TAX POLICY AND CAPITAL FORMATION

HEARINGS

BEFORE THE

SUBCOMMITTEE ON FINANCIAL MARKETS

OF THE

COMMITTEE ON FINANCE UNITED STATES SENATE

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TAX POLICY AND CAPITAL FORMATION

WEDNESDAY, FEBRUARY 18, 1976

U.S. SENATE. SUBCOMMITTEE ON FINANCIAL MARKETS OF THE COMMITTEE ON FINANCE, Washington, D.C.

The Subcommittee met at 10:5 a.m., pursuant to notice in Room 2221, Dirksen Senate Office Building, Senator Lloyd Bentsen (chairman of the subcommittee) presiding. Present: Senators Bentsen and Brock.

Senator Bentsen. The hearings will come to order.

Senator Brock is very interested, as are other members of this committee, in this particular set of hearings on capital formation, but unfortunately he is at another hearing which I just left, and that is one of the problems we have in the United States Senate, too

many committees meeting at the same time.

I called these hearings today and tomorrow, along with Senator Brock, who is the ranking minority member of the Subcommittee to examine the future capital needs of the nation, and ways of stimulating investment in the economy. Capital formation is a major problem facing this country and an ongoing concern of the Financial Markets Subcommittee. This Subcommittee was one of the very first to begin to focus on this issue to try to develop interest and attention for it. Unfortunately, we have not had enough interest other than from those directly concerned.

I do not believe the importance of capital formation has yet permeated the American consciousness in terms of what it means in the way of jobs in this country. Right now we have 7.3 million Americans unemployed, and we have a million and a half new entrants into the job market every year. There is enough idle industrial capacity to provide jobs for some of these workers, but some of that idle industrial capacity is the least competitive. Some of the idle industrial capacity is that which has not been rejuvenated and has not had modern equipment put in. It is the least competitive.

If we want to get back to full employment within a reasonable amount of time. we are going to need a lot of new investment in

job-creating capacity, and we just are not getting it.

When I look at some of the modernized manufacturing capacity, shipbuilding capacity in some of these other countries around the world, and the minimum amount of disposable income that is being invested in manufacturing capacity in this country, I cannot help but have great concern.

I-have heard some people say what we really want to do is to become a service-oriented society. I do not agree. We sure do not have high-paying jobs there, and I do not believe we can take care of the balance of trade just taking in other people's washing, and I do not think we can keep up the defense capacity of this country just through service industries, which are necessary, but I do not think it can become, and it must not become the dominant economic force in this country.

I see forecast after forecast saying that manufacturing has become a decreasing part of the GNP. I think this poses serious threat to

longrun growth prospects of our country.

Americans want to live better than their parents, and surely better than their grandparents. That is what is exciting about this country of ours, a chance to step up and improve the quality of life.

My grandparents came to this country from Denmark at the turn of the century, and homesteaded in South Dakota. The first house they had, they had to dig it out of the ground.

Now, we hear people saying we have to settle for a lowering of

the standard of living, that we want no growth in this country.

When I find people who do not want growth, I usually find someone who has it made. They want to keep the status quo. They want

to retire behind the moat and draw up the drawbridge.

What do you say to the 7 million who are unemployed? What do you say to the great number of teenagers who listen to a commencement address that tells them to go out and work in the system? We do not shelve those people for three or four years. They go on welfare, unemployment compensation. They are along the streets at night looking for action, and some of them find it.

Back in the 1920s in England, they developed a generation such as that. That must not happen in this country, and that is, again,

the reason we have to have economic growth.

We have to continue to expand.

I can recall a story that was told about Lyndon Johnson when he was President. He was taking off in Air Force I from a Midwestern city, and as the plane turned and banked over that city one of the staff members looked out and saw rows of blockhouses, and he made some derogatory remark about those houses, about the sameness of them, about the oneness of them. That is all he saw.

But President Johnson saw something more than that. He looked that staffer in the eye and said, "Just remember this, for everyone who lives in those houses, that represents a step up, a step up from where they came." That is what we have to keep alive in this country.

We have witnesses this morning that I think can provide us new

evidence on our nation's investment policies and capital needs.

This morning, my Subcommittee on Economic Growth of the Joint Economic Committee released a study by Professor Kendrick of George Washington University, on capital growth, and Professor Kendrick is a witness here today. I would like to include a copy of this study in the Record following my opening remarks.

We have copies of Professor Kendrick's study here for the Press. Professor Kendrick has made a path-breaking attempt to account for the total investment made in our economy from 1929 to 1973, and

that includes both business investment in plant and equipment, as well as families and governments in education, skill-training, research and development, and in health.

I was very disturbed by his finding that the efficiency of the investment in our economy has fallen during the past decade, and I hope

we can look to ways of changing that.

We also have Michael Evans, of Chase Econometrics, Mr. Roger

Brinner, of Data Resources, Inc.

Finally, we want to hear from the businesses we count on to make these investments, from Mr. Charls Walker, Chairman of the American Council for Capital Formation.

Tomorrow, Alan Greenspan, Chairman of the Council of Economic

Advisors, will testify on our capital needs.

[Committee on Finance press release announcing these hearings and the study referred to by Senator Bentsen follow. Oral testimony continues on p 16.]

SENATOR LLOYD BENTSEN AND SENATOR BILL BROCK ANNOUNCE FINANCIAL MARKETS SURCOMMITTEE HEARINGS ON TAX POLICY AND CAPITAL FORMATION

Senator Lloyd Bentsen (D-Texas, Chairman of the Financial Markets Subcommittee, and Senator Bill Brock (R-Tenn.), the ranking Republican on the Subcommittee, announced that the panel will conduct hearings on February 18 and 19 to examine the importance of enacting a tax policy this year to help meet our Nation's growing capital needs, to create new jobs for our expanding labor force and to promote stable, noninflationary economic growth. The hearings will be held beginning at 10 A.M.—on both days in Room 2221, Dirksen Senate Office Building.

In announcing the hearings Senator Bentsen said, "Without the adoption of sound

In announcing the hearings Senator Bentsen said, "Without the adoption of sound tax programs, our economy will be unable to generate sufficient job opportunities for our growing work force and the American worker will be the loser. Without a tax policy that will help expand our nation's production of goods and services, shortages will develop in the years ahead and the American consumer will he the

loser.'

"We need economic and tax policies that will encourage industrial expansion and modernization, increase productivity and increase the quality of goods and services produced. This is essential to keep prices down for the American consumer. Increased productivity allows an employer to raise wages without raising prices to his customers. Stable economic growth that puts more goods on the shelf is our economy's best defense against inflation."

Adding to what Senator Bentsen said, Senator Brock stated, "Our economy faces a huge demand for new capital in the years ahead and only with sufficient savings and investment can we expect to meet that need, help curb inflation, and end the

recession."

The scheduled witnesses to date are:

February 18

Panel of economists consisting of.

Charls E. Walker, Chairman, American Council for Capital Formation

Michael Evans, President, Chase Econometrics, Inc.

Roger E. Brinner, Senior Economist, Data Resources, Inc.

John W. Kendrick, Professor, George Wasington University

February 19

Alan Greenspan, Chairman, Council of Economic Advisors

Sidney L. Jones, Assistant Secretary for Economic Policy, Department of Trea-

Alex Sheshunoff, President, Sheshunoff and Company, Inc.

Because of time pressures, the Subcommittee is not able at this time to hear all those persons it wished to have participate. However, those persons or institutions who wish to submit statements for the record are invited to do so.

Statements submitted for inclusion in the record should be typewritten, not more than 25 double-spaced pages in length, and mailed by February 28, 1976, to Michael Stern, Staff Director, Senate Committee on Finance, 2227 Dirksen Senate Office Building, Washington, D.C. 20510.

JOINT ECONOMIC COMMITTEE PRESS RELEASE

February 18, 1976

NEW STUDY SHOWS DECLINE IN EFFICIENCY OF NATION'S ECONOMY, WARNS OF INADEQUATE BUSINESS INVESTMENT—LEADING TO HIGHER PRICES AND FEWER JOBS IN THE FUTURE

The efficiency of the nation's economy has declined significantly during the last decade, according to a study released today by Senator Lloyd Bentsen (D-Texas). Chairman of the Joint Economic Committee's Subcommittee on Economic Growth. It now takes more investment in equipment and human skills to produce one dollar's worth of output than it did in 1966. The declining efficiency of new investment has reduced the nation's economic growth by almost 1 percentage point per year since 1966, according to the study, and has cost the nation about \$10 billion each year

The study attributes the reduced efficiency to a recent decline in expenditures for research and development, bottlenecks in certain basic industries caused by inadequate investment, restrictive economic policies that have held down production, and the

increased numbers of less-experienced younger workers entering the work force.
"Unless we reverse this downward trend in our nation's productivity, the result will be higher prices and fewer jobs in the future," Senator Bentsen said in releasing the study. "Much of the trouble has been due to a decline in business investment. This study presents good arguments for new investment incentives and a strong recovery

to boost business investment and prevent a slowdown of our nation's ability to grow."

The study, entitled "Economic Growth and Total Capital Formation," was prepared for the Subcommittee on Economic Growth by John W. Kendrick, Professor of Economics at the George Washington University and Senior Research Staff Member at the National Bureau of Economic Research. The study was financed by grants

from the National Science Foundation.

"The American economy is falling behind and we need new investment Policies to compete in the world and hold down prices at home," Bentsen said. "Last year, for the first time, per capita income in two European countries—Switzerland and Sweden—exceeded per capita income in the United States, and other countries are rapidly catching up."

"Kendrick's study provides one explanation of why this happened and how we can get our country back on the right track. Professor Kendrick recommends a variety of ways to stimulate new investment, and I have asked him to testify on this subject-along with CEA Chairman Alan Greenspan and others-before my Finance Committee Subcommittee on Financial Markets today, February 18, and tomorrow, February

"In recent decades the government of Great Britain has eroded the living standards of its people by failing to provide adequate investment incentives. I do not want to see this country go the way of Great Britain," Bentsen said.

The Kendrick findings were part of a pathbreaking study of total capital formation in the American economy from 1929 to 1973. Kendrick's study, and other findings, are available from the Joint Economic Committee, while supplies last.

A summary of the Kendrick study is attached.

- SUMMARY

This study is a pioneering attempt to measure total capital formation in the United States from 1929 to 1973. After adopting a much broader definition of capital than that used in the official national income accounts, Professor Kendrick develops new data on how much of our Gross National Product is devoted to capital formation; how much of our total investment is performed by businesses, how much by households, and how much by governments; how the productivity of our nation's capital has changed; and how our nation's investment has been divided between human investment and investment in plant and equipment. Finally, Kendrick looks at our current policies toward capital investment and recommends changes needed to restore the nation to its full growth potential.

In the study, Kendrick goes beyond the traditional idea of capital, defined as "structures, producers durable equipment, and business inventory accumulation," and adopts a much broader definition which includes not only business capital, but also "all current outlays which increase the nation's income- and output-producing capacity

in future periods.

Using Kendrick's broad definition, capital formation consists of (1) "outlays for all tangible durable goods (structures and equipment) and inventory accumulation-by all sectors, households and governments as well as businesses," (2) intangible invest-

ments to enhance efficiency, such as expenditures on research and development (R&D), education and training, health and safety, and worker mobility; and (3) tangible human investment, including the basic costs of child-rearing. Tangible investment, then, comprises all current expenditures which increase the amount of productive resources in the country, while intangible investment comprises all expenditures which increase

the productivity of tangible capital, and workers.

One of the most startling results of the Kendrick study is his finding that the American economy has been devoting a far greater proportion of its economic activity to new investment than had been previously suspected. When all types of investment are counted, almost 50 percent of the nation's gross output goes to investment, according to Kendrick. By contrast, only 18 percent of GNP is counted as investment under the current definition. Much of what has not previously been counted includes investment in education, health, R&D, mobility and childrearing.

