prices gives rise to a gain or loss in their purchasing power. Holders of monetary assets suffer a loss of general purchasing power during a period of inflation because monetary assets buy fewer goods and services as the general level of prices rises. Conversely, those with monetary liabilities experience a gain in general purchasing power because the liabilities will be paid with dollars that have less purchasing power than when the liabilities were incurred. The gain or loss is measured by multiplying the average net monetary position during a period by the change in the general price level during that period.

The proposed Statement would not restrict disclosure of the inflation gain or loss on net monetary items to just those companies choosing to present historical cost/constant dollar information; companies that present current value information would also disclose it.

Comparison with the FASB's 1974 Exposure Draft

One hundred and one companies, most of which would be subject to the supplementary reporting requirements of the FASB's latest proposal, participated in a field test of its 1974 Exposure Draft procedures for restating financial statements in constant dollars. These companies, and others familiar with the Board's 1974 document, should note that the latest proposal differs from the earlier one in some respects, principally the following:

- Comprehensive restatement of the basic financial statements would not be required.
- Changes in purchasing power would be measured by using the Consumer Price Index for All Urban Consumers instead of the Gross National Product Implicit Price Deflator.

- Inflation gain or loss would be excluded from the computation of income from continuing operations.
- Cash, receivables, and payables denominated in a foreign currency would be classified as monetary items.
- Deferred income tax balances would be classified as monetary items.

The proposed Statement describes these differences as "tentative," and discussion at a recent FASB meeting suggests that the Board has not yet agreed on all of them. In March 1979, the Board expects to issue a document on constant dollar accounting "designed to provide a broad understanding of that methodology and to present the Board's views as to how it should be applied."

THE CHOICE: INTERPRETING THE GUIDELINES

One of the difficulties in interpreting the FASB's proposed Statement is deciding just how free the choice is between the current value and historical cost/constant dollar approaches. One guideline "encourages" companies to follow the current value approach "unless historical cost/constant dollar information better reflects the effect of changing prices on the enterprise." Another guideline suggests that "it may be sufficient" to follow the historical cost/constant dollar approach if (1) cost of goods sold and depreciation are not significant or (2) cost of goods sold and depreciation expense are significant, "but price changes in those categories of expenses have been approximately the same as the change in the general price level." Thus, the guidelines could be interpreted as requiring the current value approach unless a particular company's circumstances were such that it would get essentially the same results reporting historical cost/constant dollar information. For many companies with a significant investment in inventories and property, plant, and equipment, this interpretation would preclude election of historical cost/constant dollar reporting.

However, this restrictive interpretation is inconsistent with the general emphasis, throughout the proposed Statement, of the FASB's intention to make the reporting requirements flexible in order to encourage experimentation. The emphasis on flexibility and experimentation suggests that companies would be allowed a free choice between the two measurement approaches.

At a joint meeting of the FASB and the SEC on February 6, 1979, FASB Chairman Donald Kirk made it clear that the Board intended the more flexible interpretation. Although Kirk indicated that a majority of the Board favors the current value approach, he stated that there was no intent to rule out the historical cost/constant dollar approach, even if the results of following the two approaches would be significantly different. Thus, Kirk continued, the Board intended to permit a company to report historical cost/constant dollar information if it believed such information better served its investors, even though the guidelines in the proposed Statement would appear to require current value information and even though other companies in similar circumstances might report current value information.

While the SEC Commissioners reacted positively to the overall FASB proposal, some concern was expressed about allowing companies in similar circumstances to report different information. One Commissioner suggested that the SEC might decide to excuse a company from complying with ASR 190 only if the company applied the FASB guidelines strictly. At this time, however, it is too early to predict the ultimate response of the SEC to this concern.

We recommend that our clients make a preliminary choice between the current value approach and the historical cost/constant dollar approach on the basis that they believe would best serve users of their statements. However, those choosing the historical cost/constant dollar approach should be mindful of the risk that the final decision of the Board may restrict that option, and of the further risk that the SEC might continue to apply ASR 190 to certain companies that do not choose the current value approach.

The Information to Be Disclosed

The proposed Statement would require all companies subject to its requirements to present certain minimum information. The information would be supplementary only; no changes would be required in the basic financial statements.

REQUIREMENTS FOR THE CURRENT YEAR

The principal disclosure requirement would be a presentation of *income from continuing operations*, restated either on the current cost basis or the historical cost/constant dollar basis. On the current cost basis, income from continuing operations would be restated only for the higher current cost depreciation and cost of sales. On the historical cost/constant dollar basis, more (but not all) components of income from continuing operations would be restated. For example, revenues would be restated on the historical cost/constant dollar basis but not on the current value basis.

The restatement could be presented either in a "statement format" (disclosing revenues and expenses) or in a "reconciliation format" (disclosing adjustments to the revenues and expenses that are shown in the unadjusted historical cost income statement). Both formats are illustrated in Appendix A of the proposed Statement. Whichever format is used, the same categories of revenue and expense appearing in the unadjusted historical cost income statement would normally be disclosed. However, some combining of categories would be permitted.

In addition to restated income from continuing operations, but clearly segregated from it, all companies would be required to disclose their *inflation gain or loss on net monetary items* and their *foreign exchange gain or loss*. The latter figure would be calculated in accordance with generally accepted accounting principles and would be presented net of any "attributable income tax expenses" (discussed below). A company reporting on the current cost basis would also be required to disclose its *holding gain or loss on inventories and fixed assets*. This figure, the aggregate change in the current value of inventories and fixed assets occurring during the year, would be required to be presented net of both inflation and income tax effects on the realized portion of the holding gain.

To illustrate the holding gain or loss disclosure for a company reporting on the current cost basis, consider an item of inventory. The holding gain or loss for the item would be the increase or decrease in its current value occurring between the beginning of the year or the date of its acquisition, whichever is later, and the date of its sale or the end of the year, whichever is earlier. If, for example, the item was purchased at the beginning of the second quarter of the fiscal year for $1.00 and sold at the end of that quarter, at which time its cost was $1.04, the historical FIFO cost of sales would be $1.00, the current cost of sales would be $1.04, and the holding gain would be $.04. If the general level of prices had increased by 1 percent while the item was on hand, the part of the $.04 holding gain attributable to inflation would be $.01 (1 percent of $1.00); the amount of the holding gain net of inflation would be $.03. Further, if the corporate tax rate was 50 percent, the income tax expense attributable to the sale would be determined by multiplying the

excess of current cost over historical cost ($1.04 less $1.00, or $.04) by 50 percent; in this case, the tax would be $.02. Thus, the amount to be disclosed as holding gain net of inflation and net of income tax on the realized gain would be $.01 ($.04 minus $.01 minus $.02).

In all cases, the income tax amounts attributable to restated income from continuing operations, foreign exchange gain or loss, and, if applicable, holding gain or loss would be allocations of the income tax expense appearing in the unadjusted historical cost income statement. Comprehensive interperiod allocation of income tax expense, other than that required in the basic financial statements, would not be required. However, companies would be required to disclose that no such adjustment had been made and "may disclose" an estimate of the effect of not doing so.

Other required disclosures for the current year include:

- The level of the Consumer Price Index for All Urban Consumers at the end of the year.
- Only for those companies reporting on the current cost basis, the current values of inventories and fixed assets compared with the corresponding historical cost net book values.
- Certain explanatory information.

The explanatory information required by the proposed Statement would include the "principal types of evidence used to calculate the current cost of goods sold and current cost of depreciation and amortization expenses." As to other narrative disclosure, the proposal states only that: "Supplementary information required by this [proposed] Statement should contain sufficient explanatory material for it to be comprehensible to those who have a reasonable understanding of business and economic activities and are willing to study the information with reasonable diligence." Illustrative disclosures, presented in Appendix A of the proposed Statement, include the following information:

- Descriptions of the methods used.
- Definitions of key terms.
- The amount by which income from continuous operations would have changed had the company followed deferred tax accounting for timing differences attributable to current value accounting methods (discussed earlier).
- Warnings as to the inherent imprecision of the current value estimates.

No fixed format for presenting the supplementary information is required by the proposed Statement. Instead, flexibility in the choice of format is allowed so that companies may experiment to find methods of presentation which they believe to be most useful in their particular circumstances.

REQUIREMENTS FOR THE FIVE MOST RECENT FISCAL YEARS

The proposed Statement would also require disclosure of certain information for each of the five most recent fiscal years. Some of the information would be the same as that required for the current year, namely, income from continuing operations, holding gain or loss for companies reporting on the current cost basis, inflation gain or loss on net monetary items, and foreign exchange gain or loss. In addition to this information, the five-year summary would include net sales and other operating revenues; net assets at year-end; and per share data for income from continuing operations, cash dividends declared, and market price at year-end.

The basis on which the information would be presented would vary, depending on the nature of the information and on whether the current value or historical cost/constant dollar approach is followed, as shown below:

Information to Be Presented	Basis of Presentation	
	Under Current Value Approach	Under Historical Cost/ Constant Dollar Approach
Net sales and other operating revenues	Historical cost	Historical cost/constant dollar
Income from continuing operations	Current cost	Historical cost/constant dollar
Holding gain or loss, net of inflation, and income tax effects of realized gains or losses	Current cost	Not required
Inflation gain or loss on net monetary items	Historical cost/ constant dollar	Historical cost/constant dollar
Foreign exchange gain or loss, net of income tax effects	Historical cost	Historical cost/constant dollar
Net assets at fiscal year-end	Current cost	Historical cost/constant dollar
Earnings per common share from continuing operations	Current cost	Historical cost/constant dollar
Cash dividends declared per common share	Historical cost	Historical cost/constant dollar
Market price per common share at year-end	Historical	Restated in constant dollars

Under either the current value or the historical cost/constant dollar approach, the disclosure of net assets at fiscal year-end does not require the restatement of all assets and liabilities. Only inventories and fixed assets would be restated; all other assets and all liabilities would be included in the net assets figure as they appear in the basic financial statements. Comprehensive restatement would produce a different net assets figure.

Because obtaining the necessary information for prior years might be difficult, most of the information would be required only for fiscal years ending on or after December 25, 1979. Disclosure for prior years would be required only for net sales and other operating revenues, cash dividends declared per common share, and market price per common share at year-end.

If a company should choose the historical cost/constant dollar approach, the information presented in the five-year summary would be stated either (1) in dollars having a purchasing power equal to that of dollars of the base period for the Consumer Price Index, or (2) in dollars having a purchasing power equal to that of dollars at the end of the current fiscal year.

If a company should choose the current value approach, it would be permitted to present the information in the five-year summary in constant dollars, but it would not need to do so provided that it reported the average level of the Consumer Price Index for each fiscal year included in the summary.

WHERE TO PRESENT THE INFORMATION

As stated previously, the FASB proposal would not require companies to change their basic financial statements; it would require only that the information called for be presented in "annual reports that contain...financial statements." This information would not be required in interim reports. Companies would be allowed flexibility in choosing the format for presenting the supplementary information. The proposed Statement would neither restrict the placement of the information in an annual report nor offer guidelines for choosing its placement. It could be presented in notes to the basic statements or as supplementary information elsewhere in the annual report.

Because the proposed Statement would permit the required information to be presented outside the financial statements, the accounting profession is currently considering the degree of responsibility it should assume for it. At present, generally accepted auditing standards require an independent auditor only to read financial information presented outside the basic statements and to "consider whether such information, or the manner of its presentation, is materially inconsistent with information, or the manner of its presentation, appearing in the financial statements." The profession must now decide whether the existing requirement would continue to be suitable if the FASB should issue a final Statement permitting information about changing prices to be presented outside the financial statements. The Auditing Standards Board of the AICPA has that issue on its agenda. We understand that it intends to require some degree of auditor involvement with the proposed reporting requirement. Should the AICPA not prescribe auditor involvement, the SEC might do so, probably by requiring that the information be included in the financial statements, either as a note or as an additional statement. We will keep our clients informed of significant developments in this area.

Suggestions to Our Clients

Ordinarily, it is unwise to invest significant time and money preparing to comply with a proposed FASB Statement; the proposal may never be adopted or it may be adopted with major changes. In this case, however, waiting for adoption of a final Statement may not leave sufficient time to accumulate the information necessary to comply. Even assuming the FASB holds no public hearings on this proposal and makes few changes to the proposed Statement, it is unlikely that a final Statement would be issued before July, which would give companies reporting on a calendar-year basis six months or less before year-end to accumulate the necessary information. (A recent FASB "Status Report" schedules release of the final Statement for the third quarter of 1979.) Companies subject to ASR 190 had nearly a year to prepare for compliance; the learning, planning, and implementation phases of complying with the FASB Statement could also be time-consuming.

Conversations with the FASB staff suggest a strong possibility that the Board will issue the final Statement with few substantive changes. We understand also that the FASB considers issuing a final Statement on reporting the effects of changing prices a matter of urgency. The Board has been stung by criticism that the SEC "beat it to the punch" with ASR 190 and is aware that the cumulative distortive effects of inflation on traditional financial statements grow increasingly worse. It is safe to say, therefore, that the FASB is making every effort to have a final Statement effective for fiscal years ending on or after December 25, 1979.

In these circumstances, we believe companies would be well advised to start to prepare for the final Statement. We do not recommend that a company implement procedures now to accumulate all the information necessary to comply with the proposed requirements. However, much can be done to analyze the probable effects of the proposed Statement on a company and to plan for complying with it. Such analysis and planning could, at reasonable cost, reduce the lead time for compliance. Specifically, we recommend the following action at this time:

1. Assign one individual the responsibility for monitoring the status of the proposed Statement, preparing a plan to comply with it, and becoming the "in-house" expert.

2. Brief top management and, possibly, the audit committee or full board of directors on the existence and implications of the proposed Statement, the preliminary action taken, and the future action planned.

3. Make a preliminary choice between the alternative bases— current cost or historical cost/constant dollar.

4. Make a preliminary survey of data needs, implementation tasks, lead times, and problems in implementing the company's preliminary choice were the proposed Statement to be issued as a final Statement. Such a survey would make use of the

company's prior experience, if any, with replacement cost measurements or historical cost/constant dollar accounting. It would include:

- Determining the data required.
- Relating the requirements to the company's accounting system, including, if applicable, the means by which historical cost/constant dollar information or ASR 190 replacement costs have been calculated and the suitability of accounting records for providing the additional data necessary for compliance with the FASB proposal.
- Planning an approach to calculating the supplementary information.
- Identifying and exploring major implementation problems.
- Determining the personnel and other resources required in the first year and on a recurring basis.
- Estimating lead times to accomplish the necessary tasks.
- Considering the impact of a final Statement on the 1979 closing schedule and the publication of the 1979 annual report to stockholders.

5. Consider the impact of the application of the proposed Statement on the company's business plans. For example, will application improve or hurt the company's image in the financial community, and how should this affect the timing and cost of financing?
6. If subject to ASR 190, wait until the latest possible date to begin calculating 1979 replacement costs.
7. Consider submitting a letter of comment on the proposed Statement to the FASB.

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How Arthur Young Can Help

We are ready to help clients with all phases of complying with the Statement. Our knowledge of clients' businesses and our familiarity with their accounting and reporting practices and procedures should enable us to contribute. Our considerable experience in helping clients comply with ASR 190 and experiment with restating historical cost statements in terms of units of general purchasing power should also be useful. Following are examples of assistance we are prepared to provide:

- *Presentation to Boards of Directors and Top Management.* We can help interpret the complex requirements of the Statement, as proposed or as finally adopted, and put them in perspective for members of the board of directors or an audit committee or top management.
- *Seminars.* We will hold seminars this spring to familiarize financial executives with the technical requirements of the proposed Statement. Compliance with the Statement will require a substantial learning process, and we are currently developing a program to assist in that process.
- *Communications.* We will continue to monitor significant developments as they occur. The FASB, the SEC, and the AICPA are all involved in important aspects of the proposal. Our contacts with all three organizations enable us to analyze the significance of their decisions and communicate them to our clients on a timely basis.
- *Organizing the Compliance Effort.* We can consult with client personnel on applying the requirements to individual circumstances, including (1) planning an approach to take, (2) determining the extent of effort required, and (3) dealing with the tough implementation problems. The challenges presented by the proposed Statement are considerable, and no one has a monopoly on the right answers. However, we can bring our judgment, experience, and contacts to bear on the specific needs of each of our clients.
- *Systems Improvements.* We can assist clients to improve accounting systems to accumulate the data required to provide historical cost/constant dollar or current value information.