The trend in investment as a percent of GNP, however, is a source of great concern to Kendrick. Between 1929 and 1966, the nation's investment grew from 43.1 percent of gross output to 50.5 percent. Since then, however, it has fallen to 48.5 percent in 1973. And the downtrend has probably been accelerated by the current recession. Kendrick holds that this fall-off of investment may seriously jeopardize the ability

of the nation to attain needed longrun growth.

The main cause of the downturn, according to Kendrick, has been a major shift in the nation's income since 1966 away from business and government to households. Businesses tend to invest much more of their incomes than other sectors. For example, in 1973, the business sector invested 128 percent of its disposable income, with the extra 28 percent obtained from borrowing. Government, by contrast, invested 46.5 percent and households invested 38.5 percent (household investment includes much for education, health, childrearing, etc.). Thus a shift in income from business and government to households reduces investment. And such a shift did occur—household income grew from 63 percent of GNP in 1966 to 69 percent in 1973. At the same time, the propensity of households to invest took a significant dive, falling from 42 percent of income in 1966 to 38.5 percent in 1973. The result was falling national investment. As Kendrick emphasizes: "Since business has the highest investment/income ratio (greater than unity), it is obvious that diversion of disposable income from business tends to reduce the national investment ratio." To restore investment in the nation, Kendrick urges measures to channel added disposable income to business, as disucssed below.

The composition of the nation's investment has also significantly changed over time. In 1929, 71.5 percent of total investment was tangible investment, and only 28.5 percent in such intangible investments as education, health, R&D, etc. By 1973, the ratios were 56.6 tangible and 43.4 intangible. The biggest growth came in education and training, which grew from 20.0 percent of total investment in 1929 to 30.9 percent in 1973. The effect of this, according to Kendrick, has been to make tangible investment much more productive, at least until recently—R&D makes new machinery more productive than old, and education and training makes workers more productive.

The shift from tangible to intangible investment has been accompanied by a shift from business to government investment. Kendrick's data on the sectoral compsition of capital show that business accounted for 30.6 percent of capital in 1929 and only 21.3 percent in 1973. By contrast, government doubled its contribution to total capital,

from 11.4 percent in 1929 to 23.2 percent in 1973.

Using the broad defintion of capital, Kendrick estimates the Gross National Wealth—the total value of the nation's capital—at \$15.6 trillion in 1973, almost 9 times the GNP for that year. By contrast, in 1929 the nation's wealth was \$1.2 trillion. When corrected for inflation, the nation's wealth tripled between 1929 and 1973.

One issue of major concern to Kendrick is that while the amount of capital needed to produce a dolfar's worth of output fell between 1929 and 1966, since then it has risen. In other words, the nation's capital stock in all its forms is becoming less productive. This declining productivity of total capital reduced the nation's growth rate by 0.6 percent between 1966 and 1973. Kendrick attributes this to a recent fall-off of R&D expenditures, bottlenecks in certain basic industries caused by inadequate investment, restrictive macroeconomic policies that have held down production, increased investment for environmental and occupational health and safety programs which add to cost but not output, and the influx in the 1960's of larger numbers of less-experienced younger workers.

To restore the historic increase in capital productivity and insure that sufficient investment is made to achieve the nation's longrun growth objectives, Kendrick makes a number of policy recommendations in his concluding section. In addition to urging increased R&D expenditures by government and new incentives for household saving and investment, Kendrick urges the following major changes to spur business investment:

In my view the most important policy objective which would both reverse the downward trend in the saving-investment ratio and improve the allocation and productivity of capital would be to increase the disposable (after tax) income of the business sector as a percentage of GNP, reversing the decline which began in 1966. Since the business sector consistently plows back all of its gross disposable income, and more, into investments, an increase in its relative income would obviously tend to increase the national assistance in the sector of the sector of the national assistance in the sector of the national assistance in the sector of the national assistance in the sector of the sector of the national assistance in the sector of the se obviously tend to increase the national saving-investment rate. The shortages of capacity encountered in 1973, the eventual capacity requirements of the current expansion, the continuing pressures for cost-reducing innovations, the further capital requirements of social programs, (EPA and OSHA in particular) and domestic energy programs all point to the desirability of a faster relative increase in business

One way to accomplish this objective would be the pursuit of monetary and fiscal policies during this economic expansion that would permit the restoration of higher rates of return than were permitted by the restrictive, anti-inflationary policies followed in the recoveries of 1967-69 and 1970-73. Possibly the adoption of a stronger incomes policy would be called for later in this expansion as an

alternative to a profit squeeze leading to contraction.

An alternative or supplement to the above policy would be a reduction in business income taxes. This could take one or more of several forms: An increase in the investment tax credit; a decrease in corporation income tax rates; further reduction or elimination of the double taxation of dividends; recognition of "inflation accounting," particularly the restatement of depreciation charges from historic book costs to current replacement costs, in calculation of business income subject to tax; and possibly the institution of a R&D tax credit of 10 to 20 percent, or possibly a larger credit on incremental R&D.

The study, prepared by Professor Kendrick for the Joint Economic Committee, was based on a book to be published this spring by the National Bureau of Economic Research, titled *The Formation and Stocks of Total Capital*. Professor Kendrick's basic research at NBER was supported by grants from the National Science Foundation. Copies of the Kendrick study for the Joint Economic Committee are available from the Committee while supplies last. (Study errata: Table 3, last column, the next to

last figure should read 56.2 rather than 46.2.)

ECONOMIC GROWTH AND TOTAL CAPITAL FORMATION

By John W. Kendrick*

Evaluation of the impact of the tax system, and changes in taxes, on economic growth and progress requires an understanding of the chief sources of economic growth. Broadly defined, capital formation, in all its many forms, is by far the most important

source of growth.

As traditionally measured in the official national income accounts, capital formation or "investment" comprises only the tangible, nonhuman categories of purchases of new structures, producers' durable equipment, and business inventory accumulation, plus net foreign investments. This narrow defintion was in line with Keynesian microeconomic theory, which highlighted business tangible investment as the chief independent variable involved in determining the level of national income and product. Certainly it is the most volatile form of investment over the business cycle, and is heavily

influenced by conditions in the financial markets

However, from the viewpoint of economic growth analysis, it is useful to define and measure net investment more broadly as comprising all current outlays that augment income- and output-producing capacity (capital) for future periods. Gross investment includes additionally the investment required to offset capital consumption (chiefly depreciation) reflecting the gradual wearing out and/or obsolescence of capital. Thus broadly defined, capital formation consists of outlays for all tangible goods (structures and equipment) plus inventory accumulation of all sectors, households and governments as well as business, and of intangible investments designed to enhance the efficiency of the tangible factors. The intangibles comprise outlays for research and development (R. & D.), education and training, health and safety, and mobility. Also, for the sake of logical consistency, one may also include tangible human investment, defined as the cost of rearing children to working age, which parallels the cost of the brick, mortar, and machines that comprise the tangible nonhuman fixed capital. The intangi-

Professor economics, George Washington University, and senior research staff member, National Bureau of Economic Research.

bles are generally embodied in the human and nonhuman capital, increasing the produc-

tivity of the physical constituents.

The importance for analysis of looking at all forms of investment is that they all compete for the finite savings of the community; and that to promote the optimum allocation of resources, investments in each type should be carried to the point where the expected rate of return equals the marginal cost of funds. Even though we recognize that human investments, in particular, are undertaken for noneconomic as well as for economic reasons, in varying degree, it is nevertheless useful to have estimates of all forms of investment in devising policies to influence economic growth. At least rough allowance can be made for the nonpecuniary as well as the monetary returns to human investment in attempting to formulate growth strategies.

Since the U.S. national income and product accounts do not identify, or provide estimates for many of the categories of "total investment" as defined above, I undertook the preparation of estimates of such investments, together with the associated capital stocks, in a study soon to be published by the National Bureau of Economic Research. For this paper, I have updated the gross investment estimates, by type and sector, through 1973. In the following section, I summarize briefly the chief findings of the

study.

GROSS INVESTMENTS IN RELATION TO GNP

In table 1 the ration of gross saving and investment, as conventionally defined, to GNP is shown for selected business cycle peak years, 1929-73. The ratio of the current dollar magnitudes has been relatively stable at around one-sixth. In constant prices, the ratio was higher in 1929 and 1948 than in more recent years.

TABLE 1.-INVESTMENT IN RELATION TO GROSS NATIONAL PRODUCT

	Gross national product		Gross private domestic invest- ment plus net foreign investment	Ratio (2)+(1) (percent)
	(1)	(2)		
Billions of current dollars:	103. 1	17.0	16. 5	
1948	257. 6	47.9	18.6	
1957 1966	716 6	71. 2 - 123. 9	16. 1 16. 5	
1969 1973	930. 3 1, 294. 9	137. 9 209. 4	14. 8 16. 2	
Billions of 1958 dollars:	_			
1929	221 7	42, 0 62, 8	20. 6 19. 4	
1948 1957	176 7	72.3	16.0	
1966	658. 1	111,4	16. 9	
1969 1973	725. 6 839. 2	109. 7 138. 2	- 15. 1 16. 5	

Source: Bureau of Economic Analysis, U.S. Department of Commerce.

In comparing estimates of the saving and investment concept expanded to include nonbusiness tangible capital outlays, and intangible investments of all sectors, it is necessary to adjust the official GNP estimates for comparability. We make no attempt here, however, to enlarge the estimates generally to include all imputations for nonmarket activities and other adjustments sometimes advocated to produce a better welfare-oriented measure. Rather, we adjust the official GNP estimates only for the several items necessary to obtain consistency with the expanded investment estimates. As shown in table 2, these comprise the imputed rentals on nonbusiness capital stocks, investments charged to current expense by business, and imputed compensation of students and the frictionally unemployed which is included as part of human investment. It will be observed that the adjustments to GNP rose gradually from 24 percent in 1929 and 27 percent in 1948, to around 34 percent in 1969 and 35½ percent in 1973. In constant prices, the upward trend was less marked, and levelled out at around 32 percent in both 1969 and 1973.

¹ John W. Kendrick, *The Formation and Stocks of Total Capital* (New York: National Bureau of Economic Research, in press). This volume and the subsequent research by the author at NBER have been supported by grants from the National Science Foundation.

TABLE 2.—ADJUSTMENTS OF COMMERCE DEPARTMENT ESTIMATES OF GNP FOR CONSISTENCY WITH TOTAL INVESTMENT AND CAPITAL ESTIMATES

[In billions of dollars]

	1969	1973
Current dollars:		
GNP, commerce concept	1 929 . 1	1, 294. 9
Plus: Personal sector imputations: Student compensation Frictional unemployment Rentals on household capital Kentals on institutional capital Business: Investments charged to current account:	92. 3 16. 0 100. 1 5. 7	148. 1 24. 1 138. 5 8. 5
langible	2. 3 35. 4 67. 0	3.3 45.6
General governments: Imputed rentals on public capital Equals: Adjusted GNP.	1. 247. 9	1. 754 3
Ratio to Commerce GNP.	1, 343	1. 355
Constant 19:8 dollars: Commerce GNP	724. 7 957. 2 1. 321	, 839. 2 1, 104. 5 1, 316

¹ The Commerce Department estimate of GNP for 1969 was subsequently revised slightly upward from the number shown here which is consistent with the adjusted GNP series for the period 1929-69 presented in John W. Kendrick, "The Formation and Stocks of Total Capital." (New York: National Bureau of Economic Research, forthcoming 1976.)

Even in relation to a significantly larger GNP, as adjusted, total gross investment was a much larger proportion that conventional investment—around half by the latter 1960's, as compared with one-sixth by the conventional measures. And even though adjusted GNP rose somewhat relative to the official numbers, the ratio of total gross investment to adjusted GNP rose significantly between 1948 and the latter 1960's. The proportion in 1948 (as in 1929) was close to 43 percent; by 1966 it reached 50.5 percent. Significantly, the ratio receded thereafter to 49.5 percent in 1969 and 48.5 percent in 1973. (See table 3.)