FINANCIAL REPORTING AND CHANGING PRICES

ARTHUR YOUNG CLIENT MEMORANDUM

RECENT DEVELOPMENTS

June 25, 1979

Companies that would be subject to the proposed FASB requirements for disclosing the effects of changing prices are extremely interested in keeping abreast of developments in the evolution of an FASB Statement. We have been monitoring FASB activity closely and will be issuing client memorandums to keep our clients advised of developments on a current basis. This is the first of these memorandums.

On May 31, the FASB sponsored a national conference on financial reporting and changing prices. The conference was followed on June 6-8 by three days of public hearings. Additional input was provided to the Board by its six specialized industry task groups, each of which held a separate public hearing, and by over 400 letters commenting on the FASB proposal. On June 20, the Board held its first public meeting after the hearings to consider the comments it received and recommendations of its staff.

National conference

At the national conference, Securities and Exchange Commission Chairman Harold M. Williams voiced a strong preference for current cost reporting by industrial companies and questioned the motives of industry spokesmen who favor constant dollar reporting. He also urged that the final standard be effective for 1979, stating that the Commission "would not look positively on the loss of another year."

Comment letters and hearings

The comment letters and oral presentations at the public hearings were sharply divided over how best to report the impact of changing prices on business enterprises. Over two-thirds of the comment letters came from financial statement preparers; more of those expressing a preference favored the constant dollar

approach over the current cost approach. Most academic respondents preferred the current cost approach. No consensus has emerged in the accounting profession. The few users of financial statements that the Board heard from favored the current cost approach. Notwithstanding this division, the Board is still strongly committed to issuing a final standard by September 30.

Effective date and choice

The Board considered two key issues at its public meeting on June 20: the effective date and the choice between the constant dollar and current cost methods. Although no decisions were made, the meeting indicated the present direction of the Board's thinking.

The effective date. All Board members agreed that the final standard should be effective for calendar 1979 even though many letters from industry indicate that a final standard issued late in September would not leave sufficient time to do a proper job for 1979. Texas Instruments' Vice President and Controller, R. C. Pearson, stated at the public hearing that "a large, geographically diverse firm . . . must make extensive system alterations and conduct detailed training of personnel in order to comply. These preparations cannot be completed in three months."

The choice between the constant dollar and current cost methods. There was no Board support for allowing preparers a free choice but there also was insufficient support for either the constant dollar or current cost method alone (the FASB staff had recommended that all industrial companies be required to present current cost information).

A consensus appears to be emerging, instead, for what is being called a "layered approach" that combines both methods to a greater extent than does the exposure draft. Under this approach, companies would have to calculate cost of sales and depreciation expense on both a constant dollar and current cost basis, which represents a radical change from the proposal. One method of income statement presentation considered was a two-step approach that would first arrive at constant dollar income from continuing operations, followed by adjustments for the differences between constant dollar and current cost of goods sold and depreciation expense to produce current cost income from continuing operations. Another method of presentation considered would report only constant dollar income from continuing operations with footnote disclosure of cost of sales and depreciation expense on a current cost basis.

The comment letters showed that most respondents, irrespective of their preference for either method, favored complete freedom of choice. Of those expressing a preference between constant dollar and

current cost information, more respondents than expected favored the constant dollar method. By the FASB's count, "the responses divide into two approximately equal groups." By our own count, roughly 30 percent preferred constant dollar, 10 percent favored current cost, 40 percent did not express a preference, and 20 percent said they did not like either method.

Other issues

Other major issues which emerged from the comment letters and hearings are likely to be considered by the Board in the coming weeks. These include the following:

Complexity of the proposal. Almost half of the respondents said that the proposal is too complex and urged that both the disclosures and the methodology be simplified. Suggestions for simplification included greater use of specific price indices to derive current cost figures and limiting the minimum required disclosure to a five-year summary format containing only a few key income statement and asset amounts.

Holding gains. A number of respondents have questions about the concept of holding gains that go well beyond the matter of whether an increase in the current cost of assets should be called a gain. Some appear to have trouble understanding the FASB notion of holding gains altogether, while others question its relevance. If the FASB retains the requirement to disclose holding gains, it is likely there will be a change in the way the final standard explains the requirement and a change in terminology.

Intraperiod income tax allocation. Many respondents expressed concern about the way in which the proposal masks the effects of changing prices on the effective tax rate in the statement of current cost income from continuing operations. The Board will have to choose between maintaining consistency in the allocation of income taxes to components of income and more clearly reflecting the effects of changing prices on a company's effective tax rate.

Inflation gain or loss on net monetary items. Considerable controversy continues over whether the effect of inflation on monetary items should be included in income. However, no new arguments were presented.

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ARTHUR YOUNG CLIENT MEMORANDUM

RECENT DEVELOPMENTS

July 9, 1979

Our June 25 memorandum reported on the FASB's June 20 meeting at which the Board reached tentative agreement on the following matters pertaining to the development of a final Standard on reporting the effects of changing prices:

- The Standard should be effective for calendar 1979.
- It should not provide a choice between the constant dollar and current cost methods.
- Nonfinancial companies should be required to follow a dual or layered approach under which calculations of cost of sales and depreciation expense on both the constant dollar basis and the current cost basis would be necessary.

This memorandum reports on the FASB's June 28 meeting and discusses implications for implementation as a result of FASB developments thus far.

Applicability provisions

The Board agreed not to change the proposed size test for 1979, but decided to exempt companies meeting the beginning of the year size test by reason of a business combination consummated during the year and accounted for as a pooling of interests. The exemption would apply only for the year in which the combination occurs and only if neither of the combining companies was otherwise subject to the Standard.

The Board deferred consideration of other changes to the applicability provisions for years subsequent to 1979, including a staff recommendation to extend applicability to all public companies in two or three years.

Constant dollar issues

The FASB considered several issues with respect to the constant dollar aspects of the proposed Statement.

Inflation gain or loss on net monetary items. The Board agreed to retain the requirement to disclose the inflation effect on monetary items in the final Standard, but deferred action on the following related questions:

1. Should inflation gain or loss on net monetary items be offset against interest expense?

2. Should inflation gain or loss on net monetary items be included as a determinant of income from continuing operations or, as proposed in the exposure draft, set out separately?

3. Can a more workable distinction be drawn between monetary and nonmonetary items?

The Board intends to consider these matters after progress is made on the dual approach agreed to at the June 20 meeting.

Consumer Price Index. The Board reaffirmed its decision to use the Consumer Price Index for All Urban Consumers as the basis for restating historical cost in constant dollars.

CPI base date. The proposed Statement would require preparers to use the general price level prevailing at the end of the latest fiscal year as the basis for expressing current year income in constant dollars and would allow preparers to choose between that base date and the general level of prices prevailing at the time the CPI was last revised as the basis for expressing five-year summary data in constant dollars. The Board is now considering stating the supplementary income information in dollars having a purchasing power based on that of the average of the general level of prices in the latest fiscal year. Support for a mid-year index base has developed principally because, some believe, it leads to a better integration with current cost information which is expressed in average-for-the-year dollar amounts. From a practical point of view, the use of "mid-year" dollars as constant dollars has appeal because it would eliminate the need to restate revenues and various expenses accrued evenly over the current year. The Board decided to defer further consideration of this matter to a later date.

Current cost issues

Two important current cost decisions were made at the June 28 meeting. First, the Board reaffirmed in principle that assets stated at current costs should not be valued in excess of recoverable value through sale or use. Second, the Board decided that indexing is as appropriate a method for estimating current cost as any other method.

Value in use. The first decision means that some kind of value in use limitation on current cost calculations for assets not for sale will be retained in the final Standard. However, the Board directed its staff to reconsider the proposed value in use approach because of criticisms by several respondents as to the practical difficulty of estimating the net present value of future cash flows for property, plant, and equipment. It is possible that the resulting approach will, among other things:

- Ascribe a materiality notion to the need to recognize lower appropriate value, which could limit the approach to situations such as unprofitable or marginally profitable operations.
- Permit assets to be grouped for purposes of impairment determinations.
- Recognize that the measurement of a lower appropriate value is not precise and requires the exercise of considerable judgment by management.

Indexing method. In agreeing to give indexing status equal to that of the other methods of estimating current costs, the Board was mindful of the practical advantages of indexing. It agreed to eliminate the preference for the direct and unit pricing methods expressed in the exposure draft, but stopped short of endorsing indexing as the preferable method. The final Standard can be expected to impose no greater burden of proof on those choosing the indexing method than on those choosing other methods.

Implications for implementation

Despite the Board's sensitivity to requests for simplification of the proposed requirements, it appears that there will be much complexity in the final Standard based on the Board's tentative decisions (1) to require a dual approach, (2) to continue to require, at least in principle, current cost to be adjusted to a lower appropriate value based on net realizable value and value in use, and (3) to retain the requirement to calculate the inflation gain and loss on net monetary items.

Although the Standard is likely to be effective this year, all indications are that it will not be issued until late September. It could therefore be well into October before it is in the hands of those who will be responsible for carrying out its requirements.

All of this suggests to us that subject companies will have little lead time to spare. Calendar companies that are waiting until a final Standard is issued before developing an approach towards compliance may encounter considerable obstacles in accumulating the necessary information and agreeing on its presentation by annual report time. We believe that subject companies should consider accelerating their compliance efforts.

In our booklet, "Financial Reporting and Changing Prices: An Analysis of the FASB's Proposed Statement," and again at our nationwide seminars, we communicated to clients the kinds of actions that can reasonably be taken early on. Among those actions that we continue to believe can appropriately be taken prior to the issuance of a final Standard are the following:

1. Assign one person the responsibility for monitoring the status of the proposed Statement, preparing a plan to comply with it, and becoming the "in-house" expert.

2. Brief top management and, possibly, the audit committee or full board of directors on the implications of the proposed Statement, the preliminary action taken, and future action planned.

3. Make a preliminary survey of data needs, implementation tasks, lead times, and implementation problems. Such a survey would make use of the company's prior experience, if any, with replacement cost measurements or historical cost/constant dollar accounting.

4. Consider the impact of the application of the proposed Statement on the company's business plans.

5. If subject to ASR 190, wait until the latest possible date to begin calculating 1979 replacement costs.

If, as it looks now, nonfinancial companies won't have a choice between presenting constant dollar information or current cost information, but will have to make calculations both ways, even more opportunities for planning and preparation arise. The Board's acceptance of indexation as a method equal to others for calculating current cost, coupled with the probability that constant dollar cost of sales and depreciation calculations will be required, points to the need for companies to assess their capabilities to index. Toward this end, we offer the following suggestions for consideration:

1. Evaluate the reliability of aging of fixed assets that already exist and consider what should be done between now and late in the year to update them for asset acquisitions and dispositions.

2. Identify assets for which agings do not exist or for which existing agings are not considered reliable and consider steps to develop or improve procedures for aging these assets.

3. For purposes of calculating current costs, plan not only to age assets but to group those having similar price-change characteristics. Specific indexes that are representative of the actual increases in asset costs can then be applied to each group (no grouping is necessary for constant dollar purposes as only one general price level index is involved). In considering how detailed these groupings should be, appropriate recognition should be given to the imprecision inherent in any estimating process and in the compilation of most publicly available index series (particularly those in the U.S. Department of Labor's Producer Price Index -- formerly, Wholesale Price Index -- series). Too narrow a grouping may seek greater accuracy than can be achieved.

4. Consider the indexes to be used. Is it advisable to develop any indexes internally, as opposed to using those that are available from government or private sources? This decision rests, to a large extent, on the relevance of publicly available indexes to the actual cost experience of the company. As a general rule, internally generated indexes are costly to construct but can be more relevant.

5. Estimate how much work is involved and identify who will do it. Manpower needs will depend on what information is already on hand, how much digging into old records is necessary, and what is the best way to gather information from remote sites, including foreign locations.

6. Decide whether the aging should be done manually or by computer. Whether to invest in developing a computerized system will depend on whether management has sufficient confidence that there will be a continuing need for an aged asset data base.

7. Estimate how long the aging will take. Can it be put off until late September or early October when the final standard is expected to be available? If not, can the Company afford to wait until August when more might be known about the specifics of the Board's dual approach? Alternatively, should the aging begin now, even though there remains some risk that the Board will again change its direction?

8. Planning should recognize that techniques other than indexing will still be required for certain current cost calculations. Indexing may be of little relevance for estimating the current cost of land and unit pricing may be viewed as a better, more efficient way of developing the current cost of buildings. Direct pricing of high unit value machinery and equipment may still be preferred.

Next Board meeting

The next open meeting of the FASB on the changing prices project is scheduled for July 17. We understand that the FASB staff is preparing to have a suggested presentation of the supplementary information that would be required under the new dual approach ready for this meeting. Board agreement on form and content of the required disclosure could pave the way for solving other issues and make it less risky for companies to proceed with implementation plans prior to the issuance of a final Standard.

ARTHUR YOUNG & COMPANY

Representative HECKLER. Professor Break.

STATEMENT OF GEORGE F. BREAK, PROFESSOR OF ECONOMICS, UNIVERSITY OF CALIFORNIA AT BERKELEY

Mr. BREAK. Thank you. It's a privilege to participate in the committee's hearing today. My remarks are based on a paper that I am preparing for the committee on this topic that we are dealing with. The points I will raise are discussed briefly today in my statement and will be dealt with more fully in the full, complete paper.

As inflation has accelerated in recent years, a complex and pervasive set of tax distortions has resulted from continued use of individual and corporation income taxes based on nominal money values. As a result, the neutrality of the Federal tax system has been severely impaired.

To understand the nature of these distortions, I think you need to distinguish two very different ways in which the Federal income tax system could be adjusted or indexed for inflation.

One I call structure indexation, which is required because the tax system is progressive. It would involve converting all of the money components of the rules by which tax liabilities are computed, such as personal exemptions, zero bracket amounts, and tax rate bracket limits into constant dollar amounts. This would be done by raising them each year by the amount of general price inflation during that year.

The other kind of indexation—measurement indexation—would essentially shift the base from nominal money income to a constant dollar—what I call in the testimony "real income." I think more accurately what I have in mind would be called current dollars income adjusted so that all the components from which income is computed are stated in the same dollars.

In general, I think structural adjustments would be easy to make in practice but are highly controversial in principle. Measurement adjustments, in contrast, I believe are highly desirable in principle but probably costly and complex to put into practice.

You could initiate either form independently of the other or, of course, we could do both at the same time. I'm going to concentrate today on measurement indexation because I believe it creates more tax distortion than the structural indexation problems. That, of course, involves shifting the base for income taxation from nominal money values to a constant dollar concept; wage and salary income does not need much adjustment to do that; but property and business income does.

There is some dispute about what the best concept of constant dollar business income would be. That I think comes from the fact that there is no one ideal concept of business income for all purposes; and I propose that for tax purposes, we should use a concept that measures the purchasing power of money income to the consumer on the argument that the ultimate taxpayers are people who are consumers; and what you want to measure when you tax their income is their ability to acquire consumer goods and services.

So you would try to compute your current dollar income tax base by adjusting all component items with a broad consumption price index.

There are three main kinds of adjustments which are very well known: Inventories would be put on a constant dollar FIFO basis under this procedure by raising the beginning-of-the-period values by the amount of inflation during the period.

Original cost depreciation would be converted to current dollar terms by multiplying it by the ratio of the current year general price index to the value of the price index in the year in which the equipment was acquired.

Third, there would be real capital gains and losses on business financial assets and liabilities which would be included in the base on an accrual basis. For example, a $1.000 bond that was worth $1,000 at the beginning of the year and $1,000 at the end of the year, if there were a 15-percent rate of inflation during the year, there would be a $150 real capital loss to the bondholder and a $150 real capital gain to the debtor. These real gains and losses would be included in the incomes of the two parties.

Those real gains and losses on business financial assets are not always part of a proposal to go to a constant dollar income tax base. I think they are just as important as the others; and they complicate the picture, certainly, because though inventory and depreciation adjustments always make constant dollar income less than nominal money income, for net debtors, which most business enterprises are, the other adjustment goes in the opposite direction, so that constant dollar income for a business could be higher or lower than nominal money income.

The picture is far from simple. Another important element in the picture is that it is not just the amount of inflation that occurs that's important, but also the time pattern in which it occurs. I think Nicholaus Tideman and Donald Tucker in a study done for the Brookings Institution bring this out very nicely for a set of five hypothetical firms that they take and study their operation over four different periods of hypothetical inflation.

If you look at figure 1 in my prepared statement, the five firms vary in their equity to total asset ratio. There's a high equity firm of 0.75 and a low equity firm of 0.35; these are manufacturing firms. Then there's a typical transportation-communication-utility firm with long-lived fixed assets and the typical debt structure of that type of firm.

The first period is one of accelerating inflation in that graph, the rates are 2.5 percent, 5 percent, 7 percent, and then 10 percent. Then there's an extended period of steady 10 percent inflation. Then there's a short period of decelerating inflation where it goes down to 7.5, 5, 2.5, 0; and then there's a still more extended period in which there's no inflation at all.