The ratios of total *net* investment to NNP were only about half the gross ratios in 1929 and 1948, but thereafter showed an even sharper relative increase—from 21.4 in 1948 to 29.7 in 1969. (We have not extended these estimates to 1973.) In constant prices, the rise in the total investment proportion was somewhat less marked, since the implicit price deflators for gross investment rose more than those for adjusted GNP. On the real basis, the proportion increased from 44, percent in 1948 to 49½ percent in 1966, and leveled out thereafter, according to our preliminary estimates. As noted below, the leveling out in the real investment ratio, and drop in the current dollar ratio, was associated with a deceleration in the rate of growth in total capital after 1966, which was one factor in the subsequent slowdown in growth of real product and productivity.

COMPOSITION OF INVESTMENT BY TYPE (TABLE 3)

All of the increase in the ratio of gross investment to adjusted GNP was due to the relative increase of intangible investments from about 12 percent to 21 percent in 1973. The increase was steady, with exception of the last subperiod, when the intangible investment ratio dropped slightly. The tangible, nonhuman investment ratio showed no pronounced trend, accounting for a bit over 23 percent of adjusted GNP in 1929, 1948 and 1973. Tangible human investments in rearing, after dropping from 7.7 percent in 1929 to about 5½ percent in the mid 1940's, rose relatively to over 6 percent in the latter 1950's. Since then a steady relative decline, reflecting the declining birth rate brought the ratio down to 4.3 in 1973. Presumably, the decline is continuing, releasing funds for other types of investment as well as for consumption (since rearing costs not only reduce family savings, but also have an abstinence effect).

See Kendrick, ibid., Table 3-3.

TABLE 3.-TOTAL GROSS INVESTMENT, BY TYPE U.S. DOMESTIC ECONOMY

[in billions of dollars and percentages; selected years]

			int	angible inves	lments		
	Grand total	Total	Education and training	Health and safety	Mobility	R. & D.	Tangitles lota
Billions of current			***************************************	and the second s			
dollars:	55.0	15.7	11.0	1.9	2.5	0. 3	39. 2
1948 1951	139. 9 272. 0	45.0 92.7	31. 0 61. 4	1.9 5.2 10.6	2. 5 6. 6 10. 5	2. 4 10. 3	94. 9
1966	495. 8	198. 1	137.4	21.4	17.0	22. 3	179. 2 297. 7
1969 1973	611.7 851.0	267. 8 369. 6	192. 4 262. 6	27.9	? 1. 3	26. 2	344. 0
Percent distribution of	00U	307. 0	202.0	45. 9	31 0	30. 1	481.4
total gross investment:							
1929 1948	1 43. 1 1 42. 7	28. 5 32. 1	20. 0 22. 0	3. 5	4 6	. 5	71.5
1957	47.6	34.0	22.5	3. 7 4. 0	4. Ž 3. 8	1.6 3.8 4.5	67. 9 66. 0
1966	1 SC. 5	40.0	27. 7	4. 3	3. 4	4.5	60.0
1969. 1973.	! 49 . 0	43.8	31.5	4. 6 5. 4	3. 5 3. 6	4. 3 3. 5	46. 2
1373	1 48. 5	43. 4	30. 9	5. 4	3. 6	3. 5	56. 6

¹ Percent of adjusted GNP.

Within the intangible category the sharpest proportionate increase was in R. & D. outlays up to the mid-1960's, but then the ratio to adjusted GNP dropped from 2.3 percent in 1966 to 1.7 percent in 1973. This decline has been cited as one explanation for the productivity slowdown (and has prompted proposals for a R. & D. tax credit).

Outlays for education and training the largest type of intangible investment grew steadily from less than 9 percent of adjusted GNP in 1929 to more than 15 percent in 1969, but then declined a bit between 1969 and 1973. Health and safety outlays rose relatively over the entire period, from 1.5 percent in 1929 to 2.6 percent in 1973. Mobility outlays did not quite keep pace with GNP sagging from 2.0 percent in 1929 and 1948 to 1.8 percent in 1973.

SECTORAL COMPOSITION

With regard to the sector composition of gross investment, all of the net increase in the ratio to adjusted GNP came in the public sector. The Government investment ratio peaked in 1953 at 11.5 percent, however, and therafter sagged, particularly in the 1969-73 subperiod. After 1953, both business and personal investment strengthened somehwat relatively, although the business investment ratio fell from a peak of 12.8 percent in 1966 to 11.8 percent in 1969. The personal investment ratio has held quite steady at around 26½ percent in the 1966-73 period, close to the 1929 ratio.

Changes in the ratio of gross investment to GNP for each sector can be better

Changes in the ratio of gross investment to GNP for each sector can be better understood by looking first at the ratio of the sectoral disposable income to GNP, and then at the proportion of that income devoted to investment. (See table 4.) Thus, it is apparent that the increase in public investment as a proportion of GNP was due chiefly to the relative increase in public revenues. While the government take from GNP more than doubled, the proportion of public revenue channeled into investment rose modestly from 44.3 percent in 1929 to 46.5 percent in 1973. It will also be osberved that the Government share of gross product (income) rounded out in the latter 1960's and the drop in the public investment ratio 1969-73 was due to the declining government income share reinforced by a mild decline in the ratio of public investment to revenues.

TABLE 4.--TOTAL GROSS INVESTMENT, BY DOMESTIC SECTOR, IN RELATION TO GROSS PRODUCT AND SECTORAL DISPOSABLE INCOME

[Percentages, selected peak years, 1929-73]

	1929	1948	1957	1966	1969	1973
Persons:						
DI/GNP	78. 8 33. 2	70. 4 35. 2	68. 5 37. 3	63. 0 41. 9 26. 4	27. 0 39. 4 26. 5	13.8 18.5 25.5
lay./01	33. 2	35. 2	37. 3	41.9	39. 4	'3 5
Inv. GNP	26. l	24. 8	25. 5	26. 4	26. 5	2S. 5
Business:						
DI/GNP.	10.0	10.2	10.1	12.5	9. 5	9. 3
Inv./DI	124. 4	123.8	109.5	12. 5 102. 4	123.9	9.3 128.0 11.9
Inv /GNP	12.4	12.6	11.1	12.8	11.8	11.9
Governments:	••••				••••	****
DI/GNP	10.4	18.7	20.9	24. 2	23.4	21.7
Inv. OI	44.3	28 6	20. 9 52. 2	46. 3	23. 4 48. 1	21. 7 46. 5
lay.GRP	4.6	18. 7 28. 6 5. 2	10. 9	24. 2 46. 3 11. 2	ii. 3	10. 1

Notes: DI = Disposable income of each sector equals gross income earned from current production plus transfers (including taxes, in the case of governments) received from other sectors less transfer (and tax) payments. Inv. = Total gross investment, both tangible and intangible, of each sector. GNP = Sum of disposable income of each sector (including rest-of-the-world, not shown here) plus the statistical discrepancy between income and product.

Conversely, the share of the personal sector in gross national product declined over much of the period, as a result of increases in personal tax rates. But the proportion of disposable personal income devoted to investment rose, so that the ratio of gross investment to gross product remained relatively stable. It should be noticed, however, that these tendencies were reversed after 1966, when the share of personal income in GNP rose, but the proportion of income devoted to investment fell, resulting in continuing stability of the investment/GNP ratio.

Business disposable income (cash flow) was 9.3 percent of GNP in 1973, a bit lower than the 10 percent of 1929. But the ratio gross investment to income was 128 percent, somewhat higher than in 1929. Consequently, the investment/product ratio in 1973 was only slightly below the 1929 figure. The business share of gross product was highest in 1966. The sharp drop between 1966 and 1969 was partially offset by a significant rise in the investment/income ratio, but declining relative income was nevertheless responsible for a percentage point drop in the ratio of gross business investment to GNP.

Although business was a net borrower throughout the period, usually investing about one-quarter more than its internally generated funds, even in good years, the other two domestic sectors were net savers. Saving exceeded investment, as defined here, by more than 2 percent of disposable income, on average, in the personal sector, and by an average of over 3 percent in the public sector. It will be remembered that in our study we sharply separate current and capital accounts, so that saving represents the difference between a sector's disposable income (including imputations) and its current outlays. In this view, whereas the public sector has generally been a borrower, on net balance, the borrowing has been less than public investment in most years, indicating net saving on current account.

Before leaving the topic of investments, the importance of sectoral shifts should be pointed up. Thus, given the often-overlooked fact that governments invest a higher proportion of their disposable incomes than persons, the relative shift of gross income and product from persons to governments between 1929 and 1966 contributed to the rising national total saving-investment ratio. It also contributed to the faster increase in intangible than in tangible investment, since a much higher proportion of public than of private sector investment is devoted to intangible outlays than enhance productive efficiency. Since 1966, however, the reverse shift of income back to the personal sector played a role in the declining national saving-investment ratio, accentuated by a reduction in the investment/income ratio of persons. The relative decline in total gross investment also reflected a drop in the business income/product ratio, particularly between 1966 and 1969. Since business has the highest investment/income ratio (greater than unity), it is obvious that diversion of disposable income from business tends to reduce the national investment ratio.

GROSS CAPITAL STOCKS IN RELATION TO GNP

As a result of the high and rising (until 1966) rate of saving and investment, plus inflation, the current value of the total gross capital stock increased from about \$1.2

trillion in 1929 to 15.6 trillion in 1973, an average annual rate of increase of 6.0 percent. The growth rate of adjusted GNP was 6.1 percent, so the capital coefficient showed a slight net decline from 9.4 in 1929 to 8.9 in 1973. (See table 5.) Conversely, the ratio of product (income) to total capital increased on balance from 10.6 percent in 1929 to 11.2 percent in 1973. With some adjustments to convert product to factor income this relation can be used to calculate the rates of return on capital, which we do in a later section. Note, however, that after leveling out 1966-69, the capital coefficient rose, implying a declining rate of return in recent years.

TABLE 5.—TOTAL U.S. GROSS NATIONAL WEALTH AND PRODUCT, SELECTED YEARS, 1929-73
[Dollar amount in billions]

	Current	Price defiators (indexes, 1958 = 100)	Constant	
•	۸-	-Absolute levels		
Adjusted GNP: 1929 1948 1966 1960	\$127 328 983 1, 248 1, 754	50.5 77.9 114.8 130.4 158.8	\$252 421 856 957 1, 105	
Total GNW: 1929 1948 1966 1969	1, 203 3, 012 8, 518 10, 907 15, 641	45. 4 76. 0 118. 5 135. 2 166. 7	2, 648 3, 964 7, 187 8, 070 9, 383	
8-	Average annu	al percentage rati	n of change	
Adjusted GMP: 1929-73. 1929-48 1948-66 1966-69 1969-73. Total GMW:	6. 1 5. 1 6. 4. 8. 3 8. 9	2.7 2.3 2.3 4.3 5.1	3.4 2.7 4.0 3.8 3.6	
1929-73	6.0 4.9 6.0 8.6 9.4	3. 0 2. 7 2. 6 4. 5 5. 4 Ratios, GNW/GNP	29 21 33 4.0 3.8	
Table ANIM AND		Kados, Gita/Gitr		
Total GNW/GNP: 1929. 1948. 1966. 1969.	9.4 9.2 8.7 8.7	.90 .98 1.03 1.04 1.05	10. 5 9. 4 8. 4 8. 5	

In constant prices the relative growth of product was more pronounced, since the implicit price deflator for GNP rose by 0.3 percentage point a year less than that for capital (which we call GNW, for "gross national wealth"). As shown in table 5 the average annual rate of growth of real GNP was 3.4 percent compared with 2.9 percent for real GNW 1929-73. This is reflected in a net decline of the real capital coefficient from 10.5 in 1929 to 8.5 in 1973. This means that "total capital productivity" (the inverse of the capital coefficient) rose an average annual rate of 0.5 percent. This is a measure of all the noninvestment related forces affecting economic growth; notably, changes in (1) values and institutions; (2) rates of utilization of capacity; (3) actual efficiency in relation to potential efficiency with a given technology; (4) economies of scale; (5) the degree of economic (allocative) efficiency; and (6) changes in the inherent quality of natural and human resources. In addition, possible errors in the estimates of capital and product, if not offsetting, could affect the productivity estimates.

As was true of the current dollar capital coefficient, however, the real coefficient also leveled out between 1966 and 1969 and rose somewhat to 1973—which means that total capital productivity dropped. This is consistent with other evidence in productivity. Real product per man-hour, as measured by BLS (which does not take account of nonhuman capital inputs) showed a retardation in growth after 1966; and so did

Kendrick's total tangible factor productivity series, which takes account of tangible

nonhuman as well as human capital inputs, but not inputs of real intangible capital. In order to qualify rates of change in productivity, it is desirable to confine the measures to the private domestic business economy, for which the real product and capital measures are independent. (In the nonbusiness sectors, we impute a rental value to the capital stocks and add it to labor compensation to estimate income and product originating.)

In table 6, line 6, it can be seen that the rate of growth of tangible capital (human and nonhuman) productivity, which was 1.7 percent a year 1948-66, slowed to 0.2 percent 1966-1973. (These numbers are lower than the usual measures of total tangible factor productivity, which adjust human capital to reflect changes in average hours

worked.)

TABLE 6.-MAJOR COMPONENTS OF U.S. ECONOMIC GROWTH [Private domestic business economy, average annual percentage rates of change]

	1948-66	1966-73
1. Real adjusted gross product 2. Real gross capital stock-total 3. Fangible capital 4. Intangible capital 5. Ratio: real total capital over real tangible capital (2-3). 6. Tangible capital productivity (1-3). 7. Total capital productivity (1-2).	4.1 3.1 2.4 4.1 .7 1.7	3, 5 4, 1 3, 3 5, 2 .8 .2 6

Presumably, a major element helping to explain changes in tangible capital productivity has been the growth of intangible capital per unit of tangible capital, since the intangibles are designed to increase the quality and efficiency of the human and nonhuman tangible factors in which they are embodied. Line 5 shows the relative growth of intangible capital, weighted to give effect to its smaller share of the total capital stock than that of the tangibles. In the period 1948-66 the relative weighted growth of intangibles accounted for 0.7 percentage point, or over 40 percent, of the 1.7 percent increase in tangible capital productivity. Total capital productivity (the relationship of real product to total capital, intangible as well as tangible) grew at an average rate of 1.0 percent a year. This reflects the net effect of the half dozen major noninvestment forces noted earlier.

The contrast of the 1966-73 period is startling. Even though intangible capital grew even faster relative to tangible capital than in the 1948-66 period, its 0.8 percent a year weighted relative increase was associated with only a 0.2 percent a year increase in tangible capital productivity, and thus with a 0.6 percent annual decline in total

capital productivity!

The marked deceleration in productivity, based on this and other measures, appears to be due to a number of factors. The slower rate of growth after 1966 meant fewer opportunities for economies of scale, of course. The bulge in labor force growth after 1965 reduced the average experience of workers, and slowed the growth of real product per worker for the time being since compensation and value added of young workers are below average.

The rate of utilization of the labor force was lower in 1973 than in 1966 (4.9 percent unemployment vs. 3.5 percent); yet there were capacity bottlenecks in many basic industries, e.g., steel, aluminum, paper, and petroleum. This suggests that there had been inadequate business tangible investment in the several earlier years, and possibly some misallocation of investment. The inadequate amount, in view of the rapid growth of the labor force, was related to a declining net rate of return on investment, expecially when adjustments to profits are made for revaluation of book deprecation charges to replacement cost. The declining rate of return reflects the use of macroeconomic policies to combat the accelerating inflation which, on balance, held increases in the price level below increases in unit costs. Some misallocation of investment probably resulted from the wage and price control programs from August 1971 to April 1974.

Further, the increasing amounts of investment required for environmental protection and occupational health and safety reduced the proportion available for direct productive purposes. Since the benefits of these programs are not reflected in real product but the investments are reflected in the real capital measures, the programs tend

to reduce increases in productivity as measured.

² See John W. Kendrick, Postwar Productivity Trends in the United States, 1948-1969 (New York: National Bureau of Economic Research, 1973).

It also seems probable that the relative decline of R. & D. investments, and the leveling out of the relative R. & D. stock (see below) tended to slow down productivity advance, since R. & D. is the fountainhead of scientific and technological advance.

Finally, there were various negative social tendencies, particularly in the latter 1960's, which probably reduced productivity growth. Examples are increasing drug use and crime, increased anti-establishment and the antibusiness sentiment, and a possible loosening of the work ethic. The development of social indicators has not yet reached the point of permitting the quantification of the economic impacts of these and other social developments.

COMPOSITION OF GROSS WEALTH

Just as intangible investments rose as a proportion of total investments up until the latter 1960's, so have intangible capital stocks increased as a proportion of total wealth—from about 23 percent in 1929 to almost 40 percent in 1973. (See table 7.) But it is apparent that the relative growth of intangible capital has been decelerating since 1966. This importantly reflects the leveling out of the ratio of R. & D. stocks to total capital after 1966 following on the most rapid relative growth of any form of capital. But the relative growth of both educational and health capital, which had exceeded 50 percent between 1929 and 1966 also slowed down. Yet their proportions of the total continued to expand slowly, as did that of mobility costs, which had dropped somewhat prior to the mid-1960's.

TABLE 7,—COMPOSITION OF TOTAL GROSS DOMESTIC WEALTH
[By type and by seeter; selected years]

	Tar	ngible capitu	H	Inte	ingible capit	al
Yeer	Total	Human	Nonhuman	Total	Human	Nonhuman (R. & D.)
A. Percentage distribution by major						
type: 1929 1948	76. 8	24. 5 21. 3	52. 3 51. 7	23. 2	21.0 26.4 29.7	0. 2 0. 6
1957 1966	76. 8 73. 0 68. 9 63. 2	18. 1 16. 3	50. 8 46. 9	23. 2 27. 0 31. 1 36. 8 38. 5	29.7 34.3	Ĭ. 4
1969 1973	61. 5 60. 2	15. 2 15. 1	46. 2 45. 1	38. 5 39. 8	35. 9 37. 2	2.6 2.6

Year	Personal	Business	Governments	Addendum: net foreign claims as percent of GDW
B. Percentage distribution, by major sectors: 1929	54. 0 56. 2 55. 9 55. 4 54. 9 55. 5	30. 6 22. 4 22. 6 21. 9 21. 6 21. 3	11.4 21.4 21.4 22.7 23.5 23.2	1.4 1.3 .9 .6

With respect to tangible capital, human tangibles, while rising absolutely as the adult population grew, had declined relatively until the latter 1960's when the proportion leveled off as a result of the bulge in labor force growth. Nonhuman capital grew less rapidly than the total throughout the period, due particularly to the relative decline of land and other natural resources. Machinery, equipment, and nonbusiness durables were the only type of tangibles whose ratio to total capital expanded.

When the various types of capital are recombined inhuman and nonhuman categories, it is seen that the human share rose steadily from 47½ percent in 1929 to almost 52½ percent in 1973. The relative growth of human intangibles more than offset the relative decline of tangible human capital. The recombination of capital types into human and nonhuman groupings is helpful in computing rates of return, which we discuss in the next section.

With regard to the sectoral composition of capital (see panel B of table 7), it is apparent that the share of general governments more than doubled over the 40-year period 1929-69, before receding slightly 1969-73. The relative growth of public wealth was primarily at the expense of the relative share of business, which declined steadily, and to a lesser extent at the expense of the personal sector. But the personal sector share did grow somewhat 1969-73, while the business sector share continued to recede. Note also that net foreign claims (including monetary metals), despite a substanital absolute growth, declined in importance relative to domestic wealth throughout the period.

RATES OF RETURN ON TOTAL CAPITAL

Rates of return can be computed by dividing factor compensation, gross or net of depreciation, by the value of gross or net total capital stocks. In addition to overall rates of return, returns on human and nonhuman capital may be calculated separately by splitting national income between labor and property compensation and dividing

by the corresponding wealth estimates.

As shown in table 8 gross and net rates of return on total capital exhibit similar levels and movements. On a net basis, the 10.0 percent return in 1973 was virtually the same as it was in 1929, on the eve of the Great Depression. Returns during the early postwar period were significantly higher, reflecting the capital shortages carried over from the depression and World War II, in conjunction with generally high levels of aggregate demand. Rates of return in 1957 and 1966 were below the 1948-53 levels, reflecting more ample capital supply, but still well above the 1973 rate. The 1960 rate was lower than 1957, reflecting the incomplete recovery from the 1958 contraction; and the 1969 rate was lower than the 1966 rate, reflecting the restrictive monetary and fiscal policies adopted to combat inflation. Rates of return in 1973 were still lower, due to the net effect of wage and price controls as well as continued restrictive macroeconomic policies.

TABLE 8.—RATES OF RETURN ON TOTAL CAPITAL STOCKS EMPLOYED—U.S. PRIVATE DOMESTIC BUSINESS ECONOMY

[in percentages; selected peak years]

Year	Total	Human	N.nhuma
. Cross rates of return:			
1929	10. 2	11.7	9.3
1948	12. 1	12. 2	12.
1953	12. 1	13.5	10.
1957	11.4	12.7	10.
1960	10. 0	12. 3	9.
1966	11.8	12.2	11.
1969	10. 8	11.7	9.
1973 1	10. 4	10. 8	10.
Net rates of return:			
1929	10.0	10. 1	10.
1948	13.4	12.6	14.
1953	13.1	14.8	11.
1957	11.6	13.4	9.
1960	11.0	12.9	. 9.
1966	11.4	12.8	10.
1969	10.6	12. 2	Į.
1973 1	10.0	11.2	8.

¹ Proliminary.

Some analysts prefer to look at gross rates of return, which do not require a necessarily somehwat arbitrary division of gross income between depreciation and profit. But the gross rates tell much in the same story, except that they were fractionally higher in the boundary years than the net rates, and did not rise as much in the 1948-53 period.

The two sets of rates diverge somewhat with respect to human and nonhuman returns however. On a net basis, the rates of return on the two types of capital were almost the same in 1929, but by 1953 the human return significantly exceeded the rate of return on nonhuman capital. Although both trended downwards after 1953 except for the 1960-66 improvement, human capital continued to enjoy a higher rate

of return than the nonhuman. But between 1969 and 1973, the decline in the return

on human capital was much sharper than that on property.

On a gross basis, the rate of return on human capital started out in 1929 significating higher than that on nonhuman. Thereafter, the pattern was similar to that for the net rates, except that by 1973 the differential between the two sets of rates had narrowed substantially. In fact, between 1969 and 1973 while the gross rate of return on human capital dropped markedly, that on nonhuman capital rose slightly. This buoyancy apparently reflected the shortages of business productive capacity, despite the downward pressures on overall rates of return on capital as a whole.

CONCLUDING COMMENTS

In order to promote the resumption of economic progress (defined as increasing real income per capita), which most Americans seem to want, the material in this paper strongly suggests that an acceleration in the rate of capital formation is not required so much as an acceleration of productivity advance. Here, we are not referring just to the cyclical recovery of productivity which is currently underway and will extend well into 1976. Rather we are referring to an acceleration of the *trend*-rate of productivity advance, at least back to the 1948-66 rate.

Of course it would be helpful at least to halt and possibly to reverse the drop in the national total saving-investment ratio which began in 1966 after two decades of advance. But the rate of growth in real total capital stocks accelerated to a record rate between 1966 and 1969, and decelerated only modestly 1969-73. The problem is that the rate of increase in real product lagged, indicating a drop in total capital productivity, compared with significant advances 1948-66. This suggests, in turn, that a major attack on the problem must come through some reallocations of investment

and capital, in order to increase capital productivity.