The graph shows the extent to which these typical firms are now overtaxed compared to an indexed tax system—those are the values above the zero line on the vertical axis—and the extent to which they are undertaxed, shown by values below the zero line. You will notice that not only does the experience of the five different firms differ among themselves, but it differs over time.

The high equity firm is overtaxed throughout the period. That's one simple case; but the others begin with undertaxation by the present system which is reversed at different points in time.

The transportation firm is the one for whom undertaxation lasts the longest; but even it is reversed in the period of decelerating inflation.

Another thing to note is that the effects of an unadjusted income tax continue long into the period when there's no more inflation. This is because of the depreciation adjustment which will continue until all of the assets that were bought during any period of inflation are retired, or scrapped, or sold; the effect on the tax liabilities of the firm continue.

I think Tideman and Tucker try to summarize that rather complex picture nicely by computing the present values of the excess and deficient tax burdens that firms face under our present tax system during inflationary periods. That is shown in table 1 in my prepared statement.

There they take 20 industry groups. They are using the Treasury Department's 1972 corporate tax model file. They show, in the first two columns, the effects of a single year of 10-percent inflation followed by no inflation at all. In the first column they show the effects in the first year only.

You will notice that all the numbers are negative except for one. That means under the present tax system, firms are paying less in taxes than they would under an adjusted system in the first year, because of the effect on their financial liabilities that they would have accrued and the real gains from that.

The average for all nonfinancial industries is minus 37 percent, an underpayment in this case of tax liabilities under our present system; but then if you take what happens beyond that first year and you discount all the future years, and add it to that first year, the picture is completely reversed.

Instead of being undertaxed in total, all except the services industry turn out to be overtaxed. The average is 18 percent for all nonfinancial industries. The highest is 134 percent for railroads, and the lowest is 1 percent for other transport. Of course, services are negative; so the differences are very large among these 20 different industry groups.

If you go to the individual companies or a smaller division of industries, you will find that the differences are still larger.

So, this suggests that some very serious nonneutralities exist in the system. I give one other example in the prepared statement of these nonneutralities created by taxing nominal income. That comes from a study by Martin Feldstein and Joel Slemrod and is summarized in table 2.

What they did was take the Treasury Department's 1973 special study of people selling capital assets and realizing capital gains and losses. They took a subsample of corporate shareholders. For this subsample, they computed the price adjusted gain or loss for these people who realized gains in 1973.

In the first line of table 2 are the estimated nominal money capital gains realized by these taxpayers and taxed. This is the sample blown up to the size of the population of U.S. shareholders from known sampling probabilities.

The total nominal capital gain realized in that year was $4.6 billion, divided as the table shows into eight AGI—adjusted gross income—classes.

In line 3 is the tax that was paid on those nominal capital gains. The total tax was about $1.1 billion. It was positive in all classes except the zero to 10,000 AGI class, where it was negative.

When Feldstein and Slemrod recomputed these gains and losses by adjusting for the amount of price inflation since the assets were acquired by the owners, in each case you get a very different picture which is given in line 2. This shows a net real capital loss of nearly $1 billion for the entire group; so what you have is a net real loss mismeasured as a 4.6-nominal capital gain. You will notice that there are net losses in each of the bottom five AGI classes, up to AGI of 100,000. They all had net real capital losses rather than gains.

In the top three classes, there were still positive net gains which, of course, were smaller than the reported nominal gains; and then, in line 4, they computed what the tax would have been on these people using 1973 tax rates, exclusion rules, and loss offset limitations—what they would have paid in tax had they been taxed on a constant dollar rather than a nominal dollar basis.

The results are given in line 4. The bottom four classes would have had net tax rebates or reductions that add to about $0.1 billion. The other four AGI classes would have paid net taxes of about $0.8 billion. The net revenue for the Treasury would have been $0.7 billion.

The distribution of the net gains and losses was such that the Treasury would still have collected a positive amount of revenue. The other factor, of course, is that the offsetability of losses against ordinary income was severely restricted in that year.

Of course, if we were to make any more progress toward taxing capital gains and losses on a constant dollar basis, we would want to rethink the amount of exclusion, the offsetability of losses against other kinds of income, and questions of that sort.

I think the table brings out very clearly the kinds of distortions that the present system generates. You could easily derive a similar table for recipients of interest income. It seems to me that many of them must be getting a rather poor view of the Federal income tax when they are taxed on interest income, positive interest income, which they know is negative when they compare it with the rate of inflation. Yet they are still called upon to pay a tax on it.

It seems to me this raises some very serious questions about Federal tax policy. I will skip over the paragraph I have here on the tax distortions and the efficiency losses they probably create. These are familiar: Loss of saving investment, growth, misallocation of resources to inferior uses, diversion of work effort into minimizing your tax burdens, or discouragement of work effort that was undertaken in order to save for future consumption.

It seems to me the financial effects on Federal tax policy are equally disturbing. There's a serious threat it will undermine the public confidence in the income tax. Since the income tax is the main source of revenue for the Federal Government, it may even undermine the public's confidence in the Federal Government itself. There will probably be heightened pressures for reductions in income tax rates as a result of this discontent: and also for more special treatment of those kinds of incomes that are especially subject to inflationary distortion, such as capital gains and interest receipts.

I am worried that these ad hoc adjustments will not improve the overall equity and efficiency of the Federal income tax system.

If they are large enough, they may well impair the ability of the Federal Government to advance its high-priority programs.

An alternative set of policy initiatives would be to reduce the relative importance of the income tax on the Federal tax structure. In the absence of base indexation, inflation creates serious inequities and inefficiencies in the income tax that are not present in some of its major competitors. Among the more attractive sources of Federal revenue in an inflationary period would be a self-assessed personal consumption or expenditure tax, a value-added tax, and even the payroll tax for social security.

In other words, that failure to index the income tax both strengthens the case for adopting a Federal value-added tax and weakens the case for financing some part of social security benefits from the general fund.

If you look at some of the discussions that have been occurring, more abroad than here, about more fundamental tax reform, you will find two that are worth, I think, serious consideration although some years ago they certainly were not so considered.

One of them would be better integrating the corporation and individual income taxes. A number of European countries have begun already and moved in that direction; and that has been discussed abroad recently.

In both Sweden and the United Kingdom, tax commissions in recent years—the 1972 commission in Sweden and the Meade committee which reported in mid-1977 in Great Britain—recommended that serious consideration be given to a shift of direct taxation in those countries from an income basis to an expenditure or consumption basis.

I think one of the reasons that that possibility was attractive to them was the very reason I have cited, that in an inflationary world, the income tax has problems, serious problems, if it's not indexed for inflation that these other taxes don't have.

Now it would be complex and difficult to adjust the base of our income taxes for inflation and to do it on a comprehensive basis; but when you compare it to the complexities that would be involved in fully integrating or partially integrating the corporate and individual income taxes or in adopting a progressive, self-assessed personal expenditure tax, an entirely new kind of tax to people in this country, it may be that trying to index the base of our present income tax and improve it that way is the best of those alternatives.

I think if we did it, it would greatly increase the equity and efficiency of our tax system. We would be basing it on realistic measures of income rather than erratic and illusory ones.

I think it would help clarify future discussions of tax policy. Unlike many of the tax changes that may well be enacted in the future in its absence, I think base indexation has a solid grounding in tax theory and conforms well to long-established principles of good tax design.

Thank you.

[The prepared statement of Mr. Break follows:]

PREPARED STATEMENT OF GEORGE F. BREAK

It is a privilege to participate in the Committee's Special Study on Economic Change and to discuss today "The Impact of Inflation on the Federal Tax System." My remarks are based on the paper that I am preparing for the committee on that topic. They are necessarily brief, but each of the points raised is discussed more fully in the paper.

As inflation has accelerated in recent years a complex and pervasive set of tax distortions has resulted from continued use of individual and corporation income taxes based on nominal money values. As a result, the neutrality of the Federal tax system has been severely impaired.

To understand the nature of these tax distortions it is necessary to distinguish between the two distinct ways in which Federal income taxes could be adjusted, or indexed, in order to neutralize the effects of inflation on taxpayers. Structural indexation, required because the taxes are progressive, would convert all money components of the rules by which tax liabilities are computed, such as personal exemptions, zero bracket amounts, and tax rate bracket limits, into constant-dollar amounts. This would be done by raising them each year by the rate of general price inflation in the most recent 12-month period for which processed data are available. Measurement indexation would shift the tax base from nominal money income to price-adjusted, or real, income. It must be admitted that neither of these methods is trouble-free. In general, structural adjustments would be easy to make in practice but are highly controversial in principle. Measurement adjustments, in contrasts, are highly desirable in principle, but costly and complex to put into practice. Since failure to make them is the major cause of the inflationary tax distortions now threating the economy, the following discussion will concentrate on them.

To shift from money to real income as a base for taxation would mean making major changes in the distribution of taxable income among individuals and corporations. Whereas wage and salary income can be measured in straight money terms, with little or no distortion by the presence of inflation, neither property nor business income can. The nature of the required adjustments is a matter of some dispute. Mainly this is because there is no one concept of business income that is ideal for all purposes. To tax base designers, for example, all gains that can be measured objectively are equal. To shareholders or managers, however, the sustainability or liquidity of corporate gains is likely to be more important. Similar choices must be made among competing concepts of business real income. For tax purposes, it seems clear, one should choose a comprehensive, general purchasing power, concept. Since all tax burdens are ultimately imposed on people, the best measure of their abilities to bear them is the increase in their command over goods and services during a given period of time. The measurement of taxable real income, in other words, should be based on a general price index that covers all consumption goods and services.

If such a general purchasing power concept of income were accepted as the proper tax base, business income would be converted from money to real terms by three main kinds of adjustment:

1. Inventories would be put on a constant-dollar FIFO basis under which beginning-of-the-period inventory values would be raised by the amount of general price inflation during the accounting period.

2. Original cost depreciation allowances would be converted to current-dollar terms by multiplying them by the ratio of the current-year general price index to its value in the year in which the assets were acquired.

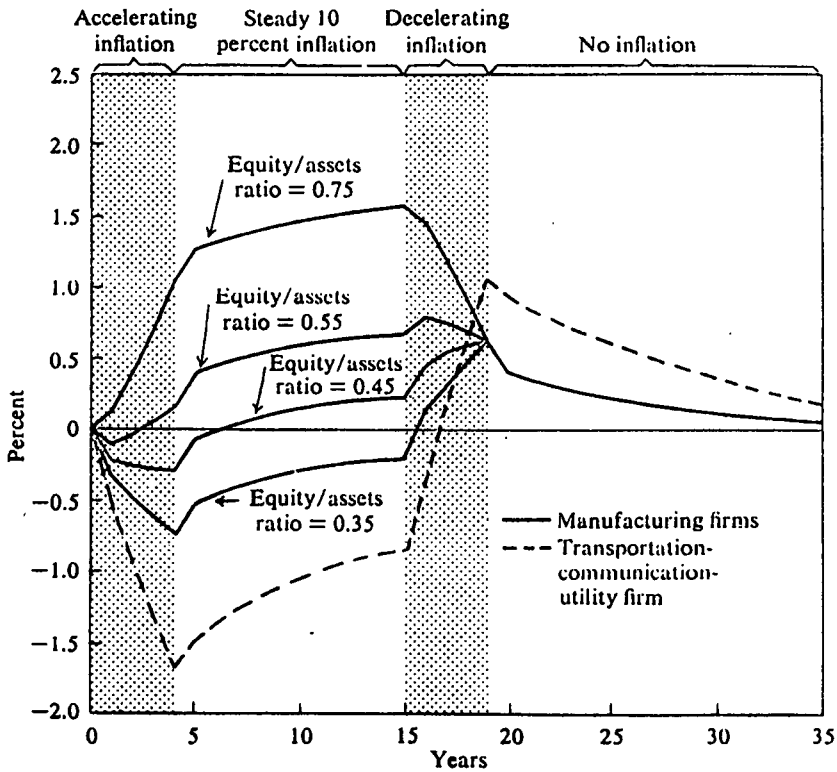
3. Real capital gains and losses on business financial assets and liabilities would be included in taxable income on an accrual basis. On a bond worth $1,000 at the beginning and end of the year, for example, the adjustment for a 15 per cent rate of inflation during the year would be a $150 real capital loss for the bondholder and an equal real capital gain for the debtor. When these purchasing power gains and losses on bond capital values are combined with nominal money interest receipts and expenses, the latter are converted into real terms.

Real gains and losses on business financial assets are sometimes omitted from proposals to adjust taxable business profits for inflation. They are, however, just as basic a part of the total conversion to a general purchasing power income concept as the other two adjustments. Since the inventory and depreciation adjustments make real income less than money income while the financial asset adjustment for net debtors, which most businesses are, has the reverse effect, real business profits may be either larger or smaller than nominal money profits. Variations in business capital structure and in asset composition necessarily make for large differentials among individual companies and between different industries in the size and direction of the gap between real and money income.

The effects of shifting business income to a real basis depend not only on the rate of price inflation but also on the pattern in which it occurs over time. This is brought out clearly by the calculations made by Tideman and Tucker for five hypothetical firms operating under four different kinds of general price change. The results are shown in Figure 1. Their four representative manufacturing firms vary in capital structure from 75 percent equity and 25 percent debt to 35 per-

cent equity and 65 percent debt. The fifth firm is a typical transportation-communications-utility enterprise with a high ratio of long-lived assets to inventory and a high debt-to-equity ratio. The four-period inflation pattern assumed begins with a period of accelerating price increase, at 2.5 percent, 5.0 percent, 7.5 percent, and 10.0 percent respectively. It continues with an 11-year period of steady 10 percent annual inflation, then a 4-year period of decelerating inflation at rates of 7.5 percent, 5.0 percent, 2.5 percent, and zero percent, and finally an extended period of no inflation. The patterns of excess taxation under an unadjusted income tax differ considerably among the five firms. Whereas the two high-equity manufacturing firms are overtaxed throughout the entire period, the two highly levered ones are first undertaxed and then overtaxed. The transportation-communications-utility firm enjoys unusually low burdens under an unadjusted tax until the middle of the decelerating inflationary period and has excess burdens thereafter.

FIGURE 1.—Excess of actual taxes over taxes based on inflation-corrected income, as a percentage of assets, for four representative manufacturing firms and a representative transportation-communication-utility firm



Sources: Derived using the assumptions that follow. Initial values assumed for the manufacturing and transportation-communication-utility (TCU) firms, respectively, are total assets 100 and 240, monetary assets 25 and 17, short-term debt 20 and 30, annual equipment investment 3.27 and 10.90, annual structures investment 1.40 and 4.67, sales 100 and 100, cost of sales 70 and 55, and other costs 20 and 18. The long-term debt of the TCU firm initially 85, while the long-term debts of the four different manufacturing firms are initially 5, 25, 35, and 45. All these magnitudes are assumed to grow at a constant 3 percent real rate. The tax accounting life of equipment is twelve years in manufacturing and twenty-five years in the TCP firm; all firms use a forty-year life for structures. Equipment and structures are depreciated by the 200 percent and the 150 percent declining balance methods, respectively. Inventories are turned over three times a year in manufacturing and six times a year in the TCU firm. The nominal interest rate on short-term debt adjusts completely to the current rate within one year, while the average rate on outstanding long-term debt depends on an average of inflation rates over the past 25 years.

T. Nicholaus Tideman and Donald P. Tucker, "The Tax Treatment of Business Profits Under Inflationary Conditions," in Henry J. Aaron ed. *Inflation and the Income Tax* (Brookings Institution, 1976, p. 46.)

Clearly, the effects of inflation on a firm's tax liabilities cannot be determined by comparing its nominal and real profits in only 1 or 2 individual years. Mainly this is because the depreciation adjustment reflects both past and present inflation, builds up gradually under persistent inflation, and continues long after the inflation has stopped—in fact, until all assets on the books in the last year of price rise have been fully depreciated, sold, or scrapped. The adjustments to financial assets, in contrast, are present only when inflation is occurring and are a direct function of the current inflation rate.