In my view the most important policy objective which would both reverse the downward trend in the saving-investment ratio and improve the allocation and productivity of capital would be to increase the disposable (after tax) income of the business sector as a percentage of GNP, reversing the decline which began in 1966. Since the business sector consistently plows back all of its gross disposable income. and more, into investments, an increase in its relative income would obviously tend to increase the national saving-investment rate. The shortages of capacity encountered in 1973, the eventual capacity requirements of the current expansion, the continuing pressures for cost-reducing innovations, the further capital requirements of social programs (EPA and OSHA in particular) and domestic energy programs all point to the desirability of a faster relative increase in business investment.

One way to accomplish this objective would be the pursuit of monetary and fiscal policies during this economic expansion that would permit the restoration of higher rates of return than were permitted by the restrictive, anti-inflationary policies followed in the recoveries of 1967-69 and 1970-73. Possibly the adoption of a stronger incomes policy would be called for later in this expansion as an alternative to a profit squeeze leading to contraction

An alternative or supplement to the above policy would be a reduction in business income taxes. This could take one or more of several forms: An increase in the investment tax credit; a decrease in corporation income tax rates; further reduction of climination of the double taxation of dividends; recognition of "inflation accounting," particularly the restatement of depreciation charges from historic book costs to current replacement costs, in calculation of business income subject to tax; and possibly the institution of a R. & D. tax credit of 10 to 20 percent, or possibly a larger credit on incremental R. & D.

The last proposal, although a new one, seems particularly appropriate at this time to reverse the relative decline on R. & D. investment. Studies by Terleckyj, Griliches, Mansfield and others all indicate a high productivity effect and rate of return on R & D outlays, particularly those designed to improve producers' goods and processes. In my view, a most important element in raising the productivity trend is a renewed relative growth in the stock of knowledge and know-how resulting from R. & D.

emobodied in men and machines.

This brings us to the public sector. There, too, I believe that a stronger and steadier expansion of expenditures to support R. & D. is desirable. It will also aid in maintaining and possibly increasing the national saving-investment ratio if the public sector continues its relatively high ratio of investment to disposable income. As to allocation of investments among the alternative types discussed in this study, and among specific projects, more work is needed to refine cost-benefit and prospective rate-of-return estimates, and to regularize capital hudgeting.

Generalized social and private rate-of-return studies would also help in guiding personal sector investment decisions. For example, recent studies indicate a sharp drop in rates of return to investing in higher education between 1969 and 1975. As a result, the fraction of young men choosing college has declined. Our numbers also suggest that the incremental returns to human investment (predominantly education) had dropped faster than the incremental rate of return on nonhuman investment 1969-73, but we did not include rate-of-return estimates by category of investment, by sector. Support for development of more such estimates could have a big payoff in making possible more rational investment decisions, and a more efficient capital mix.

As far as the personal sector is concerned, it is significant that the ratio of investment to disposable income has dropped from the peak rate reached in 1966. In part, this may reflect a decline in expenditures for rearing children as a fraction of DPI. But it does indicate that the potential for higher saving and direct investment is there. Investment in self and in one's family could be stimulated by more generous deductions in the personal income tax for outlays for education, training, medical purposes, and mobility. Recommendations for liberalization should not be made, however, unless studies indicate a sufficiently high social rate of return on such expenditures.

In conclusion I must note that my observations on possible tax policies to promote capital formation stem from my personal interpretations of the material presented here, plus my general reading of recent economic history. Others may well come to different conclusions. But regardless of differences among analysts, the broader view provided by the new total investment and capital estimates should help in clarifying

the issues and reaching a sounder policy consensus.

Senator Bentsen. I am going to ask you gentlemen to please limit your prepared remarks to 10 minutes each. We will take the full statements in the record, and hopefully we will have some of these other Senators appear, and then we will let them proceed on questions.

Dr. Kendrick, will you proceed?

A PANEL OF ECONOMISTS CONSISTING OF: CHARLS E. WALKER, CHAIRMAN, AMERICAN COUNCIL FOR CAPITAL FORMATION; MICHAEL EVANS, PRESIDENT, CHASE ECONOMETRICS, INC.; ROGER E. BRINNER, SENIOR ECONOMIST, DATA RESOURCES, INC.; JOHN W. KENDRICK, PROFESSOR, GEORGE WASHINGTON UNIVERSITY

Professor Kendrick. Mr. Chairman. in the 10 minutes I have, I want to do three things: First, to review trends in capital formation and investment, and second, to comment on the capital requirements for the last half of the decade of the '70s, with particular reference to the Council of Economic Advisors' projection, and third, to express my views regarding possible incentives to stimulate capital formation.

On the trends, based on the official national income accounts, gross private domestic investment has maintained a fairly stable ratio to GNP in good years of around one-sixth, and fixed business investment of a bit over 10 percent. The ratio has dropped cyclically, of course, from 1973 to 1975.

For purposes of analyzing economic growth, it is necessary to define investment more broadly than the Commerce Department and include all outlays that add to or replace income and output-producing capacity for future periods.

⁴See Richard R. Freeman, "Overinvestment in College Training?", The Journal of Human Resources, X-3, 1975.

⁵ After having drafted this paper 1 was interested to find much the same viewpoint ably expressed by Albert T. Sommers, "Social Goals and Economic Growth—The Policy Problem in Capital Formation," The Conference Board Record, December 1975.

Some define total investment as including tangible capital formation of the household and government sectors as well as that of business, plus intangible investments of all sectors. This means research and development, education and training, health, safety, and mobility out-

In a recent study for the National Bureau of Economic Research. which was summarized in this paper presented by the Joint Economic Committee that Senator Bentsen just referred to, I have developed estimates of U.S. total investment, and the associated stocks of capital

in the private sector.

These estimates show on the table, and if you have this print in front of you, you might look at table 3, and you will notice on the lest-hand column at the bottom that the ratio of total investment to GNP rose from 43 percent in 1948 to 50.5 percent of GNP in 1966, thereafter dropping back to 49 percent in 1969 and 48.5 percent in 1973. In other words, it dropped 3 percentage points in total investment over the last 9 years or so.

The increases from 1948 to 1966 came in the intangible investment category entirely, R&D and education and training, and so forth, which rose from about 12 percent to 21 percent of the adjusted GNP. These increases were concentrated in the public sector, which had gotten an increasing share of GNP largely at the expense of the personal sector and also there was an increase in the proportion of the revenues devoted by government to investment objectives.

I do not think we relaize that government spending really consists almost 50 percent of investment-type outlays, equipment, health, edu-

cation and so forth.

Now an analysis of the decline in the total of the saving-investment ratio after 1966 is instructive as we look ahead to what we can do to stimulate capital formation. The important point to note with regard to the drop of 3 percentage points in investment is that this was due in part to intersectoral shifts of disposable income away from business, which has the highest ratio of investment to income, that is, business invests more than 100 percent of its cash flow, and here, if you look at the committee print, table 4, on page 5, you note that in 1973, business was spending 28 percent more than its retained earnings and depreciation charges. So business does invest more than any other sector of its disposable income.

But its disposable income dropped from 12.5 percent of GNP to

less than 9.5 percent from 1966 to 1973.

Also, there was a shift away from government, which also invests more than the personal sector and the personal sector gained from 63 percent of GNP up to about 69 percent of GNP, and this shift was compounded by the fact that persons began investing less of their disposable income over this period, from 1966 to 1973.

Now, in my view, the drop in the business sector share of GNP was largely the result of macro-economic policies designed to combat inflation after 1966, which prevented prices from rising as fast as unit costs during the booms of 1969 and 1973-1974.

Further the wage and price controls of 1971 to 1974 also tended to hold down profit and to distort profit and investment patterns which aggravated the capacity shortages of basic industries that we well remember from 1972 to 1973.

Now, another highly significant recent trend which is often overlooked, although I see Michael Evans makes a good deal of it in his testimony, and rightly so, has been the marked slowdown in productivity and, first of all I refer to capital productivity, since this slow-down has been even more pronounced than the slowdown in labor productivity.

The average rate increase per unit of tangible stock in the economy dropped to .3 of a percent from 1966 to 1973. I might say that the point the Senator referred to about the drop in total capital productivity is shown in the committee print on page 8, if you take account of all capital including the intangible capital resulting from education, R&D, and so forth, and embodied in human beings. We find there was an actual decline in total capital productivity after

1966 of between .5 percent and 1 percent a year.

Now, the drop in capital, purely tangible capital productivity was not due to a deepening of capital per worker. Indeed, due to the accelerated growth of the labor force and employment after 1966, real capital stocks per person engaged slowed from 2.3 percent growth rate up to 1966 down to 1.8 percent after 1966, and I think this was one element in the slowdown in labor productivity, as measured by real gross product per worker. This slowed from 3.2 percent growth per annum up to 1966, down to 1.8 percent from 1966 to 1973, and as we know, productivity dropped in 1974, although it is coming back somewhat with the recovery in 1975.

I believe that the increase in capital formation required for environmental protection, occupational health and safety, and other social programs was undoubtedly a factor in the slowdown in the growth of real product in relation to real capital, but I believe the more important factor must have been a slowing-down in the rate of

cost-reducing innovations.

I do not agree with the overly dramatic phrasing of the title in an article in Business Week of February 16, 1976, "The Breakdown of U.S. Innovation," on the front of this Business Week. They say "the breakdown of U.S. innovation." That is overstating it. We know the journalists like to be overly dramatic, but there was a slow-down in innovation, reflected in productivity, which I think was due to several things.

In the first place, R&D expenditures have declined markedly as a percentage of GNP from 3 percent down to 2 percent since the 1960s, and this means a drop in business R&D and much more so in government-financed R&D. This has slowed the rate of increase of inventions and thus the potential innovations actually undertaken

by business.

The main point in this article is that businessmen are less willing now to take risks. After all the shocks of the last half-dozen years with the roller-coaster commodity price inflation, with price controls, with the OPEC cartel action, all of these shocks have tended to increase the risk premium that businessmen wish on new investments, and this point was made very ably, I think, by Alan Greenspan in this year's report of the Council. The risk premium has gone up, affecting the business demands for innovation and risk-taking.

The CEA in its recent annual report, looking ahead now to the rest of the decade, they infer from a BEA study—that is the Commerce Bureau of Economic Analysis, that the ratio of business fixed-investment to GNP would need to be 1.5 to 2 percentage points higher in the latter half of this decade than it was in the first half in order to achieve a full employment of real GNP in 1980, plus meeting the capital requirements of the 1970 and 1972 pollution control law, and also the greater energy independence goals.

control law, and also the greater energy independence goals.

My chief criticism of the BEA study is that the projected capital requirements may be a bit on the high side since a net increase in the capital coefficient was projected based on the trends of the

period 1963 to 1970.

But as I noted earlier, there were net declines in capital coefficients, which is the inverse of capital productivity, in the prior 15 years, and I believe that appropriate policies could result in somewhat lower

rather than higher capital coefficients in 1980 than in 1970.

But I do not want to quibble over the study of the Council and the BEA. In general, I do agree that higher saving-investment ratios to GNP may well be needed for several years to come in view of, one, the continued rapid increase of the labor force and prospects of that until the late 1970s, and two, the need to increase capital-per-worker to maintain past trends of rising real income and product-per-worker which most Americans seem to desire, and here let me interpolate that I agree whileheartedly with Senator Bentsen that the no-growth viewpoint is confined to a rather small band of ivory tower intellectual-types.

Certainly as we look at the behavior of the American people, they want to improve their material status, if we look at the labor unions and the individual worker, in trying to find employment that pays more than his previous job, and so forth. I think our aspirations are still outrunning our realizations in the material sphere, which does not mean we are materialistic necessarily, because the material base is necessary for higher levels of cultural activity and so forth.

Number three, the increased necessary capital requirements are in the environmental programs and so forth, and there is a necessity to look at other national welfare areas. I am concerned about the growing gap in the real national security outlays in this country and in the Soviet Union and some certain other possible adversary countries. We may need more industrial capacity to increase our military production unless arms limitation agreements are reached and that is not at all certain as we look ahead.