A useful way of summarizing the impact of tax effects that differ from 1 year to the next is to compute the present value, at the after-tax real rate of return on corporate capital, of the entire sequence. Tideman and Tucker have done his for firms with assets of $1 million or more in the Treasury Department's 1972 corporate tax model file under two kinds of contrasting hypothetical inflation. Table 1 shows their estimated percentage tax under- and over-payments for nonfinancial firms in twenty different industry groups. The first two columns deal with the effects of a 10 percent inflation rate in 1 year only, followed by zero inflation rates thereafter. The differences shown between the first-year and the full-period effects are striking. The first column indicates first-year under-payments in all but one of the industries (finance, insurance, and real estate) ranging from 10 percent unindexed tax liabilities in two groups to 374 percent in railroads and airlines. The long-run effects, shown in the second column, are quite different. For the all-nonfinancial-industry group the first-year underpayment of 37 percent of tax liabilities is sufficiently overbalanced by later tax overpayments to produce a total long-run excess tax burden of 18 percent. Degrees of total tax overburden vary widely in the other industries, from 1 percent in "other transport" to 134 percent in railroads. Services are the only group showing a long-run tax underpayment. Finally, the third column shows total steady-state annual tax overpayments if inflation persists indefinitely at 10 percent. The inter-industry pattern is similar to that shown in the second column, though the amounts in each case are larger.

An important implication of the estimates shown in the first two columns of table 1 is that the present Federal corporate income tax is procyclical. When inflation accelerates, unindexed business tax burdens are typically less than those that would be imposed at that time by an inflation-adjusted corporate profits tax. Later, when inflation rates are falling and stimulus to aggregate private demand may be called for, unindexed tax system burdens exceed those under an indexed tax. Tideman and Tucker also conclude that "These results demonstrate that the surtax imposed by inflation is arbitrarily and inequitably distributed."[1]

When one turns from hypothetical to actual cases, the tax distortions created by taxing nominal income during inflationary periods become even more dramatic. A number of empirical studies, discusssed in my paper for the committee, are now available. All of them show very large differentials, both among industries and among individual companies, in the tax burdens imposed by an indexed and an unindexed corporate profits tax.

Personal property incomes are subject to the same inflationary measurement distortions as business income. A good example of the nature of these distortions is provided by Feldstein and Slemrod's analysis of the capital gains and losses realized by a group of over 30,000 corporate shareholders in 1973, selected from the Treasury Department's special sample study of capital asset transactions in that year. For these shareholders Feldstein and Slemrod computed their real capital gains and losses by adjusting their cost bases upward by the amount of general price increase between their individual years of purchase and the sales year 1973.

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[1] Tideman and Tucker, in Aaron ed. *Inflation and the Income Tax*, p. 54.

TABLE 1.—AVERAGE TAX OVERPAYMENTS AS PERCENTAGE OF TAX LIABILITIES FOR FIRMS WITH ASSETS OF AT LEAST $1,000,000 IN 1972, ASSUMING 10 PERCENT INFLATION[1]

Industry	10 percent inflation in one year		Steady-state overpayment, 10 percent inflation in every year
	1st-year overpayment	Discounted total overpayment[2]	
Mining	−15	4	7
Contract construction	−35	14	18
Food and related products	−18	17	21
Petroleum refining	−23	31	39
Chemicals, rubber	−12	19	22
Other nondurables	−16	19	23
Primary metals	−78	23	36
Fabricated metals, nonelectrical machinery	−10	18	20
Electrical equipment	−24	5	8
Transportation equipment	−11	15	17
Other durables	−10	21	25
Railroads	−374	134	233
Airlines	−374	45	92
Other transport	−73	1	9
Communication	−111	29	48
Electric, gas utilities	−198	6	48
Trade	−21	26	29
Finance, insurance, real estate	46	64	68
Services	−94	−23	−13
All nonfinancial industries	−37	18	25

[1] Overpayment is the excess of tax liabilities based on conventional income over tax liabilities based on inflation-corrected income. An overpayment greater than 100 percent indicates that the industry earned an inflation-corrected loss although it earned a conventional profit.

[2] Future overpayments resulting from 1 year's inflation were discounted at 5 percent in deriving the figures in this column

Source: U.S. Department of the Treasury, 1972 corporate tax model file. Tideman and Tucker, in Aaron ed. Inflation and Income Tax, p. 50.

The results, given in table 2, are striking. All taxpayers are estimated to have realized net nominal capital gains on corporate stock of $4.6 billion in 1973, distributed among eight adjusted gross income (AGI) classes as shown in the first line of the table. The estimated tax liability on these realized gains was $1.1 billion (line 3). If the same realized gains and losses had been taxed on a real, rather than a nominal money, basis, however, the net taxable amounts in each AGI class would have been those shown in the second line of the table. It is notable that net real losses would have been realized in each of the five AGI classes below $100,000 and by corporate shareholders as a group. In the aggregate a net real capital loss of $0.9 billion (line 2) was mismeasured in 1973 as a net nominal capital gain of $4.6 billion. The fourth line of the table shows the tax liabilities of each AGI class under a price-adjusted capital gains tax using the same rates and loss offset limitations that prevailed in 1973. Though shareholders in the bottom four AGI classes would have had negative tax liabilities of $0.1 billion, those in the other classes would have owed $0.8 billion, and a net capital gains tax revenue of $0.7 billion would have been generated.

The interpersonal inequities created by the taxation of nominal capital gains and losses under inflationary conditions are all too obvious. Moreover, since the excess of inflation-created tax liabilities can be avoided by postponing realization of capital gains and losses, the net effect is likely to be a significant increase in investor lock-in effects. That shareholders are sensitive to tax considerations, particularly in decisions to switch from one investment asset to another, is the message conveyed by two recent empirical studies by Feldstein, Slemrod and Yitzhaki.[2]

[2] Martin Feldstein and Shlomo Yitzaki, "The Effects of the Capital Gains Tax on the Selling and Switching of Common Stock," *Journal of Public Economics*, Vol. 9 (February 1978), pp. 17–36, and Feldstein, Slemrod and Yitzaki, *The Effects of Taxation on the Selling of Corporate Stock and the Realization of Capital Gains, National Bureau of Economic Research*, Working Paper 250 (June 1978).

TABLE 2.—CAPITAL GAINS AND ASSOCIATED TAX LIABILITIES

[In millions of dollars]

	Adjusted gross income class								
	Less than zero	Zero to $10,000	$10,000 to $20,000	$20,000 to $50,000	$50,000 to $100,000	$100,000 to $200,000	$200,000 to $500,000	More than $500,000	All
1. Nominal capital gains	86	77	21	369	719	942	1,135	1,280	4,629
2. Real capital gains	−15	−726	−895	−1,420	−255	437	839	1,125	−910
3. Tax on nominal capital gains	1	−5	23	80	159	215	291	374	1,138
4. Tax on real capital gains	0	−25	−34	−52	58	141	235	337	661

Note: All figures relate to capial gains on corporate stock sold in 1973.

Source: Martin Feldstein and Joel Slemrod, "Inflation and the Excess Taxation of Capital Gains on Corporate Stock," National Tax Journal, vol. 31 (June 1978), p. 109.

The tax distortions created by inflation threaten to impose some serious efficiency losses on the U.S. economy. The general nature of these effects is well known, but their quantitative dimensions are still highly uncertain. They include:

1. A reduction in the level of private saving and investment and hence in the Nation's rate of economic growth;

2. A diversion of resources from superior to inferior economic uses in response to the large tax burden differentials imposed on different sectors of the economy and on different industries;

3. A diversion of work effort from productive activities to the search for ways of minimizing the erratic and hard-to-predict effects of inflation on tax burdens; and

4. A discouragement of work effort undertaken in order to save for future consumption.

The potential effects on federal tax policy are equally disturbing. Unless inflation abates significantly in the near future, continued use of an unindexed income tax base risks serious loss of public confidence in the equity of the income tax, and perhaps even in the Government itself. Savers who are required to pay income taxes when they know that their real rates of return are negative are only one of the groups whose alienation from Government may be intensified.

One obvious result would be heightened pressures for reductions in income tax rates and for expanded exclusion from the tax base of those kinds of income, such as capital gains and interest receipts, that are most subject to inflationary distortions. Such ad hoc adjustments are not likely to improve the overall equity and efficiency of the federal income tax system, and if they were large enough they might well impair the ability of the federal government to finance its high priority programs.

An alternative set of policy initiatives would seek to reduce the relative importance of the income tax in the Federal tax structure. In the absence of base indexation inflation creates serious inequities and inefficiencies in the income tax that are absent from some of its major competitors. These more attractive sources of federal revenue include a self-assessed personal consumption, or expenditure, tax, a value-added tax, or even the payroll tax for social security. Failure to index the income tax, in short, both strengthens the case for adopting a Federal value-added tax and weakens the case for financing some part of social security benefits from the general fund.

Prominent among the economic changes of the past decade with substantial effects on the tax system has been the large drop in the rate of growth of worker productivity—from nearly 2½ percent a year in earlier decades to less than 1 percent a year in the seventies. This change raises a host of questions about the effects of taxes on incentives to work, to save, and to invest. Fundamental tax reforms once thought to be too drastic, or too complex, to be taken seriously have come to the forefront of policy discussion. Various ways of better integrating the corporation and individual income taxes, with their promise of stimulating growth by reducing excessive tax burden on corporate source income, have been explored and enacted abroad and were the subject of a 2-day conference of experts held at the Brookings Intitution in 1977.[3]

[3] Charles E. McLure, Jr., "Must Corporate Income Be Taxed Twice?" (Brookings Institution, 1979).

Both the 1972 Government Commission on Taxation in Sweden and the Meade Committee set up to study the structure of the tax system in the United Kingdom, which reported in mid-1977, recommended that serious consideration be given to a shift of direct taxation in those countries from an income to an expenditure (consumption) basis.[4] Among the major advantages of a progressive, personal expenditure tax discussed was its freedom both from inflationary distortions plaguing an income tax with an unindexed base and from the very large unneutralities among different sources of saving and kinds of investment that have been built into modern income taxes everywhere. The expenditure tax was also the subject of a 1978 Brookings conference of experts.[5]

While neither of these major tax reforms can be taken lightly, particularly in view of their continuing development abroad, their enactment would clearly be a difficult and complex undertaking. Viewed in this light, a comprehensive adjustment of the Federal income tax base for inflation seems less formidable than it otherwise would. If present rates of inflation continue, the change would greatly improve the equity and efficiency of the Federal tax system, and by basing tax burdens on realistic measures of income rather than erratic and illusory ones, it would clarify future discussions of federal tax policy. Unlike many of the tax changes that might well be enacted in the future in its absence, base indexation has a solid grounding in tax theory and conforms well to long-established principles of good tax design.

Representative HECKLER. I would like to hear now from Mr. Penner.

STATEMENT OF R. G. PENNER, RESIDENT SCHOLAR, AMERICAN ENTERPRISE INSTITUTE, WASHINGTON, D.C.

Mr. PENNER. I would like to thank the committee for this opportunity to testify. I believe the previous two speakers have adequately described the nature of the problem. I would like to take another look at some of its quantitative dimensions.

I agree with Professor Break that the most serious efficiency problem posed by the interaction of inflation and the tax system involves the measurement of taxable income or what I call the tax base problem in my prepared statement. Lawrence Summers and Martin Feldstein have carefully investigated the effects of inflation working through this measurement problem as it has affected the tax burden on the real return to capital used in the corporate sector.

This analysis considers inflation-induced distortions which emerge as corporate income, passing first through the corporate tax and then through the personal tax system in the form of dividends and capital gains.

They conclude that the effect of inflation with existing tax laws was to raise the 1977 tax burden by more than $32 billion. This extra tax raised the total effective tax rate from 43 percent to 66 percent of capital income.

My prepared statement goes on to question some of their assumptions; but no one can question the fact that a very serious problem exists and it's of immense quantitative importance.

While the increase in the effective tax rates caused by inflation represents a serious burden on corporate and individual savers, the sheer size of this burden may do less damage to economic efficiency than the fact that the burden varies greatly among different types of investment.

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[4] Seven-Olof Lodia, "Progressive Expenditure Tax—An Alternative?" A Report of the 1972 Government Commission on Taxation (Stockholm: LiberForlag, 1978); Institute for Fiscal Studies, "The Structure and Reform of Direct Taxation," Report of a Committee Chaired by Professor J. E. Meade (George Allen and Unwin, 1978).

[5] Joseph A. Pechman, ed. "The Expenditure Tax" (Brookings Institution), forthcoming.

Distortions created between the corporate and noncorporate sectors may be most important. In particular, inflation tends to increase the tax subsidy to owner-occupied housing in that the return to such an investment is not taxed while inflated mortgage interest rates can be deducted. At the same time, inflation is increasing the tax burden on the corporate sector and this combination may account for a large part of the recent boom in housing prices relative to the acute illness affecting stock prices.

While the interaction between inflation and the tax systems is creating grave problems for investment and, therefore, for economic efficiency, it is not a problem which yields to an easy solution. Any tax law that attempted to take account of all the tax problems raised by Mr. Summa and Mr. Break would be enormously complicated, and devastating politically when you had to tell homeowners they would no longer deduct the full inflated mortgage interest rate.

I was very impressed by the deliberations of the British Meade committee which, after tussling with the problem of adjusting capital income for inflation, threw up its collective hands and said, "Let's not tax the income from capital at all."

While you can make a very good case for not taxing the income from capital even in a noninflationary economy, it was mainly the problem of adjusting for inflation which led them to this conclusion.

Realistically, such a drastic reform is unlikely here or in the United Kingdom for that matter. I think that one is left with advocating very highly pragmatic and imperfect approaches to what is a very serious problem in the United States. Because the insufficiency of the depreciation allowances represents an important component of the problem, I do believe that we should move immediately to make existing depreciation allowances more generous.

The Jones-Conable bill, which shortens asset lives for tax purposes, has much appeal on the grounds of simplicity; but there are other possible variants on the same theme.

Many will argue that it is both inequitable and inefficient to ease depreciation allowances because of inflation while continuing to allow investors to deduct the nominal interest rate on debt from taxable profits. It is true that you would end up in a situation where various investments will be taxed differently. As a result, you would still have inefficiencies and inequities. It may be possible to find depreciation schemes that are somewhat more efficient than shortening lives as in Jones-Conable. Since I wrote the prepared statement, people have suggested to me that the provision of large initial allowances would be better. That may be true, but there are imperfections with any pragmatic solution. However, I am sure that we can find solutions that would improve on the very serious situation that we have today.

It also has to be admitted that just easing depreciation allowances still leaves the tax burden on capital subject to the whims of inflation. If inflation accelerates further, the burden will go up. If it falls, it is theoretically possible that a very generous depreciation allowance combined with investment tax credit can lead to a negative tax on certain kinds of new investments.

I would regard that as no more desirable than a positive tax; but what all of this means is that in an inflationary environment where

inflation is going up and down, you are forced to reexamine the tax system constantly.

To my knowledge, no country has adequately dealt with the problem of redefining the tax base to adjust for inflation. A number of countries have, however, dealt with the other problem that Professor Break mentioned, and that is the problem of the personal tax rate structure. Canada indexed their income tax structure almost perfectly.

In a perfectly indexed system, all exemptions, standard deductions, tax brackets, and other nominal dollar amounts in the system are increased each year at the same rate as some broad price index.

The lack of tax structure indexing in the United States has not been nearly as serious as the income measurement problem, because the Congress has provided periodic tax cuts to offset the effects of inflation. If they had not, the profits from inflation would have been enormous. In the United States, every percentage point increase in the inflation rate raises personal income tax revenues by roughly 1.6 percentage points. In other words, if we assume that inflation will be roughly 9 percent over the next year, and the tax law remains unchanged, the Treasury will, in 1980, collect about $12 billion more than they need to maintain the purchasing power value of their income tax receipts.

Although the Congress has roughly offset the effects of both inflation and real income growth, pushing people into higher brackets over the 10 years, 1967–77, the tax cut of 1979 was not sufficient to offset the inflation occurring since 1977; and, of course, the situation will worsen greatly if we don't have another tax cut before 1980.

But, although the Congress did a good job of de facto aggregate indexing in the long run and may resume this practice in the future, there are good reasons for favoring an explicitly indexed system. The de facto indexing which has occurred since the late sixties worked fine in the aggregate, but different taxpayers have been treated very differently.

Obviously, the Congress has the right to redistribute tax burdens any time it wants, but I would much prefer a regime in which this were done explicitly rather than letting inflation play a major role in the process.

If we had had a perfectly indexed system since the 1960's, I suspect the personal tax system would look very different from the one that has actually evolved.

The actual effect of the many tax cuts that we have had since the late sixties, when you combine it with the effects of inflation, has been to make the tax system very much more progressive over the period.

Lower income groups have been overindexed for the growth of money income while the upper middle class has been allowed to drift into higher and higher tax brackets.

In my prepared statement, I provide a numerical example to substantiate this point.

In order to get more progressivity in the tax system, it has been necessary to raise marginal rates almost throughout the system. Even the marginal rates at the very bottom have risen dramatically over the last 10 years.

It is, of course, marginal rates which are important in determining the quantity and quality of work effort, savings, the degree of tax avoidance, and tax evasion.