Now, in recognizing the possibility of error in the BEA projections with respect to capital shortages in years to come, I believe there is less risk in adopting stimulating policies than in doing nothing. We all know that investment has a multiplier effect on national income, and we will get the faster recovery if we get more investment in the several years ahead.

This will reduce excessive unemployment faster than would otherwise be the case.

Senator Bentsen. Professor Kendrick, you have gone over 10 minutes, and I think we will make that 15 minutes for each of you.

Professor KENDRICK. Thank you very much. Senator BENTSEN. We will summarize today. Professor KENDRICK. All right.

Another reason for stimulating investment is that there is a possibility we will run into bottlenecks as full employment is achieved, when we go into 1979 and also capital will accelerate productivity and the increases in real income per worker.

Also, I think this will help to mitigate increases in unit costs that

typically appear in the later phase of a business cycle expansion.

Coming now to possible incentives to get more capital formation, I think the most important force is something that is occurring automically now, and that is the recovery in corporate profits and net income of proprietors.

Macroeconomic policy should continue to promote this economic recovery, back up to rates of return on investment comparable to

those earned in the mid-1960s which was a good period.

With due allowance for inflation effects, that is. Since business typically plows back all of its cash flow on balance, and more, as I pointed out, into capital formation, the increase of 2 or 3 percentage points in the business cash flow share of GNP over and above the 1963 proportion should mean a similar increase in the capital formation ratio.

This objective implies a monetary policy which would continue to hold interest rates within a moderate range, somewhat similar to what we have had in recent months, and the fiscal policies which would promote the reduction of the Federal Government deficit in step with the recovery of net private borrowing to finance the growth of private capital formation.

Finally, a full employment surplus of the Federal Government would contribute both to a high rate of private investment and to a mitigation of the inflationary pressures normally built up as the expansion con-

tinues.

To play it on the safe side, I believe that Congress should give serious consideration to supplementing the forces of recovery, however, by a modest reduction of business income taxes. As I noted in the Joint Economic print, this could take one or more of several forms.

One, a decrease in corporate income tax rates of several percentage points. Two, an exemption of a portion of dividends from double taxation, more than the present \$50 or \$100 exclusion we now have. Three, recognition of some form of inflation accounting, in calculation of taxable business income. Four, a further increase in the investment tax credit, which I understand the labor unions favor as well as business organizations, and five, possibly an expansion of the tax credit to apply to R. & D. outlays as well as to plant and equipment expenditures.

The exemption from taxation of some portion of corporate profits paid out in dividends has the special attraction of promoting equity financing vis-a-vis the debt financing of capital formation. That is, as we now know, interest is deductible as an expense, and dividend payments are not. They are taxed as corporate profit, and then they are taxed to the owners again as dividends. This would help to put equity financing on the same basis as debt financing which should improve the coporation balance sheets.

The final point that I conclude with is that the R. & D. tax credit—and this, I think, is important to try to stimulate research

and development which has dropped—it is the fountainhead of technological progress, the source of product inventions and innovations, and I think this drop in R. & D. in the last decade has contributed importantly to the slowdown in production. This increase in R. & D. would increase the projects in the pipeline, some of which would bear fruit during the current recovery, would help to increase capital productivity, and would mean we can provide full employment in 1980 with somewhat less tangible capita formation than otherwise would be required.

Thank you very much.

Senator BENTSEN. Thank you very much, Mr. Kendrick.

Mr. Charls Walker, would you proceed, please?

Dr. Walker. Thank you very much, Mr. Chairman. I am pleased to be here to speak for the American Council for Capital Formation. I was impressed with your opening statement and I am pleased to associate myself almost fully with Professor Kendrick's remarks. I think the analysis that he presented, plus the recommendations that he made are, as best as I can tell, fully consistent with our views. This will facilitate summarization of my statement and I can yield back quite a bit of the time that you have granted.

Mr. Chairman, the case that the American Council, supported by about 1,600 businesses and individuals in favor of increasing capital formation, makes for a higher rate of capital formation can be sum-

marized succinctly in six statements.

First, rapidly rising productivity provides jobs and economic growth, helps contain inflation and enhances our competitiveness in world markets.

Second, trends in productivity reflect mainly the skills and habits of the workforce plus the quantity and quality of the stock of real capital or productive investment.

Third, changes in the quantity and quality of productive investment

reflect decisions to consume, save, and invest.

Fourth, although many factors affect such decisions, the impact of the Nation's tax system is among the most important.

Fifth, in this Nation, in our judgment, we overtax savings and invest-

ment and undertax consumption.

Sixth and finally, one of the most promising and feasible means of promoting faster capital formation is, therefore, to shift the tilt in the tax system away from excessively stimulating consumption toward fostering savings and investment.

These six statements are by no means universally accepted; there are some who would argue that, left alone, the capital formation problem will take care of itself. But I submit that the views I express are gaining widening support, both among the public and in the Congress. This naturally leads to the question of why Congress has been relatively slow in addressing the problem, a matter I shall return to toward the end of my testimony.

I note that all the studies I am familiar with on the long-term capital outlook agree that the demand for capital will be increasing in the future. Then I note a point that is not seriously disputed—that capital formation promotes growth in economic activity, and I cite

examples in this country relative to abroad.

Then I present the argument that capital formation creates jobs, and dampens inflationary pressures, and finally I turn to the six recommendations of the Council.

Senator Bentsen. What page is that on?

Dr. WALKER. On page 9 and I am going to read these and if you gentlemen want to discuss them in the question period I will be happy to respond.

RECOMMENDATION NO. 1

We must begin to eliminate the two-tier tax on corporate profits and tax business income only once. Whether the best approach is to grant the individual a credit for all or part of the corporate profits tax, permit dividends to be deductible against the corporate tax, a combination of the two or other variations—all these approaches deserve additional discussion and debate. The important point is that we get started, one way or another, down this road. Most of the major European nations have done so.

Let me say that if we truly comprehended the benefits to our economy I believe we would repeal completely the corporate profits tax. I know that sounds extreme. But such a repeal, if coordinated with strong control of Federal spending (reducing the rate of growth in the Federal establishment) or if tied in with an increase in taxes on consumption, would have a very favorable impact on jobs, growth, and price stability. And the case is strengthened by the fact that we simply do now know who finally pays the corporate tax—except that it is people, not corporations.

RECOMMENDATION NO. 2

Permanently extend the Investment Tax Credit (ITC) at a 12 percent level, remove rescrictions relative to earnings, and make it fully "refundable" (that is, grant it as a cash rebate to businesses which earn nothing or too little to realize the full benefits of the credit).

Professor Kendrick is correct that the President's Labor-Management Advisory Committee endorsed unaminously a 12 percent incentive a year ago, but there has been an attrition in that position since then.

RECOMMENDATION NO. 3

Provide for simpler and more liberal depreciation allowances.

Depreciation allowances under the Tax Code are too small. For example, the United States has the most restrictive depreciation allowance provisions of almost any major industrial country. More realistic ways to permit businesses to depreciate assets and recover investments, particuarly during these inflationary times are needed. One approach would be to liberalize the Accelerated Depreciation Range by extending it from the existing 20 percent up to 40 percent or more. Another would be to permit business to "catch up" with inflation by permitting depreciation on a replacement rather than original cost basis.

RECOMMENDATION NO. 4

More equitable capital gains tax rates.

There have been a number of sound proposals which merit serious consideration for making the capital gains tax more rational by taxing a smaller portion of the gain the longer the asset is held. I think much of the argument here has been missed in recent years, because the minimum income tax which Conoress enacted in 1969 is an add-on tax rather than an alternative tax. Thus it tends to hit right at the capital gains sector.

RECOMMENDATION NO. 5

Provides tax incentives for stock ownership.

A plan allowing taxpayers to defer tax payments or providing for tax credits for income invested in common stocks up to some limit would have a number of desirable benefits. Such a plan would encourage additional savings and investment in productive equity markets, thus stimulating business expansion, which in turn will provide new jobs and greater material well-being. The program would have the desirable socially stabilizing benefits of expanding ownership of American enterprise to many more citizens and providing additional motivation and reward for individual nestegg savings.

RECOMMENDATION NO. 6

Provide tax deferment for dividend reinvestment.

I have been impressed by a plan to defer tax on dividends until

the stock is sold. I think you would get a big bang for the buck.

Mr. Chairman, these six recommendations are not intended to be exhaustive. If these recommendations are as strong as I think they are, and as Professor Kendrick thinks, why haven't they been accepted? I am sorry to intrude on your turf, but I would like to mention that, after 7 years of working rather closely with the Federal tax system, there seems to me to be three very important myths with respect to that system.

The first myth is propagated by the press and perhaps some politicians—that the rich get away with murder when it comes to paying taxes. I have seen the figures year after year after year the one out of the hundred of the high income persons who pays little tax gets the headline, the 99 percent who pay very high levels of taxes—in

fact, through the nose, do not get the attention.

According to the Brookings Institute, our average Federal income tax rates range from 0 percent for non taxpayers (now negative for some receiving the earned income credit) up to 10 percent in the lowest brackets, and up to 33 to 40 percent in the higher brackets, depending on your assumptions on the incidence of the corporate tax. That is progressive enough for me, and I think it is progressive enough for most Americans.

So I think we have a basically fair income tax system despite what

you read in the newspapers.

The second myth is that corporations can be taxed without hurting people. This is nonsense. Corporations are simply legal arrangements for doing business, and the taxes they pay are either passed forward in the form of higher prices to consumers, or backwards to the factors of production, including owners. That is one reason we are short of capital formation.

People pay taxes; corporations as such do not.

The third myth is that there are literally billions upon billions of so-called tax loopholes or tax expenditures that, if plugged, could

result in sharp reductions in the tax bills of most Americans.

This is not so. Many of these so-called tax expenditures or "loopholes," and I prefer to call them tax preferences, zing right in to help the low- and middle-income taxpayer. The biggest area is homeownership and another big area is employer contributions to pension funds. You add up this \$90 billion (even though it is not theoretically addable), \$70 billion is in the individual area, and only about \$20 billion in the corporate area.

Mr. Chairman, so long as these myths prevail, I think constructive changes in the tax laws to permit capital formation are going to

be very hard to sell politically.

To the extent we are successful in educating the public on this problem, the task of you in Congress who perceive the real nature of the problem as well as its solution should be that much easier.

Thank you.

Schator Bentsen. Dr. Walker, as always you are interesting and concise, and we will want to ask you some questions after we let the rest of these witnesses make their comments.

Mr. Evans, if you would, proceed, please. Mr. Evans. Thank you, Mr. Chairman.

I am pleased to be here this morning to comment on the capital shortage needs. My paper is long, and I will try to stay within the allotted time by summarizing it briefly.

I believe the most critical issue facing the U.S. economy today is the lack of growth in productivity. That explains both high inflation

and high unemployment.

Like most other people throughout the world, Americans have become accustomed to a steadily rising standard of living. Yet this can be accomplished only if productivity continues to rise, for in the long run the difference between the percentage increase in the aggregate wage rate and the consumer price index is equal to the growth in productivity.

Wage increases which are not offset by productivity gains can be offset only by higher prices or lower profit margins; but with average margins less than 5 percent, there is not much more room to squeeze in that direction. Thus if productivity gains are close to zero, wage increases are inevitably translated fully into price hikes, and the infla-

tionary spiral continues to accelerate.

Furthermore, an equal percentage increase in both wages and prices implies a reduction in the standard of living as long as the personal income tax schedule is progressive and is based on current dollar levels of income.

Unlike fluctuations in the real sector, inflationary spirals do not tend to gravitate toward an equilibrium position. Thus if we are to reduce the rate of inflation in the long term, we must increase the rate of growth in productivity; all the gimmicks to delay or retard price increases, including but certainly not limited to wage and price controls in all their various disguises, will not increase the standard of living one whit.

One statistic goes far in explaining the problem of inflation which we have had during the past 10 years. For the first 20 years of

the postwar period, namely from 1947 to 1966, output/man-hour in the private sector increased at an annual average rate of 2.9 percent. For the next 10-year period, 1966 to 1975, it has increased by only 1.3 percent. These figures are based on official BLS estimates which, as we shall see below, are actually somewhat overstated for recent years.