The Kennedy-Johnson tax cut of 1964 was considered a triumph of economic efficiency because it lowered marginal tax rates throughout the structure by anywhere from 14 to 30 percent. We still enjoy the benefits of the reduction at the very top where marginal rates were reduced from 91 to 70 percent, and at the bottom, where rates went from 20 to 14 percent; but it's interesting to notice that inflation has eroded the value of that tax cut for a wide range of taxpayers who are in the middle.

In table 1 of my prepared statement, I compare the rate structure on taxable income in 1963, before the Kennedy-Johnson cut, with the 1979 rates on the same levels of real income.

You can see that from a 1979 taxable income of roughly $12,500 to $150,000, the marginal rates are now higher than they were before that tax cut.

The table refers to taxable income, and that must be emphasized, because the relationship between taxable income and economic income has changed over the period. But those changes, if carefully documented, wouldn't change the basic conclusion that the vast majority of taxpayers in the middle now face higher marginal rates than before the Kennedy-Johnson tax rate.

Professor Break went into some of the nefarious consequences of high-marginal rates. I won't repeat them here; but my basic conclusion is that the economy has suffered because our personal income tax system has not been indexed. For completeness, I should note on the other side that inflation can actually increase the efficiency of some aspects of the tax law. For example, I think for both equity and efficiency reasons, it is important to tax unemployment insurance benefits. The 1979 act does tax those benefits on joint returns with incomes above $25,000. With inflation, more and more of those benefits will be taxed through time.

I cite an example like that to illustrate that inflation is not only a silent tax reformer but it's a very seductive one as well. There are a lot of inflation-induced reforms that I like; but again I think they should be made very explicit.

Very briefly, I would like to answer two arguments that you often hear against indexing. One is that with indexing we would lose some of the built-in stability provided by the tax system. This is an argument which depends on Keynesian theory which is under challenge more and more all the time. Even if you accept that theory, I don't think that it's a good argument in recent times. Unfortunately, we have recently been beleagured by high rates of inflation even after the economy has started to turn downward, and more important, it should be that a practical indexing system involves timelags. For example, in Canada, it is next year's tax rate structure that is affected by this year's inflation rate.

With that lag, the change is no more likely to be stabilizing than destabilizing. In fact, in Canada, indexing has turned out to be stabilizing, but that's pure accident.

It is also argued that indexing should be avoided because it would reduce the pain imposed by inflation on the ordinary voter and so make inflation more acceptable politically. Aside from the sadism implicit in the argument, I think it misses an important point.

Indexing might make inflation less painful for the voter, but it also makes it less profitable for political decisionmakers. They no longer have the inflation tax with which to provide pseudo-tax cuts or expanded programs. I think that might act as a more important curb on inflation than imposing more pain.

Thank you.

[The prepared statement of Mr. Penner follows:]

PREPARED STATEMENT OF R. G. PENNER*

Inflation and the Tax System

I would like to thank the Joint Economic Committee for this opportunity to testify. The opinions expressed in this testimony represent my own personal views and do not necessarily represent the views of the staff, advisory panels, officers or trustees of the American Enterprise Institute.

Economists were generally far too sanguine for far too long about the effects of moderate inflation. To the extent that inflation was unexpected, it was thought that its main effect was to redistribute income around the economy and that its effects on overall economic efficiency were minor. To the extent that inflation was predicted correctly, it was thought that markets and institutions would adjust and that people could protect themselves against it. Economists admitted a minor problem in that some cash has to be held to finance everyday transactions and inflation erodes the purchasing power value of that cash. But again, this was thought to represent a relatively minor inconvenience as long as hyper inflations were avoided.

As Arthur Okun has pointed out, such analysis ignored the profound effect of inflation in destroying the usefulness of the dollar as a measurement of purchasing power. Without this measuring rod everyday decisionmaking by consumers and businessmen tends to flounder. No one can forecast the inflation rate with confidence for the rest of this century and as a result no one knows how much has to be saved for purposes such as financing an adequate pension or a college education for one's children. Businessmen are also left with little idea of what the true return on various investments will turn out to be.

The psychological costs of this increase in uncertainty are enormous, but the efficiency of the economy is also affected as people attempt to hedge by investing in assets such as gold, paintings and real estate. Major efficiency costs are added because our regulatory institutions and tax system show great inertia and have simply not adjusted to the secular inflation of the post-Vietnam era. For example, financial regulation still forces small savers into passbook savings accounts which yield before-tax interest rates which are far below the inflation rate.

This testimony will focus on the inertia displayed by our tax system and the resulting impact on equity and economic efficiency. The tax system is affected by inflation in two ways. First, inflation distorts the traditional measures of the tax base, that is to say, the income or wealth concepts to which tax rates are applied. Second, inflation is constantly changing the real meaning of the tax rate structure. Basic exemptions, the standard deduction, the width of personal income, estate, and corporate tax brackets, and many other features of the tax structure are specified by law in terms of nominal dollars. In the absence of changes in the law, inflation constantly erodes their value in terms of purchasing power. The practical result is that taxpayers find themselves constantly pushed into higher and higher tax brackets.

Of the two problems, the distortion of the tax base does the most harm to economic efficiency, and it is also the most difficult problem to solve adequately. The Congress has mitigated the problems posed by the effects of inflation on the tax rate structure by providing a series of so-called "tax cuts" which have largely offset the tax increases caused by inflation since the late 1960's. However, the series of discretionary tax cuts has had very different effects on different parts of the tax rate structure and has created a number of problems which will be explored in detail later. But first, the more difficult problems posed by the distortion of the tax base merit extensive discussion.

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*Views expressed in this testimony are those of the author and do not necessarily reflect views of the staff, advisory panels, officers or trustees of the American Enterprise Institute.

The most serious problem involves the definition of the taxable return from capital. There are four major components to the problem. The first involves depreciation accounting. Our tax laws base the allowable depreciation deduction on the original cost of the investment. While the asset depreciation range (ADR) gives the investor considerable flexibility in choosing an assumed life for his equipment, this flexibility is not sufficient to offset the fact that the replacement cost of the capital being worn out far exceeds its original cost because of current and past inflation.

Second, our tax system taxes gains resulting from the increased value of inventory even though this gain may be entirely the result of inflation and need not reflect a positive real rate of return on the inventory investment, LIFO accounting systems mitigate this problem but do not solve it completely.

Third, although 1978 law reduced the capital gains tax on the appreciation of assets, the tax is still applied to nominal gains. Therefore, if the nominal value of an asset goes up by an amount equal to the inflation rate, a tax has to be paid when the asset is sold even though the real before-tax rate of return is zero. Small positive before-tax real returns can easily be converted to negative after-tax returns, or in other words, the true tax rate can easily exceed 100 percent.

Fourth, expected inflation raises nominal interest rates. Borrowers are allowed a deduction based on these inflated rates while lenders have to pay a tax on them. Suppose that the before-tax interest rate is 10 percent while inflation turns out to be 8 percent. If both borrower and lender are in a 50 percent bracket, the after-tax nominal rate is 5 percent, but adjusted for inflation, the borrower gains an amount equal to roughly 3 percent of the debt every year while the lender loses 3 percent, i.e., both experience negative after-tax real interest rates. If the borrower and lender are in different tax brackets, the after tax real returns can obviously differ. In a tax system which is perfectly adjusted for inflation, the borrower would only be allowed to deduct the real interest rate of about 2 percent while the lender would pay a tax on the same rate. Where they are both in the 50-percent bracket both would experience a real after-tax interest rate of about 1 percent.

Martin Feldstein and Lawrence Summers[1] have carefully investigated the effects of inflation on the tax burden on the real return to capital used in the corporate sector. The analysis considers inflation-induced distortions which emerge as corporate income passes through both the corporate and personal tax system. They conclude that "the effect of inflation with the existing tax laws was to raise the 1977 tax burden (on the nonfinancial corporate sector) by more than $32 billion. * * * This extra tax raised the total effective tax rate from 43 percent to 66 percent of capital income in the non-financial corporate sector."

Of course, any estimate of this type will be subject to some controversy, and some will question the precise nature of Feldstein and Summers' estimating techniques. However, none can question the fact that a very serious problem exists and it is of immense quantitative importance.

However, because the paper is so important, a number of points should be made about the exact estimates. In their analysis, the most important problem involves the depreciation deductions. In 1977, the Department of Commerce estimated the depreciation used for tax purposes fell short of true economic depreciation by $14.7 billion.[2] Feldstein and Summers argue, however, that when depreciation allowances were eased in the early 1950's and again with ADR in 1971, inflation was not considered to be an important issue, and the Congress' real intent was to ease the burden on the real return to investment by an amount equivalent to about $25 billion in 1977. They, therefore, add this amount to the $14.7 billion mentioned above to estimate that the true depreciation insufficiency was $39.7 billion. Given the difficulty of interpreting Congressional intent, it may be argued that the whole $25 billion should not be added to the depreciation insufficiency, but even if none of it is added, an important problem remains.

The Feldstein-Summers analysis also argues that the tax benefit arising from the ability of corporations to deduct nominal inflated interest rates was slightly more than offset by the tax penalty suffered by the holders of the debt since their

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[1] Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector," National Bureau of Economic Research, Working Paper No. 312. Cambridge, Massachusetts, January 1979.

[2] Subsequent revisions of the GNP accounts have lowered this number slightly to $12 billion. Unless otherwise noted, I shall use the same estimates used by Feldstein and Summers.

effective tax rate was slightly higher than the effective corporate rate. It is obviously important to take account of this offset when investigating the tax burden on the real return to investment as it flows from the ultimate lender to the ultimate user of the funds. But the fact that they estimate that the offset is almost perfect in the aggregate does not imply that the problem can be ignored in designing a perfect tax law. Different borrowers and lenders can be affected very differently depending on the rate of interest when the loan was made; on subsequent inflation rates; and on their respective tax brackets. On the other hand, perfect adjustments would require an enormously complicated tax law, and I shall have to return to this difficult problem later in the analysis.

The Revenue Act of 1978 mitigated the tax burden on returns to corporate capital somewhat by easing capital gains taxes and lowering corporate rates. Unfortunately, the desirable effects of these changes have probably been overwhelmed by the acceleration of inflation since that time. Between 1976 and 1977, the consumer price index rose only 6.7 percent. Between 1978 and 1979, it is very likely to rise by over 10 percent.

While the increase in effective tax rates caused by inflation represents a serious burden on corporate and individual savers, the sheer size of this burden may do less damage to economic efficiency than the fact that the burden varies greatly among different types of investment. Thus we may be misallocating our scarce capital stock in ways which greatly diminish society's real before-tax rate of return. Feldstein and Summers study two-digit manufacturing industries and note that "additional taxes in 1976 caused by historic cost depreciation and existing accounting practices * * * varied from less than 25 percent of actual taxes in a few industries to 100 percent of taxes paid in several others."

Though not investigated by Feldstein and Summers, the distortion created between the corporate and non-corporate sectors may be even more important. In particular, inflation tends to increase the tax subsidy to owner-occupied housing in that the return to such an investment is not taxed while inflated mortgage interest rates can be deducted. When this situation is compared to the increased corporate tax burden caused by inflation, I would suggest that tax factors account for a large part of the recent boom in housing prices relative to the acute illness afflicting stock prices.

While the interaction between inflation and the tax systems is creating grave problems for investment and, therefore, for economic efficiency, it is not a problem which yields to an easy solution. As has already been noted, any tax law which attempted to define capital income correctly would be enormously complicated, not to say politically devastating as home owners would have to be told that they could no longer deduct the full value of nominal interest rates. It is interesting to note that the Meade Committee, after tussling wih the problem of defining capital income in the United Kingdom, threw up its collective hands, and recommended that the income from capital should not be taxed at all. While excellent arguments can be made for taxing consumption rather than income even in a non-inflationary environment, it was primarily the problem of adjusting capital income for inflation which pushed the Committee to advocate consumption taxes for the United Kingdom.

Since such a drastic reform is unlikely here, or in the United Kingdom for that matter, one is left with advocating highly pragmatic and thus imperfect approaches to the problem in the United States. Because the insufficiency of depreciation allowances represents an important component of the problem, I believe that we should move immediately to make existing depreciation allowances more generous. The Jones-Conable Bill, which shortens asset lives assumed for tax purposes, has much appeal on the grounds of simplicity, but there are, of course, many other possible variants on the same theme.

Many will argue that it is both inequitable and inefficient to ease depreciation allowances because of inflation while continuing to allow investors to deduct the nominal interest rate on debt from taxable profits. Looking first at the efficiency issue, it is important to note that even with the enactment of something like Jones-Conable, capital income would, on average, still pay a substantial tax rate with current rates of inflation. In other words, we would still be far from a consumption-type system.[3] A consumption tax system can be attained in a number

[3] It is more difficult to say where we might stand relative to a true comprehensive income tax system. However, the many actions of the Congress to ease capital taxation suggest that this is not their goal.

of ways, one of which would go beyond Jones-Conable and allow the complete expensing of capital investments combined with a perfect integration of the corporate and personal tax system. (Under such a system, the investment tax credit would also have to be eliminated to avoid actually subsidizing savings at the expense of consumption.)

Even though the easing of depreciation allowances can be thought of as a step toward a consumption-type system, those who worry about efficiency still have a point in that it would affect different types of business investment differently and does not completely cure the misallocation of the capital stock. It is a well-known proposition in economic theory that partial steps toward a perfect tax system can actually leave the economy worse off. However, given the current overtaxation of capital income, it is hard to believe that a general reduction of capital taxes would not improve things. I would at least suggest that the burden of proof is on those who may argue the contrary point of view.

A pragmatic easing of depreciation allowances also still leaves the tax burden on capital subject to the whims of the inflation rate. If inflation should accelerate—and I certainly hope that it does not—tax burdens would again increase. With lower inflation, it is theoretically possible for generous depreciation allowances combined with the investment tax credit to result in after-tax returns being greater on some new investments than before-tax returns,[4] and this is no more desirable than the reverse situation. But all of this simply implies that the tax system must be constantly reexamined.

Because different investments are taxed differently, equity, as well as efficiency, considerations emerge. Some will argue that a particular inequity arises between borrowers and lenders when the deduction of inflated interest rates is allowed by the borrower while the lender pays taxes on the whole rate. It should be noted, however, that the entire benefit of more lenient depreciation does not stay with the borrower in this situation. Investment and borrowing will be increased thus putting upward pressure on nominal interest rates. After-tax real rates will rise for both the borrower and the lender, and the latter thus reaps a portion of the benefit of a bill such as Jones-Conable.

Summarizing to this point, the effect of inflation on the tax burden on capital is creating serious problems. These problems cannot be solved perfectly without creating a tax system which is inordinately complicated. I, therefore, conclude that it is desirable to resort to pragmatic adjustments to the system, and my first priority would be to ease depreciation allowances. It cannot be denied that serious equity and efficiency problems would remain, but it is hard to believe that they would be worse than those inherent under current law.

To my knowledge, no country has adequately dealt with the problem of redefining the tax base to adjust for inflation. A number of countries, have, however, dealt with the interaction of inflation and the tax rate structure by indexing their personal income tax system for inflation. For example, Canada has recently adopted a system which adjusts almost perfectly.

In a perfectly indexed system, all exemptions, standard deductions, tax brackets, and other nominal dollar amounts in the system are increased every year by the same percentage amount that some broad price index, such as our consumer price index, increases. As noted earlier, the lack of indexing in the United States has been offset to some extent by periodic "tax cuts", whereas in Canada, their Parliament tended to spend the "profit" which government derives from inflation. That profit can be enormous. In the U.S. system, every percentage point increase in the inflation rate raises personal income tax revenues by roughly 1.6 percentage points. In other words, if inflation is about 9 percent and the tax law remains unchanged between 1979 and 1980, the Treasury will collect about $12 billion more than is required to maintain the purchasing power value of its income tax receipts.

Although the Congress roughly offset the effect of both real growth and inflation pushing people into higher brackets between 1967 and 1977,[5] the tax cut of 1979 was not sufficient to offset the inflation occurring since 1977. The situation will worsen in 1980 if there is not another tax cut.

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[4] Even with current rates of inflation, this situation exists with a few tax shelter arrangements.

[5] The ratio of personal and nontax receipts to personal income was 11.1 percent in 1977 and 10.8 percent in 1967.

Even though Congress has done a good job of de facto aggregate indexing in the long run and may resume this practice in the future, there are good reasons favoring an explicitly indexed system. From the point of view of good public policy, there is something dishonest about elected officials claiming great credit for tax cuts which are not really tax cuts. Moreover, the de facto indexing which has occurred since the late 1960's worked fine in the aggregate, but different taxpayers have been treated very differently. Obviously, the Congress has the right to redistribute tax burdens any time it wishes, but it would be preferable to do this explicitly rather than letting inflation play a major role in the process. If we had had a perfectly indexed system since the late 1960's, I suspect that the personal tax system would be very different from that which actually evolved.