Even if we take into account that 1975 is a recession year and assume that productivity growth will rebound in thus upturn just as fast as it has in other recoveries—surely a generous assumption—we find that the average annual increase over the 12-year period 1966 to 1977 is only 1.8 percent. And we believe that even this number is somewhat of an overestimate.

In my prepared remarks in table 1, you have tabulated the postwar

record for increases in output per man-hour in the private sector.

Does everyone have table 1? These figures show the average growth rate has declined to 0.1 percent. While this figure is affected in some degree by the recession, the overall trend is certainly in the downward direction.

It should be noted that this very low increase in productivity explains why it is possible for the real wage to have declined 4 percent from April 1966 to April 1975.

The principal factors determining the rate of increase in productivity

are usually given as follows.

(1) Proportion of fixed business investment to gross national product.

(2) Proportion of output devoted to spending on research and

development (R. & D.).

- (3) Mix of employment: proportion of production to overhead workers.
- (4) Mix of output: relative growth rates of the manufacturing and service sectors.

(5) Training and education of the labor force.

While I believe that all of these factors have a bearing on the rate of technological growth over the long run, the evidence given in figures 1 through 3 in my handout indicates clearly that the amount of investment spending has the greatest direct influence on productivity growth.

In figure I we note the slowdown in constant-dollar plant and equipment spending which has occurred since 1966, particularly, when we extract the estimated figures for spending to meet environmental and safety standards. Whereas it increased by 4.6 percent per year for the period from 1949 to 1966, it is projected to rise only 1.9

percent per year from 1966 to 1977.

The slowdown is very clearly shown in this figure, and that is quite an astonishing decline. We can never be absolutely positive that the slowdown in productivity after 1966 was due to the reduced rate of growth in investment. However, additional supporting evidence can be gathered by examining the investment and growth patterns of the U.S. economy with those of the other leading industrialized countries of the world. These comparisons are provided in the next two graphs.

In figure 2 we find almost a perfect correlation between the proportion of GNP spent on fixed investment and the growth in productivity.

Figure 3 documents the extent to which increase in output/manhour in the U.S. have fallen behind growth in the rest of the world. Even when one adjusts these for lower wage gains in this country, the evidence explaining the weakness of the dollar seems compelling.

In figure 2, we have investment as a percentage of GNP on the horizontal axis, and we have increases in productivity on the vertical axis. You can see there is almost a perfect correlation, and the U.S. wins the anchor spot, in reverse, for both of those indexes. We are even below the U.K., a fact that surprises a number of people.

In figure 3, here again, we see that the rate of growth in the U.S. has indeed been substandard. No one really expects us to keep up with Japan, but all the other industrialized countries have had

a rate of produtivity increase which is far above the U.S.

I am tempted to conclude by looking at these graphs and say

we must be doing something wrong.

There are a number of other factors which contribute to the slow-down in productivity growth. One of these factors is the proportion of GNP spent for R. & D. spending. In table 2, we note that the proportion of R. & D. as a proportion of GNP has declined rather markedly from the peaks that were reached in the mid-1960s.

The other three factors which I listed previously in my remarks have also contributed to the recent slowdown, although not to the

same great extent.

While environmental and safety standards in the overall rate of growth during the last 10 years have clearly reduced the amount of productive investment undertaken, the major factors of the slow-down are found in the financial sector.

The major events which have occurred, all of which are interrelated,

are as follows:

(1) Internal liquidity has been sharply reduced relative to investment needs. These figures are shown in table IV.3.

(2) The costs of external financing in debt markets has risen sub-

stantially without a corresponding gain in the rate of return.

(3) Equity financing has all but disappeared as higher interest rates have depressed many stock prices below book value. With the recent increases in stock market averages we find this is still the case for

many capital-intensive companies.

(4) Bank financing, the only other alternative source of funds, has been available only at interest rates which were well above long-term market rates. Furthermore, as we have already mentioned, even this source of financing will not be available to many firms during the next credit crunch during what we think will be the next credit crunch in 1977 and 1978.

Now, to summarize the problems. First, decrease the corporate income tax rate to 40 percent. This cut is very similar to the one which was called for by President Ford earlier this year and was quickly buried by Congress. Yet this method would not only be the simplest but would be the most efficient, since it would not cause firms to undertake certain types of expenditures instead of others because of tax ramifications. This cut would add about \$7 billion to cash flow this year and about \$20 billion in 1984, or about one-third of the additional funds needed.

It is probably worth noting, however, that in congressional hearings this method has repeatedly been rejected in favor of more complicated schemes, ostensibly on the grounds that other plans are specifically designed to create jobs or spur investment, whereas the extra corporate profits might not be used for any productive purpose. The logic of such an approach is not strong enough to warrant any comment, but since this is a popular political view, businessmen may be well advised to push for other combinations of incentives which

would serve to increase cash flow by the needed amount.

Two, depreciation allowances should be based on replacement rather than historical costs. The same overall effect could undoubtedly be accomplished by further shortening of tax lives on plant and equipment, yet it seems that now is the time to face up to the problems which are caused by inflation and the degree to which reported profits are actually overstated. This method would not be without its problems, since it would require an estimate of replacement costs. However, this problem could be met in principle by using the BLS and NIA price indexes for detailed components of plant and equipment. Even if these indexes understated the true rise in prices, the discrepancy between depreciation allowances and actual replacement costs would be smaller than it is now by an order of magnitude.

Senator Bentsen. You would summarize please, Mr. Evans, in the

interest of time?

Mr. Evans. Yes.

Three, integration of the personal and corporate income tax schedules has been discussed for many years, but the first steps have

yet to be taken in this direction.

Four, additional expansion of the investment tax credit could be undertaken in two ways. First, the rate itself could be increased and the restrictions with respect to the amount of deductions which can be taken could be eased substantially. An increase from the present effective rate of 6.5 percent to 12.0 percent would raise approximately \$4 billion. Furthermore, the tax credit should be extended to cover a larger proportion of the investment expenditures which must be undertaken due to environmental, safety, or consumer regulatory standards.

We are not suggesting that Congress is about to rush out and implement these tax changes during the next session. However, I feel the figures which we have developed here suggest that the additional amount of national savings needed to generate \$4.6 trillion of investment during the next decade can be obtained if the Federal Government is willing to redirect its share of the increased revenues back to the corporate sector. Our estimates indicate that this job is feasible, although they certainly do not suggest that it is without its short-term political drawbacks.

There is a lot of material not covered here, Mr. Chairman, but in view of your requests I will end my remarks now.

Senator BENTSEN. Mr. Brinner?

Dr. Brinner. Thank you very much. I will try and keep myself

quite brief, so I will try to summarize my statement.

I think you will see as I present my position and as you read my study, that I do have some slightly different perspectives than the other three members of the panel. First of all, I think we have a basic problem in trying to define a "capital shortage." Some people might mean that capital formation will be inadequate to sustain the trend growth rate of capital and total output. I would agree that if productivity were sustained at its historic rates the expansion will be less rapid in the next 15 years than it has been in the last 15 years, although this will be due to the slower expected

growth rate of labor.

I estimate that the 1990 full employment per capita output level will be from 2.5 to 10 percent below what it had been if the previous rates of output had been sustained. However, this is not necessarily good evidence that the United States would be suffering from a capital shortage. After all, in a free market economy where the citizens make the choice, there is a logical problem in claiming that there is too little investment. We are basically saying that citizens are making the wrong choices.

On the other hand, I realize we have a mixed economy and the tax structure influences the citizens. In the statement I have prepared, I analyze distortions in this choice pattern which has been created by inflation: I am really not in the camp that would argue moving toward consumption taxes rather than income taxes. I feel the equity arguments in favor of an income tax far outweigh any modest efficacy

arguments for a consumption tax.

A second way that people talk about capital shortages is in terms of financial problems of the corporate sector, rising debt to equity ratios, and so forth. DRI agrees that in the absence of new tax policies there will be an extension of, although not an acceleration of, the financial pressures which have been building since the mid-1960s. For example, cash flow will continue to provide a smaller share of capital expenditures. There has been a rebuilding of corporate balance sheets in the recent recovery, but we are talking about long-term trends here.

A little-noticed element in the discussion of capital shortages is that inflation has distorted the measurement capital income. Inflation creates problems for measurement of capital income that do not exist when we are labor income.

For example, during the relatively mild inflation during 1950 to 1965, the effective tax burden, on say, triple A seasoned bonds was not equal to the tax levied on the typical individual of 40 percent, but closer to 60 or 70 percent.

That is because we do not allow the individual to make a deduction to maintain the purchasing power of his wealth. We ought to be

taxing the difference between the nominal yield and inflation.

So if we did move to a system of inflation accounting for both personal and corporate taxes, we would be changing the effect of our tax system on the incentive to save.

(I would like to say that increasing the incentive to invest would definitely increase savings, but unfortunately, the evidence is very

mixed on that point.)

Let me try to pursue how we might remedy the inflation distortions of the personal income tax. It may seem that everyone would be forced to work with a computer, but in fact that is not true. For things such as interest on savings accounts, we would simply have the bank calculate what the inflation adjusted return is and report that to the individual each year. It would be very easy for the banks

to do this, and in some references that I provide in my statement,

I have worked out the exact procedure.

Now, as for bonds, it would be easier, I think to take an alternative but equivalent approach. That is, when the individual calculates his gain on schedule D, simply allow the individual to write up the purchase price of his bonds, and indeed I will suggest the same for stocks, by the inflation that has occurred between the purchase date and sale date of this equity instrument.

For example, if when you purchase the bond or stock, the Consumer Price Index stood at 1, and when you sold it, it stood at 2, then you would double your effective purchase price before computing

the capital gain.

This would be equivalent to the proposed treatment of savings account interest. It is important to note that not just those assets which are currently classified as capital assets should get this treatment. This inflation imposes a tax on everyone who is saving, whether they put their money into the stock market, bond market or into savings accounts.

Senator Bentsen. You wouldn't be concerned about the great disparities in inflation between various items?

Dr. Brinner. What I would use is something like the Consumer

Price Index.

Senator Bentsen. I understand, but you have great variances within.

Dr. Brinner. There are variances for items within the Consumer Price Index, but it has been shown that the aggregate indexes are representative. Even when you compare the typical expenditures of the wealthy versus moderate versus low-income people, the respective price indexes do not differ tremendously.

The most recent episode of food inflation you might have thought would have provided the most dramatic chance for differences, but studies by the University of Wisconsin and other places indicated that the CPI is a representative index for all classes. It would come closer to measuring the real income rather than the current tax structure which ignores inflation altogether.

On the corporate level I would argue that we ought to try to alleviate two problems. One is the bias against equity investment in

the corporate sector that exists due to the corporate profits tax.

I would propose to do this by allowing full deductibility of dividends. Prof. Martin Fledstein, of Harvard, has estimated that using 1974 as an example, corporate profit taxes would have fallen by something like \$29 billion.

Of this \$29 billion, \$27 billion would have been distributed as extra dividends, and \$2 billion would have been seen as increased retained earnings.

Now, these are equilibrium movements. They would not happen

instantaneously, but rather over a period of 3 to 5 years.

As to the question of the total loss in Federal revenue, I said that \$27 billion would go out as increased dividends that would be taxed at the personal level.

So we gain back in \$10 to \$15 billion there. Therefore the net

revenue loss would be approximately \$15 to \$20 billion.

Given that the dividend behavior would change gradually over 3 to 5 years just by the fact that the corporation would not immediately

respond by increasing dividends, I think this is a modest amount that would help support the recovery of the economy.

Again, at the corporate level, I would do several other things. I would move to inflation accounting, and this would encompass several

aspects.

First, depreciation should be on an effective replacement cost, or an approximate replacement cost basis. If you did this alone, there would be a significant drop in corporate taxes. However, I think since we are trying to get a better definition of income, we should recognize that corporations with a large volume of outstanding debt do benefit from inflation to the extent that it is easier to pay back that debt.