The nature of the actual changes can be illustrated by the following figures. Between 1967 and 1979, the consumer price index will have risen roughly 116 percent. Over the same period, the basic exemption rose from $600 to $1,000, or by about 67 percent. In other words, it eroded in real terms by 23 percent. On the other hand, the standard deduction, which was the lesser of 10 percent of income or $1,000 in 1967 became a flat $3,400 on joint returns in 1979. Thus, it rose by more than 50 percent in real terms, and this was of most benefit to the lower half of the income distribution. The basic tax rate structure remained unchanged for joint returns for the whole period 1967 through 1978, or in other words, the real value of the tax bracket widths was approximately halved over the period. In 1979, some brackets were combined, some marginal rates were reduced, but generally speaking, tax bracket widths were increased only by 6 percent—a minute adjustment given the inflation over the previous twelve years. The middle 1970's also saw the development of the earned income credit which is only relevant in 1979 to families with children having incomes less than $10,000.

The net result of all these changes combined with the effects of inflation was a tax system which became very much more progressive over the period. Lower income groups tended to be overindexed for the growth in money incomes while the upper middle class drifted into higher and higher tax brackets. For example, consider a relatively low income and an upper middle class family of four, each earning the same real before-tax income in 1967 and 1979. Suppose the low income family earned $4,000 in 1967 and its purchasing power equivalent $8,644 in 1979 while the upper middle class family earned $20,000 in 1967 and $43,220 in 1979. The low income family's average income rate went from a positive 4.3 percent in 1967 to a negative rate of 1.8 percent in 1979.[6] (The earned income credit was greater than the positive tax liability.) The upper middle class family went from a positive rate of 14.7 percent in 1967 to 19.4 percent in 1979.[7] The marginal rate rose from 15 to 26.5 percent for the low income family (12.5 percentage points are added by the phase-out of the earned income credit) and from 25 to 43 percent for the upper middle class family.

It is, of course, marginal rates which are important in determining the quantity and quality of work effort, savings, and the degree of tax avoidance and tax evasion. The Kennedy-Johnson tax cut of 1964 was considered a triumph for economic efficiency because it lowered marginal rates throughout the tax structure by 14 to 30 percent. While we still enjoy the benefits of the reduction of tax rates from 91 to 70 percent at the top of the income distribution and from 20 to 14 percent at the bottom, it is interesting to note that inflation has eroded the value of that cut for a wide range of taxpayers who are in the middle.

Table 1 compares the rate structure on taxable income in 1963 (before the Kennedy-Johnson cut) with the 1979 marginal rates on the same levels of real income.

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[6] Assumes standard deduction in both years.
[7] Assumes itemized deductions equal to 16 percent of income in both years.

TABLE 1.—A COMPARISON OF 1963 AND 1979 MARGINAL TAX RATES ON THE SAME REAL LEVEL OF TAXABLE INCOME

1963 tax brackets	1963 marginal rates	Equivalent 1979 income	1979 marginal rates
0 to $2,000	0.20	0 to $4,713	0.14–0.18
$2,000 to $4,000	.20	$4,713 to $9,426	.18–.21
$4,000 to $8,000	.22	$9,426 to $18,853	.21–.28
$8,000 to $12,000	.26	$18,853 to $28,279	.28–.37
$12,000 to $16,000	.30	$28,279 to $37,706	.37–.43
$16,000 to $20,000	.34	$37,706 to $47,132	.43–.49
$20,000 to $24,000	.38	$47,132 to $56,558	.49
$24,000 to $28,000	.43	$56,558 to $65,985	.49–.54
$28,000 to $32,000	.47	$65,985 to $75,411	.54
$32,000 to $36,000	.50	$75,411 to $84,838	.54–.59
$36,000 to $40,000	.53	$84,838 to $94,264	.59
$40,000 to $44,000	.56	$94,264 to $103,690	.59
$44,000 to $52,000	.59	$103,690 to $122,543	.59–.64
$52,000 to $64,000	.62	$122,543 to $150,822	.64
$64,000 to $76,000	.65	$150,822 to $179,100	.64–.68
$76,000 to $88,000	.69	$179,100 to $207,380	.68
$88,000 to $100,000	.72	$207,380 to $235,660	.68–.70
$100,000 to $120,000	.75	$235,660 and above	.70
$120,000 to $140,000	.78		
$140,000 to $160,000	.81		
$160,000 to $180,000	.84		
$180,000 to $200,000	.87		
$200,000 to $300,000	.89		
$300,000 to $400,000	.90		
$400,000 and above	.91		

From a 1979 taxable income of $12,500 to about $150,000, marginal tax rates are now higher than they were in 1963. It is of course, important to note that the table refers to taxable income. The relationship between taxable income and adjusted gross income (AGI) has changed over time as has the relationship between AGI and economic income. Different types of taxpayers have been affected differently by these changes, but making such adjustments for specific taxpayers would not change the overall conclusion, that is to say, over a wide range of 1979 incomes taxpayers face marginal rates which are higher than the rates prevailing before the tax cut of 1964. The 1969 Tax Reform Act did make one major improvement by lowering the maximum marginal rate on personal service to 50 percent, a rate which goes into effect on taxable income above $56,600.[5]

Some may argue that high marginal tax rates are unlikely to have a major impact on economic efficiency, because the empirical evidence that work effort or savings is affected is tenuous, to say the least. Furthermore, at high income levels, there are many opportunities for tax avoidance. However, I believe that such arguments miss some of the main effects of high marginal rates. At high income levels few actions are undertaken without assessing their tax consequences. Whether or not total effort or savings are affected, the direction of effort and the distribution of savings most certainly is. A person may be able to avoid the burden of paying taxes to the United States Treasury, but frequently at great cost. Investments may be made which pay low before-tax returns relative to risks and legal, accounting, and syndication fees are often enormous. In other words, one can often avoid the burden of actually paying taxes, but one cannot escape the burden of contending with the tax system. The costs of avoidance are frequently only marginally lower than the cost of paying taxes. Put another way, there is a large implicit tax which may not differ that much from the explicit tax which would be paid if the opportunities for avoidance did not exist. A reduction of marginal rates frequently would, by inducing the taxpayer into taxable activities, leave both the high-income taxpayer and U.S. Treasury better off while increasing the efficiency with which our productive resources are used.

It has been argued above that inflation has been a silent partner in raising the personal tax burden on the upper middle class in a way which probably would not have been politically possible if there had been no inflation. I believe that economic efficiency has suffered as a result. For completeness, I should note that inflation can also increase the efficiency of certain other aspects of the tax system. For example, I think it important, for both efficiency and equity reasons,

[5] In all of the above, taxable income has been defined to exclude the $3,400 "zero bracket amount", the new version of the standard deduction.

to tax unemployment benefits. The 1978 Act begins to tax those benefits on joint returns with income above $25,000. With inflation, a higher and higher proportion of unemployment benefits will be taxed through time. Inflation will also erode the real value of the $100,000 capital gains exemption on sales of owner occupied houses—an exemption which I happen to believe is bad tax law.

I cite these examples partly to illustrate that inflation is not only a silent tax reformer, but a very seductive one as well. It is very tempting to use inflation to reform the tax system where one likes the reforms, but to try to offset inflation-induced reforms where they are not so desirable. Therefore, the fact that everyone can find some inflation-induced reforms which he or she likes does not weaken the case for indexing. All reforms should be debated openly and indexing will bring this about. One might go further and say that reforms brought about silently by growing real incomes should also be countered by indexing the system to total compensation rather than to prices. It is hard to refute the logic of this case, but it is not nearly as quantitatively important as the argument that inflation should not be allowed to reform the system. I would therefore be quite satisfied with the first step of indexing the system to prices.

Two further arguments against indexing should be countered before concluding. It is often said that indexing would reduce the built-in stability provided by the tax system. In theory, the increase in taxes which results from inflation is supposed to reduce purchasing power thus countering the inflation which caused the tax increase in the first place. The argument obviously rests heavily on Keynesian theory—a theory which is being challenged more and more as time goes on. However, even if one accepts Keynesian theory in its simplest form, the argument has little merit. In recent years we have been beleaguered by high rates of inflation after the economy has started downward and the tax system has been as destabilizing in Keynesian terms as it has been stabilizing. More important, practical indexing systems involve time lags. It is, therefore, likely to be next year's tax structure which would be altered by this year's inflation. Even in the traditional Keynesian framework, the resulting "tax cut" is as likely to be stabilizing as it is to be destabilizing.

It is also argued that indexing should be avoided because it would reduce the pain imposed by inflation on the ordinary voter and so make inflation more acceptable politically. Aside from the sadism implicit in the argument, it misses an important point. Indexing might make inflation less painful for the voter, but it also makes it much less profitable for political decision makers. They no longer have the "inflation tax" with which to provide pseudo tax cuts or new or expanded programs. That may act as a more important curb on inflation than imposing slightly more pain on voters.

Representative HECKLER. Is it correct all three of the witnesses think we are to expect a continuation of inflation, and that is now such a given fact that we must alter our tax policy to face that assumption?

Mr. PENNER. I would sure like to make a different assumption, Congresswoman Heckler, but I am afraid that the fight against inflation is going to be a very long one.

That is why it is very important to do something now, especially about the problem of measuring income.

As I said, doing something about the depreciation problem is most important.

Representative HECKLER. Mr. Break, do you agree with that?

Mr. BREAK. I am afraid so.

Representative HECKLER. Inflation is a fact of life and the tax code has to be altered to deal with it?

Mr. BREAK. Well, I think it's well enough entrenched that we ought to think carefully about making these changes.

Now it will take some time to have this kind of policy discussion. It is possible by the time we have had it, we won't need it, which would please me very much.

For rates of 1 to 5 percent, I would think it's not worth talking about. For rates around 10, I think it is.

I think the prospect is for a long enough continuation of those rates that it's worthwhile to begin, because the longer we wait, the worse the problem will get.

Representative HECKLER. Mr. Summa.

Mr. SUMMA. I am afraid I agree with my fellow panelists. I would add that it does require inquiry. The accounting profession, just from the point of view of financial statements, has been discussing the question of effects of inflation for more years than I care to remember and has not come up with a solution.

It seems to me that part of the problem is that each time you come closer to a solution, someone suggests inflation is really abating and it isn't a serious problem.

I think it is a serious problem. I think I agree with Professor Break, however, that at low levels of inflation, you can mess the system up more than you can improve it.

Since that doesn't seem to be where we are now, I would think we should go forthrightly ahead and try to get a system in place. Then if it turns out that we don't need it, we would all be happy.

Representative HECKLER. Well, as we are discussing this question of the tax code today, and the impact of inflation on our tax laws, many of the committees of the Congress are discussing the same subject.

The Ways and Means Committee is discussing the President's proposal. This committee has had testimony in terms of a potential tax cut in this particular year.

While the administration, their spokesman, Mr. Blumenthal, stated that they were not in favor of the tax cut at this time, nonetheless it's a strong feeling of many Members of Congress that the proposals are going to be made.

Therefore, it will have the reality of a tax cut as one of the legislative issues in this Congress. It may also have the indexing of the tax itself as one of the issues, but not quite as advanced in terms of its support and its recognition.

I would like to know if it's the opinion of all of the witnesses that if you were simply to index individual income taxes and depreciation schedules, that we would have a better system than we presently have?

Mr. PENNER. Yes, I would agree that we would. I do think that indexing the depreciation schedules is a very complicated thing to do. That's why I do tend to favor a more pragmatic solution. But certainly, I think if you could do it, it would be a much better system.

Representative HECKLER. You want total indexing?

Mr. PENNER. Yes, to the extent that it is practical.

Representative HECKLER. I would expect to see a very generous increase in the depreciation allowance as one of the priorities of the Congress. I'm not sure the whole indexing would be acceptable politically at this time.

Mr. SUMMA. Could I comment on that, if I may?

Representative HECKLER. Yes.

Mr. SUMMA. I think there is no question but that a capital cost allowance system would be simpler and easier to put into effect. On the other hand, looking at it from the point of view of an accountant, the people who get the numbers together, I think it's fair to say that while an indexing system would be difficult to initiate, that once it was put

into place, the year-to-year adjustments would be really rather a simple matter.

To the extent that they were in fact tied into the underlying financial statements and underlying financial records of a company, they really wouldn't impose any particular burden at all.

I might also add that depreciation, by its very nature, not only in corporate form, but corporate and unincorporated business, is going to be determined and computed by people who do work with figures. Therefore, it will cause less concern about the minor complexities than might be true for an individual where you were trying to index medical expense allowances or something like that.

Representative HECKLER. Professor Break, in the book that you have coauthored with Joseph Pechman, "Federal Tax Reform: The Impossible Dream?", you indicate the tax burden imposed by inflation is heaviest at or near the exemption levels and that it declines as income rise. You, therefore, suggest that periodic adjustment of the exemptions, the credits, the low-income allowances would eliminate a major share of the tax hardship resulting from inflation.

Most of the indexing proposals in the Congress, on the other hand, suggest indexing the tax schedules and the brackets themselves. Are these proposals concentrating on the wrong thing?

Mr. BREAK. No. I think they are both important. I think if you look at the rate structure, there is a range where it's quite steeply progressive. Inflation has been moving more and more people into that steeply progressive range as they receive constant real incomes but rising money incomes.

I think that effect is occurring. So I think that indexation of those tax bracket amounts is important. An alternative thing to do would be to reduce the number of different tax brackets and just have maybe two, three, four broad brackets in which case you don't have to index them as often, because people don't move out of them so much.

Treasury Departments "Blueprints to Basic Tax Reform," which came out in 1977, recommended this solution, and the British tax system uses a very broad, ordinary tax rate bracket. There are reduced rates for people with lower incomes. Then there's a supertax at the top for the very rich.

That's not an unattractive kind of system in its own right, and it gets around some of these inflationary difficulties that we now have. Of course, Congress did reduce the number of brackets in the last session. I think that's important.

Representative HECKLER. That further simplification, I think, would be more acceptable and might be easier to advocate in terms of gaining support in the Congress.

Mr. BREAK. Yes.

Representative HECKLER. Rather than the total indexing.

Mr. Penner, you have made a statement in your testimony which suggests that tax factors account for a large part of the recent boom in housing prices relative to the acute illness afflicting stock prices.

In the absence of other evidence, one could explain this simply by a flight from paper assets to real assets. Do you have any other explanation of your diagnosis that the tax factors are to blame?

Mr. PENNER. I don't think that you can look at it as a flight from paper to real assets, because the paper issued in the stock market is a

claim on the ownership of real assets. Indeed, I am ashamed to admit that for that reason, in the early 1960's, I used to teach my students that the stock market would be a great hedge against inflation. [Laughter.] I believe that it has not turned out that way because of inflation's impact on tax burdens. Inflation, by eroding depreciation allowances, by exaggerating capital gains and inventory profits, and so on, has increased the tax burden on stock, and this has offset the fact that you are really buying a piece of real machinery when you buy the stock.

With regard to housing, as I said, it is the reverse. There is a tax subsidy in current law. That tax subsidy is greatly increased by inflation.

So, I think the proper way to put the problem is that the investor is facing a choice between two different real assets. On housing, inflation is giving him a bigger and bigger subsidy. On business capital, inflation is giving him a bigger and bigger tax, so naturally he chooses the asset which gets a growing subsidy.

Representative HECKLER. Well, it would seem to me that the fact of a housing allowance is the most sacrosanct aspect of the whole tax code; and if we are to tamper with anything, we would be least effective in changing that. We would have to change the whole system before we altered that particular item.

Mr. PENNER. I wouldn't dream of suggesting it.

Representative HECKLER. Mr. Penner, I would also like to have you explore in greater detail, expand on your statement in the record, on the significance of the marginal rates. You state that the marginal rates are important in determining the quantity and quality of work effort, savings, and the degree of tax avoidance and tax evasion.

Amplify that, please.

Mr. PENNER. Well, I think that it is clear that the higher marginal tax rates certainly reduce the reward from any extra effort. They reduce the reward from every extra dollar that is saved. There's great dispute among economists about the aggregate effects of this; that is to say, whether the total work effort or savings in the economy is affected significantly.

I think that dispute somewhat misses the point, if you are searching for the real inefficiencies caused by these high marginal rates.

They are certainly affecting the direction of work effort, and of savings. Martin Feldstein pointed out recently that even if total savings aren't affected at all by the tax system, the tax system imposes an inefficiency because it is still affecting the amounts that people can consume in the future from a given dollar of saving. That's the true inefficiency. It's how it affects your future consumption or your future bequests, if that's what you save for.

Turning to the kinds of distortions that result from high marginal rates. I was impressed, when I worked at HUD and OMB, and studied real estate tax shelters and railway car leasing shelters and other similar gimmicks, that while these arrangements allowed people to avoid taxes, they were incredibly costly. The lawyers' fees, syndication fees, Mr. Summa's fees, everybody's fees absorbed a large part of the tax saving. [Laughter.] Putting these things together imposed what I call an implicit tax in my testimony that was not that far

from what the explicit tax would be if the investor had chosen some bona fide taxable activity.

So it is my guess—I certainly can't prove this, but it is my guess that if you lowered all top rates, say had no rate in the system above 50 percent, Treasury would actually gain rather than lose revenue as people went into taxable activities and chose, in other words, to pay the U.S. Treasury instead of paying the great hordes of people that now arrange these tax shelters.

Representative HECKLER. Of course, then we would not get the income tax from those people. We would then be deprived of their earnings. Mr. Summa's future might be jeopardized by this.

Mr. SUMMA. If I might comment on that, actually they were not all my personal fees.

I think Mr. Penner makes a very sound point. That is that there's a great deal of human effort in this country which is not as productively employed as it might be in working around the tax law and trying to go to alternatives A, B, C, and D to get the best tax results where I would hope those people would earn equally fine incomes doing something that would be productive for the country.

I do share your feeling very strongly. I have seen many misapplications of our human intelligence to rediverting an effort to avoid the tax law, legitimately and properly but nevertheless not using it to further our productive capacity. Not using it to enhance investment in a broader sense.

Representative HECKLER. Professor Break, do you want to comment on this subject?

Mr. BREAK. Well, I agree with——

Representative HECKLER. Everything that's been said?

Mr. BREAK. That's a dangerous thing to say. Yes, I think I do. I think it's a very serious problem, this diversion of effort into nonproductive activities. I wish we had better measures of how big it really comes out to be.

We are going to try to measure the cost of regulation, I guess, on the economy; maybe we will eventually measure this. I gather the British system is much worse than ours and even they don't seem to have any very quantitative measures of it.

One thing brought out in the discussion of their system is the gap between the average and marginal rates that's really important for this disincentive effect. If they are close together, the average rate tends to have the opposite kind of effect on incentives from the marginal rate. The marginal rate discourages people from working. A high average rate sort of forces them, pushes them to work. If you have a system with a very broad gap between the two rates—the marginal rate very high and the average rate very low, you have difficulties in that income range.

The British system, and I think ours probably looks the same, has a high gap at the bottom of the income distribution because of all the income—indexed, welfare, food stamp, and medicare, medicaid programs; then it's narrower in the middle brackets and gets very wide at the top.

I think it would be good tax policy to try to narrow the marginal—average tax rate gap in both of these income ranges.

Mr. PENNER. I think few people realize how much we have raised the marginal tax rate at the bottom recently, mainly because of the way that the earned income credit phases out.

At around $9,000 of income now, a family of four contemplating earning an extra dollar will lose, 14 or 15 cents from the positive tax system; will lose 12.5 cents from the earned credit; will pay directly about 6 cents in payroll taxes; will probably live in a State where they pay another 2 or 3 percent in State income taxes. At what we consider to be relatively low income levels, you can have people losing 35 cents of every dollar just through our traditional tax system. As Professor Break noted, it's theoretically possible for a family like that to be on food stamps. There they could lose another 25 cents or so in food stamps and on and on.

Representative HECKLER. Do you think there is an awareness of this at that low-income level in our society?

Mr. PENNER. Well, I think there must be. Some say that people don't notice high marginal tax rates, but I can't believe that. In some cases you can go out to work and actually end up with less in after-tax income than before you were working. It strains my credulity to think they would not notice that they have actually been penalized for working.

Often, the effects of high marginal rates are subtle. I don't think that people just stop working, but if they are unemployed for a certain period of time and they are contemplating an array of job offers, and they do any calculation at all of what they are going to net after taxes, they may look for just the "right" job for another month or another few weeks. Something like that imposes significant upward pressure on the average unemployment rate.

I think the way these things work are very subtle. People don't calculate very precisely what their marginal tax rates are; but I think in a general way they just can't help but be affected by them.

Representative HECKLER. Since at least two of you have discussed the need for more incentive in the tax policy to promote productive effort, I wonder what your opinions would be of the most desirable shape that a windfall profits tax could take in order to achieve the greatest benefit for the country.

Mr. Summa, would you say that there should be a requirement that 75 percent of that tax be reinvested? Would you prefer a system in which there would be a requirement that 75 percent of very dollar be invested in exploration for new energy sources? Would that be a productive use of the tax?

Mr. SUMMA. Well, that is a somewhat different subject.

Representative HECKLER. It is, but we tend to veer off of the subject in this committee. [Laughter.] While I have you experts here, I want to use you in every way possible.

Mr. SUMMA. Some have suggested that that's not a profits tax but an excise tax. One could debate the effect of the tax in its present form. I think one could argue twofold. One that the profits, if they are left where they are generated, will be taxed anyway; and that presumably those companies have great needs for reinvestment, so perhaps nothing need be done.

On the other hand, I think if a tax is to be enacted, it would seem to me to be a great mistake if substantially all the revenue produced

by that tax were not used to produce or to explore to investigate and develop other sources or enhancing any sources of energy.

It seems to me it would be—I wouldn't want quite to call it a fraud on the American public, but it would be a distortion. The concern is an energy concern. The revenue, if it is to be produced, is going to be produced from an energy source.

It seems to me that ought to be the net use of it; 75 percent or more? I would say virtually all would be my own view.

That doesn't say that I think the windfall profits tax is a desirable tax.

Representative HECKLER. No; I just asked what would be the most desirable form of the tax.

Mr. SUMMA. Yes.

Representative HECKLER. I would like to hear your comments on any aspect of the windfall profits tax.

Mr. BREAK. That's a tough question. I think I would—there are two aspects—I have not tried to look at this tax seriously. One aspect that I would like to see studied is its effect on certain of the oil companies, on the rewards they are likely to get in the future if they do spend a lot of money exploring, developing new sources of supply.

I think high uncertainty is something one should try to avoid. It's not just the rate at which those profits from expanding supply would be taxed in the future; it is uncertainty about whether that rate is going to be—high, low, or whatever.

You might well be able to get away with a fairly high rate, as long as they knew what it was going to be and wasn't going to continually be pushed up as prices continue to rise.

I would worry about whether the present proposals do not create considerable uncertainty as to that. I still believe that expectation of high profits will induce people to work hard to get them.

Representative HECKLER. Do you think there should be a requirement for a plowback into energy exploration?

Mr. BREAK. Well, that I think raises the issue of would the money be better spent in the private sector developing conventional new sources or would it be better put in a different part of the private sector to develop synthetic fuels.

As far as I can tell, the synthetic fuel industry does need government help to get it going. The profit incentive probably is not yet powerful enough. Of course, the government holds down the profit incentive there by holding down the price of oil. You let that go up, you will create a strong incentive for the development of alternative sources; so the windfall profits tax operates there.

I guess I would come down nicely in the middle of using some of that money to be reinvested by the companies as they see best and maybe putting some of it into an organized program of developing synthetic alternative fuels.

Representative HECKLER. Mr. Penner.

Mr. PENNER. Well, it's probably as politically viable as me arguing that the mortgage rate deduction should be eliminated; but I would suggest that the best rate for the windfall profits tax would be zero. I really think we have been piling irrationality on top of irrationality in this whole energy situation. It is quite curious to me that in the rest of our tax law, we go to great lengths to avoid the taxation of wind-

falls, by allowing averaging; whereas in this instance, we think that a windfall should bear a penalty tax.

Sure, you can almost eliminate the burden by allowing plowback. Some proposals would in fact eliminate the tax on most firms by providing a 100-percent tax credit for any drilling investment. That would imply that such investment would be absolutely free to the firm. Certainly they would make a lot of investments, but as much as we need more energy, it's possible to overinvest in looking for it.

I am particularly worried about the vast expansion in the public sector that is going on here quietly as a result of recent energy proposals. This synthetic fuels effort could turn into an immense boondoggle.

The notion seems to be that the windfall profits tax that would finance it is somehow free money. But right off the top, it will greatly reduce the corporate tax burden on oil price increases and individual tax payments by oil company shareholders are reduced as well.

To the extent that the windfall wasn't taxed, of course, you would also have dividends and capital gains that the investors could use for productive purposes.

By using the windfall tax to subsidize the synthetic fuels industry, you really are expanding the public sector greatly. I was particularly struck by the fact that between the President's January budget and the midsession review that was released in the middle of July, OMB has increased their projection of outlays for 1984 by some $64 billion.

That is a lot of money. That $64 billion is comprised primarily of these energy proposals and health insurance. In fact, the projection has increased by over $100 billion when they shift to more realistic economic assumptions.

So we are talking about a very big change in the way this country does its business. If people insist on a windfall profits tax, I would not use it for plowback or synthetic fuels, but would instead use it for a general tax reduction. Some of these high marginal rates could be reduced.

Representative HECKLER. I'd like to return to the question of Canadian experiment. I think you, Mr. Penner, discussed that. Professor Break did as well. I want to know what are the relative benefits and drawbacks of such a system in the United States? Is it really applicable?

We are told that whatever Canada does in any field always works perfectly. I wonder, are there any areas in which there are serious dissimilarities between the two countries which would impact negatively on our taking their experience as a base for our future judgments? Let's take just the indexing question.

Mr. PENNER. I think that it was much more important for them to index in the first place than it is for us to do it, because their Parliament was tending to spend the whole inflation tax.

Representative HECKLER. I'm so glad you don't think that Congress is. That's the first recognition that I have ever heard.

Mr. PENNER. The Congress has, over the long haul, been very good about keeping the tax burden constant. The Congress has taken credit for a lot of tax cuts along the way that really weren't tax cuts, and I think you can criticize them for that. But in terms of keeping the tax

burden constant overall, they have done a pretty good job with that; whereas the Canadian Parliament did a dismal job.

While it was more important to index there, I see no reason why we could not adopt their system.

Representative HECKLER. Are there any drawbacks to their system that you know of, or to the adoption of the system here?

Mr. PENNER. Not that I know of. I have been disappointed in talking to Canadians that there is a great lack of understanding of the system amongst the populace. They really don't understand how it works; but otherwise, I have heard nothing bad about it whatsoever.

Representative HECKLER. Professor Break.

Mr. BREAK. Actually I think it probably goes the other way. They had problems when they did it that we wouldn't have in that they share automatically a significant portion of total income tax revenue with the Provinces. The provincial people were very upset about indexation, which they saw as reducing their revenues in the future automatically. They, I think, pretty much opposed it.

Nevertheless, they have it. We would not have that difficulty, because we don't distribute our money to State and local governments in that way. If we should ever move in that direction, it would complicate our ability to do it.

Representative HECKLER. Do they distribute defense funds?

Mr. BREAK. I think they just give a stated portion of the income tax revenue collected by the Federal Government. It goes to the Provinces automatically. They may have negotiated higher rates. I don't know.

I think that choice, the structural indexation, is really a choice between whether you think a set of automatically working rules will work better than letting Congress in its wisdom do maybe the same thing; and with the discretionary changes by Congress, each time you have them, you have an opportunity to change the progressivity of the system.

Mr. Penner said Congress, up to the last tax reform act, distributed those revenue losses very progressively, more to the low-middle than to the upper. The 1978 act, however, was not nearly so progressive as the preceding ones; which to me raises an interesting question. Is that change just a once-for-all aberration? Are we going to go back to reductions which are very progressively distributed? Or is the 1978 act setting a different mark, or goal?

It could be because the rate of inflation was higher in 1978 than in the preceding years; and I think inflation has a steeply progressive effect on its own, by itself.

So the tax system accentuates that. If that's right, the changes in an inflationary economy would continue to be less progressive each time Congress made them. I don't feel so strongly about whether structural indexation is a good thing or a bad thing. I think we could live without it, particularly if we reduced the number of nominal tax rate brackets in the law.

I do think base indexation is very important if inflation rates continue as high as they are now.

Mr. SUMMA. I would add, based on my experience, the administration of an index system such as the one in Canada really doesn't pose any great problems. People may not fully understand the concepts of it, but nevertheless it works out relatively easily in practice.

I do think, though, that I would say if our concern is the haphazard effect that inflation can have, then having an indexing system has to be better than asking Congress, with all the other things it has to do, to try to reexamine the tax law each time.

I don't think you can examine each of the provisions for the effects of inflation. You just can't do that often enough. So you are bound to get the unintended and haphazard results to which Mr. Penner referred. It seems to me the way you avoid that is to have an indexing system which automatically eliminates those effects caused by inflation and then obviously look at the other provisions to see what other things Congress wishes to do.

In terms of the objections by the Provinces in Canada, we don't have quite the same matter in the United States, although there are some jurisdictions that base income on Federal income; so that there is some tie-in. Many of us hoped that that would be a growing trend, because taxpayers have to file tax returns in many, many jurisdictions with a different set of rules in each jurisdiction.

They find that to be quite a burden. I would say the objections of the Provinces, or indeed the objections any States might raise, would be unfair objections. If you talk about a windfall profit, they are getting a windfall of revenue that isn't contemplated when you write the law, only because of inflation.

Again I think as Mr. Penner pointed out in his prepared statement, the effect of that is a heightened effect. For 10 percent inflation, the Government gets more than a 10-percent increase. It seems to me the objection is not a sound objection.

Representative HECKLER. I have not seen any figures on what the decrease in Federal revenue would be if we indexed the tax code. Would any of you have those figures?

Mr. PENNER. Well, I suggest that between 1979 and 1980 alone it would be $12 billion.

Representative HECKLER. That is what you said?

Mr. PENNER. I was assuming a 9-percent inflation rate.

Representative HECKLER. That would be lovely if only it were true. But I think it will probably be 14 percent very shortly.

Mr. PENNER. And the revenue loss accumulates, of course, the next year.

Representative HECKLER. Professor Break, have you had an opportunity to assess the impact of the capital gains tax changes, the Steiger amendment which we passed last year? Have you seen any data on that? Do you see any movement in the economy as a result of that?

Mr. BREAK. I think it's too early to tell. Feldstein has made two studies which I cite in my prepared statement. They do show that investors are quite sensitive to tax considerations when they are deciding to sell corporate stock, and particularly if they are considering switching from one type of investment to another.

Those computations, those empirical results suggest that the recent changes will have a significant effect. Now whether they are really going to raise capital gains tax revenues above what they were under the higher rates—which has been a long continuing debate among some of the experts—I don't think we've got definitive evidence on that yet.

The whole capital gains tax treatment picture is very worrisome to me. If we don't go to a constant dollar price adjusted measurement of gains and losses, I think we give the people who want to get rid of that tax altogether a pretty strong argument, that it's a very bad part of the present law. People who are really losing money on sales are being taxed on nominal positive gains.

I would much rather see the exclusion rate raised from what it is now and gains and losses computed in real terms and the loss offset limitations relaxed. That would appeal much more to me. I am afraid if we don't index, we are going to see the exclusion rate go up farther than it is now.

That part of the system will be eroded. That means we are moving to an expenditure tax basis. We are gradually reducing the tax burden on some kinds of saving.

Again I would much rather adopt a comprehensive expenditure tax and exempt all savings from the tax burden than to do it piecemeal and ad hoc—certain kinds this year, other kinds next year, and distorting the choices that savers have in the process.

Representative HECKLER. As you all know, in the Congress we have a growing sense of concern about the survival of small business. This is something that's often mentioned in discussions and in policy debates, et cetera.

Is there any aspect of the tax policy that you've discussed that would have a more beneficial impact on small business? Of course, it is very difficult to separate out small versus large corporations. Additionally, you have been addressing both personal needs and corporate policy. But if you were to counsel a small business on what it should propose to the Congress, is there any change that you would make that would be beneficial to that kind of an entity?

Mr. SUMMA. Well, I think, in general, the adjustment for inflation would be beneficial to a small business; and in some respects perhaps more so.

I think of things like the accumulated earnings tax. When I think of the fact that in many cases capital investment may represent a relatively larger portion of the budget of a small company, I think to that extent the general discussions we have had would be pertinent and perhaps more pertinent for them than for a large company. Other than that, I have no other comment to make.

Representative HECKLER. You have said, Mr. Summa, in your statement that you recommend an improvement in the depreciation allowance for all businesses; is that correct?

Mr. SUMMA. Yes.

Representative HECKLER. You refer to the Financial Accounting Standards Board proposal on financial reporting. I think that's a very complicated proposal, which, by its own terms would apply only to larger firms: Generally, firms whose assets exceed $1 billion. What about that?

Mr. SUMMA. That proposal. But the general concept of a constant dollar adjustment as I suggested earlier is one that I don't think is all that difficult to put into effect. I think it's one that could be made workable though and not simple, but certainly not unduly complex.

As I suggested earlier, while I think the initial adjustment—because it would be a new system—would pose some problems, I think it is

clear that annual adjustments thereafter would really be quite simple, unlike LIFO adjustments which are quite complicated and continue to be complicated.

The constant dollar adjustment, as Mr. Break suggested on a FIFO inventory, would be difficult at the outset but simple thereafter.

Representative HECKLER. Professor Break.

Mr. BREAK. I think one of the disadvantages that small businesses face is their access to capital markets. They have much less ready access than the big corporations. So, I would favor tax policies that tend to improve the functioning of these capital markets and make funds more readily available to small business, which would mean looking at the effects of capital gains taxes on decisions of investors to switch and put money into new business; maybe changes that would increase dividends by some integration of the corporate and individual taxes—that is, increasing dividends, making more money available in the hands of investors who might then put it into small new business rather than letting the big corporations keep it, in which case they may try to use it to merge, buy up, and so on.

Representative HECKLER. Mr. Penner, you are shaking your head—the great dissenter.

Mr. PENNER. I don't really feel that we should bend over backward to differentiate small business from big business. There are some very, very rich people who own small businesses. There are some poor people who own stock in A.T. & T. and GM and so on, but the important thing is to encourage enterprise of all types. I really do think that moving to a consumption type tax system has a great deal of appeal in this regard.

If we keep the income tax system, generally reducing the marginal tax rates and correcting tax bases for inflation, it would do very good things for small business and big business as well.

I just don't feel that you do have to differentiate between them.

Representative HECKLER. Does the American Enterprise Institute have any task force or division or subdivision or study group that looks at small business?

Mr. PENNER. Not really. We have, I think, a fascinating project going on which we call our mediating structures study. Clearly, people have been very dissatisfied recently with Government intervention in both our economic and social lives. The study, therefore, looks back at some of the traditional mediating structures that provided the bulk of both economic and social services in an earlier era. I mean institutions, such as the church and the family, and the small business institution gets into that as well. Other than that very fascinating study, we do not have anything on small business specifically.

Representative HECKLER. I certainly would like to see your very esteemed institution undertake some kind of a focus or study on small business, primarily because of the dispersion of the gains; when business thrives, and large business thrives, it certainly is good for the whole economy; but on Main Street in America, there are thousands, if not hundreds of thousands of small companies.

If we could find a way to see them prosper, then you disperse the benefits and do so at the grassroots level. I think that would have a very stimulating effect. I have often thought if we had a policy to allow small business to expand, we could ease our unemployment

crunch. It would be useful to have the benefit of the Institute's thinking on this.

Mr. PENNER. That's an interesting idea.

Representative HECKLER. I would like to ask the members of the staff if they have questions?

Mr. KRUMBHAAR. I have one question. The thrust of the testimony today, at least with respect to corporate taxation, seems to be that business needs some sort of tax relief with regard to the tax treatment of capital, revised depreciation, and so forth.

On the other hand, before coming to the hearing this morning, I trid to see if there was some relationship between corporate taxes and GNP that changed as inflation also changed. So I compared pretax profits and GNP; posttax profits and GNP; pretax profits and posttax profits.

I couldn't find any relationship between such factors as these that bore any relationship to the rates of inflation. In other words, as inflation went up, these ratios just seemed to be random. What should I have done? What did I do wrong?

Mr. PENNER. Just looking at it grossly like that, you are looking at the combined effects of an enormous number of variables, all working together. I'm not sure which components of the GNP you looked at. Some are not very reliable. I had to change my testimony at the last minute because of some major July revisions in the estimate of the depreciation insufficiencies. I am not clear exactly what is going on there; but, in general, I just don't think you can get at the problem that grossly.

I am very impresed by the results of the Feldstein-Summers study, that I cited, which suggests that the inflation tax burden in 1977, a year of about 7 percent inflation, was $32 billion.

That's a lot of money. I think you have to go at the question by trying to disentangle the tax factors from all of the others, as did Feldstein and Summers. That's always a very difficult thing to do.

Mr. KRUMBHAAR. Such as the business cycle?

Mr. PENNER. Yes; by the way, in the kind of thing that you were doing, one must note the secular decline in the relative importance of the corporate sector because more and more of our GNP is being produced by the service sector which tends to be less incorporated. You have that major trend going on while everything else is going on as well.

Representative HECKLER. I would like to apologize to the witnesses for the fact we have a vote in progress now on the House floor. I do appreciate your testimony very much. We very much appreciate your being available for the questions from our professional staff. Thank you.

Mr. BARTEL. I have just one question. Mr. Penner, you speak of the treatment of capital gains in the European countries, in the United Kingdom in particular. You made a reference to the Meade committee and indicated how the income and capital gains were treated.

How are capital gains themselves treated in the United Kingdom and other countries? Do people learn from their experience?

Mr. PENNER. Well, there are a great variety of treatments. Professor Break may correct me on this, but I think as a general rule, capital gains are treated more leniently in other countries.

In Canada, for example, the capital gains tax is a fairly recent phenomenon. Not only are capital gains treated differently in many countries, they are also defined differently. That is to say, some countries may treat capital gains much more leniently, but greatly broaden the definition of what they call ordinary income versus capital gains.

Mr. BREAK. I think that's right. I think there's a very strong English tradition that capital gains are not income at all, insofar as they are casual, infrequent.

Mr. PENNER. They are windfalls which should not be taxed.

Mr. BREAK. Yes; to the liberals in Canada and the United Kingdom it was a great step forward when they finally did enact a capital gains tax, which in both countries was quite recent.

In England, anybody who is in the business of making capital gains, that was ordinary income. They had this very rough distinction between, as you say, windfalls, which are not supposed to be taxed at all, which is the opposite of what most tax experts would want to do; they would want to tax the windfalls heavily and leave the ones that really were resulting from productive activity less heavily taxed. It's curious.

Probably the fact that capital gains are less heavily taxed elsewhere is not unrelated to the fact that inflation rates have been higher elsewhere than here until recently.

It's a tough business to try to bring those into the tax base if you don't adjust them for inflation.

Mr. Ross. We did a special study and heard testimony recently on the need to expand greatly investment in our productive facilities, that is, investment in the Keynesian sense.

Today Mr. Break and Mr. Penner both suggested our present tax system, in fact, puts strong disincentives in the way of investment. A couple of quick questions: Does this mean, then, that we are condemned to ever-declining productivity rates if the same disincentive structure stays in place? Does it mean that, in effect, the difference in needed investment between what we are getting and what we need will be taken up by Government investment? Is this a logical conclusion?

Mr. PENNER. My own view is that the most important thing to do is to get inflation under control so we wouldn't have to have discussions about adjusting the tax system to it. I have a few paragraphs at the beginning of my prepared statement which suggest the enormous harm done by inflation, even before you get to the problem of taxation.

The problems of adjusting our regulatory institutions, too, are just as serious as the problems of adjusting our tax system. So, the really desperate need in this country is to control inflation.

Even with the current tax system—which in my view taxes capital too heavily—but even with that system, I think that we could restore productivity growth, not to the levels of the sixties, but to a level for above the dismal record of the seventies, if we could get stable prices again.

Mr. Ross. But it does seem as though we put up a barrier. Inflation now exists at a rate of approximately 13 percent.

Mr. PENNER. Yes.

Mr. Ross. It's a fact of life. Now it seems that, based on your testimony, we can't go back to this benign noninflationary period unless we begin to invest or reinvest in our productive facility, but you said that there is, in fact, a disincentive to that, given the tax structure.

Mr. PENNER. Given the inflation, very certainly you should make adjustments to the tax structure to reduce the tax burden on capital. But I hope I did not leave the impression that that would cure inflation. If by some magic we could get the rate of productivity growth up from less than 2 percent per year in the seventies back to the 3 percent of the sixties—which we can't do, I think for all sorts of reasons—but even if we could, we are talking about relatively small increases in the supply of goods and services relative to the 14-percent inflation rate that we have today.

While the current inflation could be mitigated very slightly by restoring productivity growth, the basic cause is a money supply that's growing too fast and recent excesses in fiscal policy.

We have to use such macropolicies, in the long run, to cure the current 14-percent inflation rate.

I don't mean to say that micropolicies are irrelevant to inflation, but they are just not very quantitatively important relative to the kind of problem that we face today.

If anything can be read in my testimony that suggests I'm satisfied with the current inflation rate——

Mr. Ross. No. I am not implying that at all.

Mr. PENNER. I would hope not.

Mr. Ross. Professor Break.

Mr. BREAK. Well, I think, given the present inflationary expectations, there is a serious disincentive generated by the overtaxation of capital and property income, compared to wage and salary income, because of the failure to measure the base correctly; but the quantitative evidence on that is hard to come by.

As far as I know, there isn't yet very much. The National Bureau of Economic Research, I think, has a big study underway which may give us some answers sometime in the future, but we are operating with a pretty high degree of uncertainty. I just think it's a serious risk, that that is a major disincentive, not only to the total amount of investment, but to its distribution among sectors and industries.

That misallocation may be an even more serious problem than what has happened to the total amount of investment that we are making.

I would much prefer to see us try to index the income tax base rather than changing the depreciation allowances and investment tax credit and those other alternative incentives. I'd rather do the base. I would expect that to be stimulating to investment.

Then when we observed what happened there, we could see what we wanted to do further with depreciation allowances and the others. It's a much cleaner system if you measure income correctly to start with, and then see whether you need further incentives or not.

It's very hard now to find out what our tax system is doing. We don't know what the income of individual companies really is. It's badly mismeasured. I don't think Congress probably has a very clear idea of what the distribution of tax burdens in this society now is by some realistic measure of personal income.

Mr. Ross. This is the Special Study on Economic Change. We are looking into major changes in the U.S. economic circumstances in this post-World War II era. It looks as though you may have put your finger on it.

Mr. BRADFORD. I would like to ask, what is the more important consideration regarding the impact of tax changes: Resulting changes in the flow of the funds that come from it, or the after-tax rates of return?

Mr. PENNER. There's a long, long dispute in the economic literature about the effects of changing the cash flow versus the effects of changing the after-tax rate of return. I happen to be convinced by the after-tax rate of return people, but there's certainly a lot of arguments on the other side. However, I still think it is important to focus on the rate of return.

Mr. SUMMA. I think that would be the business approach, looking at alternative choices for investment or indeed whether to make an investment at all. I think that should be the focus.

I do believe going back to the earlier question, it would also be pertinent in terms of having what I would think would be not only a beneficial but a much needed effect in improving productivity. One of the things that's concerned me for a number of years—and I have refreshed my studies from time to time—is the competitive disadvantage with which our companies find themselves in dealing with competition from abroad.

Obviously there can be many, many factors. There are indeed many factors that affect productivity, including worker motivation and such; but one of the factors that we can do something about, I think, is the question of investment.

It's clear that just about anywhere in the free world an investment incentive of one sort or another, tax or nontax, has been far greater than it has been in the United States, I think it has shown itself in the results.

Mr. BRADFORD. Our JEC report has a strong emphasis on the supply side and the concern with after-tax rates of return.

Mr. KRUMBHAAR. I would like to ask a related question of Mr. Summa. It has always interested me that when we carry out debates—which are done in Washington on a somewhat abstract level sometimes—that we sometimes lose sight of how things are done in the real world. A debate about capital investment, for example, really relates specifically to individual business decisions on whether to build plant A or not to build and so forth.

In your prepared statement you stated, "Investment decisions are made on the basis of capital budgeting which measures the differences between expected revenues and cost with allowances made for the differences in timing."

Could you go into that in more detail and talk us through a typical investment decision?

Mr. SUMMA. Let me try. In trying to make an investment decision about a major capital expenditure, one would try to project revenue. One would try to project cost: not only capital cost but cost of operation; and one would present-value all those factors so as to see whether the investment made sense. I think more and more businesses do that on a fairly scientific basis.

The allowance made for difference in timing is the present-valuing of the revenue flow and the cost allocation, the depreciation and other costs of allocation over the period of useful life.

Obviously the very troublesome part of that which is affected by inflation is that when you are making those projections you don't know what the inflation rate will be and you don't know whether it will be even or uneven, your projections are unsound.

To the extent you don't project inflation, they are even more unsound, because you know that over the period of the life of the asset or the period of useful life of the expenditure, you will not in fact recover your costs.

I think the example Professor Break gave of a capital gain being not a capital gain, and Professor Penner's tables illustrate the same thing. They are completely applicable in the case of capital investment in machinery and equipment.

The net result is that the business is taxed on a nominal profit which is in fact either no profit or a loss. It's that kind of projection one tries to make.

Mr. KRUMBHAAR. Where the considerations of cash flow come into it are, if you have a large cash flow early in the life of the asset versus late in the life of the asset——

Mr. SUMMA. That minimizes the problems of inflation.

Mr. KRUMBHAAR. Exactly.

Mr. SUMMA. It doesn't solve it.

Mr. BRADFORD. Could I ask a question on that? With regard to cash flows, in your statement I believe you indicate accelerated depreciation has a larger impact on capital investment than corporate income tax reductions.

I would just like to ask a question that broadens that a little. For the lost impact on tax revenues, where do we get the greatest impact on investment—accelerated depreciation, corporate rate reductions, investment tax credit, capital gains removal or reduction, personal income tax cuts, or a combination? Where is the best investment for the dollar lost in revenue?

Mr. SUMMA. Well, I think that's a question on which reasonable men might differ. My own view would be that as I see businessmen make investment decisions, they would be most affected by something that they mentally linked; and that would be accelerated depreciation, investment credit, and inflation-adjusted depreciation as compared with the broader effects; but obviously a capital gain reduction has a beneficial effect on investment in a broader sense.

Obviously all the others have some effect. My answer would be that something tied more directly to the business decisions being made on a day-to-day basis would have a greater effect.

That's not based on a scientific study. That's based on my day-to-day experience with people making those decisions.

Mr. PENNER. I think it depends very much on the timeframe that you are using. Over the long run—and I mean 5 or 10 years—it probably doesn't make much difference. That is to say, any tax change that has an equal effect on the after-tax rate of return will probably bring forth an equal amount of investment. In the very short run, if you are looking just at the next year, I would certainly agree with Mr.

Summa that what you want to do is to concentrate your tax benefit on the marginal investment. The techniques for doing that are things like the investment tax credit or accelerated depreciation.

If you are interested in the first-year revenue loss alone—and I am not sure you should be, but if you are—then the investment tax credit has an advantage, because on a given piece of capital equipment, extra depreciation doesn't really cause a revenue loss in the long run. But it causes a big first year loss, because it just lowers taxes initially and increases them later on.

Or course, from the point of view of the economy as a whole, with investment growing along a trend, there will be a tax loss from extra depreciation in static terms over the long run.

But in dynamic terms, over the long run, if you are successful in actually increasing the rate of investment in the economy and therefore the rate of economic growth, you get the revenues back eventually.

Mr. BRADFORD. Could I ask just one question quickly of Professor Break? In your prepared statement, you have a table showing inflation tax losses. In light of Congresswoman Heckler's questions, her concerns for small business, I note that the greatest losses are in small business firms. That can mean that indexing will benefit them more than the larger firms?

Mr. BREAK. I don't think you can infer that from this table. This is the adjusted gross income class of corporate shareholders in the United States. The biggest loss does occur in the group zero to 10,000 AGI; but that may well be from investments in big corporations.

We can't tell what these—it would be interesting to try to answer your question, and it might be possible from the Treasury's file to do that; but this just says corporate shareholders with low adjusted gross incomes in fact had the largest real losses in 1973.

Now I would like to see more years than 1973 studied to test whether you can generalize these results to other years or not; but this table strongly suggests that the people with AGI above 100,000 are doing a lot better in their corporate investments than people under that. I would like to know why.

It raises lots of questions which I don't think that paper from which I took the table from answers either. You might like to talk to either Feldstein or Slemrod about that research. Not very much of this has been done. The 1973 data set is about the only one available on a large scale. That's why they used it.

So I don't think it tells us anything useful about small versus large business.

Mr. BRADFORD. Thank you.

Mr. KRUMBHAAR. Thank you very much. I think we developed a very good record in the hearing, both in and of itself, and for the Special Study on Economic Change in particular.

Thank you all very much for coming.

The committee is adjourned.

[Whereupon, at 12:15 p.m., the committee adjourned, subject to the call of the Chair.]

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