That is, the real burden of that debt is decreased by inflation.

A thorough study Sidney Davidson and Roman Weil indicates that if you took those two steps corporate income would decline. but

only by approximately 5 to 10 percent.

So we would not have a major loss there. We would have as a better measure of income across corporations. Moreover, if you are trying to stimulate capital formation you would probably like to support high growth industries and Weil and Davidson note that this kind of inflation accounting would prove that the earnings of high growth firms were better than their current income statements say they are, compared to the slow growth, old industries. This revelation should enhance their ability to attract the funds they need to sustain growth.

Given that time is short I think that it probably would be good to close at this point and then let you pursue any of the points

I have brought up.

Senator Bentsen. I noticed in the testimony of Dr. Kendrick that part of the reduction in productivity on capital investments results from a lack of research and development.

We had Dr. Gilpin of Princeton who testified before my Economic Growth Subcommittee of the Joint Economic Committee and he made the same point, but he coupled it with an explanation of what he

thought some of the reasons happened to be.

Pure research was very much in vogue back in the 1950's. A lot of corporations were doing it. A lot of corporate presidents were dedicating substantial sums of money to pure research. The results were not patentable and sure didn't show up in the profits per share for the next year or the next 5 years, and a lot of those corporate presidents were anticipating retirement in the next 5 years.

They weren't particularly interested in doing research for one of their successors. They were interested in what their particular stock bonus was, or the year-end cash bonus was, and in impressing the

board of directors and their shareholders.

They soon decided that it wasn't in their personal interest to spend a lot of money on pure research, and I think that is what has happened.

I think you are seeing some very real emotional and selfish objectives that are involved and that they play a part in the decision

there.

How do you get around that in this country of ours? We are dropping behind in the amount of money we spend on research and we were the ones who were making great strides.

Dr. Gilpin, in his study for us, thought the way to get around it was to do more in the way of pure research in the universities, with all of that available to business, to try to utilize it for breakthroughs.

But he couldn't figure out a way to get businesses to do more of it, since they couldn't see a direct payoff, and yet the full

knowledge that we have to keep doing it is widely held.

Do any of you have any comments on that?

Professor KENDRICK. You are quite right about business not spending very much for basic research. I think that over 90 percent of the expenditures are for applied research and development and engineering, where the payoffs can be seen down the road.

Senator BENTSEN. Not too far.

Professor Kendrick. Not too far, yes.

Senator Bentsen. "Before I retire as company president."

Professor KENDRICK. Yes.

Now, I think that is one reason why the Congress in its wisdom established the National Science Foundation and put the resources of the Federal Government behind supporting basic research in view of this fact that most industry research is more short term and more

applied.

I think it is very important in addition with respect to what can be done to stimulate private research. that the Federal Government support R. & D. through the Science Foundation, through DOD, through NASA, and so forth, that this continue to grow at a gradual pace more or less in line with GNP, and that we not have an off-again, on-again support for basic research which, as you remember, as we began to phase out of Vietnam, and that was in 1969 and 1970, led to an unemployment of scientists and engineers as many of those defense programs of research were suddenly phased out without anything to take their place.

I think that that is one thing, a fairly steady Government support for the basic kind of research, as well as the research connected

with defense and other national programs.

But with regard to the fact that private research is biased toward the applied variety, that is why I believe a case can be made for an R. & D. tax credit, say the 10 or 12 percent that you now have on machinery and plant investment, recognizing that there are external situations, as the economists say, in this research in that the community benefits and other companies benefit from the research and therefore I think part of the cost could be borne by Government through this kind of a tax credit.

That is part of the case for the situation and I think that this credit should apply to grants made by companies to universities and to nonprofit research organizations, which might be more in the basic research areas.

So, I think that is part of the case for this tax credit, that we do benefit, all of us, from the basic research and since the company doesn't sometimes get as much benefit as is necessary to justify it on a pure profit calculation, that the credit will help to stimulate more of the research which is for the benefit of the whole economy.

Senator Bentsen. Dr. Walker, Dr. Kendrick suggests a further tax

credit for research.

There are students of the tax law who argue that when we give these tax preferences or incentives, that we distort the decisionmaking process that we would normally have for business and that we don't really rely on the market forces than you get an artificial jiggering of that decision.

Now, you have had substantial experience both in Government and

out. What do you say on that?

Dr. WALKER. If those people would change the word "distort" to

"affect," I would be a lot closer to them.

They seem to me to be starting from the assumption that we have a perfect tax system as it is, one that does not affect market decisions. This is incorrect.

In fact, the basic thrust of my testimony today had to do with the tilt favoring consumption versus saving and investment. But, I would go a step further. We have a mixed economy. We have an affluent economy. We have a nation in which the people have made it clear that in the light of our affluence they want to serve certain goals that we couldn't serve 100 years ago when just getting enough to cat was a problem. These goals have to do with the improvement of the environment and things of that type.

Now, in a pure market economy where you are trying to maximize your short-run return—I think that is a shortsighted view for a businessman, and I think he ought to maximize the long-term return

to his stockholders——

Senator Bentsen. I agree with you, Dr. Walker, but I am not sure that can be done.

Dr. WALKER. Yes. As the famous fellow said, "In the long run we are all dead," and a chief executive may be retiring in 5 years, so his view is not going to be so long run. That's why short-run profit maximization is often the goal.

We want to serve these public ends, and if we want to do it through Government there seems to me to be basically two ways

to approach it.

You can try to do it through the route of direct subsidization

and this is very popular among many academic economists.

They would say, "Why have a tax preference such as the investment tax credit. We could use the same amount as a Federal appropriation

aimed basically at the same purpose."

My objection to this is at least twofold: First of all, when you start setting up direct subsidy programs, you have got to select people to run them who make decisions as to project versus project and person versus person. I don't like the "rule of men" as contrasted with the "rule of law."

In other words, you would have to have a bureaucracy of some sort.

Senator BENTSEN. Don't say "as you would have." I was quoting someone else.

Dr. WALKER. I was using "you" in a generic sense, Senator.

Senator Bentsen. All right.

Dr. WALKER. I think we have gone too far down that road relying on bureaucracy and the "rule of men."

If you take the tax preference or subsidy approach if the public wants to subsidize certain types of activity, then giving a tax credit

for that purpose does not in my judgment distort the basic precepts of the market economy. The businessman will then make the decision on the basis of having ground in the tax effect on the after-tax profit.

I think a carefully conceived tax preference or tax subsidy approach

is generally far superior to the direct subsidy approach.

The disadvantage is, you get them in the law and they are liable to stay there for a longer period than needed. I would therefore accompany tax subsidy or preference in the law with, at the least,

an automatic review on a periodic basis.

When I was a Treasury official, we recommended three new subsidies adopted in 1969. One had to do with investment in antipollution equipment; one had to do with rehabilitation of slum property; and I think the third had to do with railroad rolling stock—those three preferences were put in the Tax Reform Act of 1969. But they expired in 5 years.

Something proved such as the Investment Tax Credit needs little review. But now preferences, if not for limited periods need periodic

review by Congress.

This approach is definitely not inconsistent with a market economy. Soundly conceived tax legislation can abet social goals without

distorting the private decisionmaking process.

Senator Bentsen. Let me ask one other question, because I have been sympathetic to the idea that you ought to be able to use effective replacement costs in your depreciation schedules, because that is more realistic, but I would like someone to address themselves to the practicalities of the determination of replacement costs, the mechanics of that, as compared to just the accounting entry of what actual costs are, which is a very easy thing.

How do you keep from having a continual wrangle with IRS in

that situation?

Dr. Brinner. Some of the groups that have looked at that have come to the same conclusion you just reached, that an exact replacement cost approach would be impossible to audit and would hence lead to litigation and what they suggest in its place is to use an aggregate or average index such as the GNP deflator or the durable equipment deflator—something that measures roughly the movements in the price of new equipment.

Again, like the discussion we had earlier with respect to the Consumer Price Index, this would not be an exact figure, but it would

be better than assuming zero inflation.

Senator Bentsen. Is there any further comment on that?

Professor Kendrick. I know that Mr. George Tuborg is a student of that view, that rather than try to price out the exact structures of the exact equipment that rifle company is depreciating, that an overall index, such as the depletion for structures and equipment of the GNP would greatly reduce any controversy and in effect stylize the whole computation.

Senator BENTSEN. Mr. Evans and Dr. Brinner, you have recently made some projections concerning the Federal budget which are

disputed by the administration.

Do you have any comments and rebuttal? You have had substantial variance from what the administration has said.

Mr. Evans. Yes. The official budget and estimate for 1977 of \$395 billion, our best estimate is that it will be about \$30 billion higher than that.

Half of that approximately is due to the fact that we are predicting a higher rate of inflation and higher interest rates, and therefore, everything will cost more and the debt for the Government will be somewhat larger. But about \$15 billion of that reflects the fact that we do not expect programs to be cut back to the extent that President Ford and his administration propose.

I think the passage of \$96.1 billion public works programs, passed by heavy majorities in the House and Senate would appear at this point to be put into law. That is one example of the sort of thing

that could happen.

We see virtually no progress being made as far as reducing the deficit, which is unusual. Usually, the deficit is countercyclical. It is large in recessions, and declines in periods of prosperity. I do not see this occurring.

Furthermore, to carry this out further, we have predicted that unless there is a change in the mix of fiscal and monetary policies that we would expect another recession to occur in 1978, and at that point, if nothing changes, then the Federal budget deficit would ap-

proach levels of \$150 billion.

Dr. Brinner. We do not foresee as much of a threat in the future of a major depression or recession, whatever your favorite word is there, but we do agree that the Federal Budget should be, and in all likelihood will be higher than the estimate of President Ford. We feel that the Ford budget is essentially a statement of philosophy. Therefore in our forecast we look for a higher level of spending, and we welcome that. We also look for an extension of the current tax cuts, and our estimate again is that we would not see the big tax cuts that President Ford's budget calls for along with his big expenditure cuts.

Senator Bentsen. Senator Brock?

Senator Brock. Why do you think we need an increase in Federal

spending?

Dr. Brinner. Even with the forecast that we have the Federal Government share of GNP is not rising. It is actually falling. The fact of the matter is that if we had the cuts in expenditure and the cuts in taxes that the budget message calls for, we would have a depressive effect on the economy.

Modern economists agree that the stimulative effect of a tax cut is not as great as the stimulative effect of an equal expenditure increase. By a similar logic you see that if you make an equal tax cut and an equal budget cut that you will depress the economy.

Senator Brock. Are you concerned about the size of the deficit?

Dr. BRINNER. Yes, but I think the best way to cut the deficit in a long-run sense is to get the economy rolling again.

Senator Brock. How much would that take?

Dr. Brinner. You would have to specify your choice of how fast you would approach full employment.

Senator Brock. Make your choice.

Dr. Brinner. I would like to see a stimulus of \$15 to \$25 billion. Senator Brock. Over the President's budget?

Dr. Brinner. Over what we are projecting. The most optimistic outlook we see is 6 percent unemployment by the end of the 1970's. We do not see 5 percent much less 4 percent, unemployment until the 1980's, It is asking a lot of patience of the American public.

Senator Brock. Give me a budget figure, then. I do not think I understand you. You said that you wanted \$15 to \$25 billion more than what you wanted? What do you want? How much more do

you want?

Dr. Brinner. In fiscal year 1977, we look for \$351 billion in receipts and \$394 billion in outlays.

Senator Brock. That is the present budget.

Dr. Brinner. Yes. I am sorry.

Instead of the President's budget, we are predicting that in 1977, and this is a calendar year, we will have a deficit of approximately \$40 billion.

Now, recall that this similar deficit is achieved in a different way. We have higher taxes, and we have higher expenditures. On the other hand, we get the economy going somewhat stronger, and ——

Senator Brock. Let's keep it to one point at a time. What is

your expenditure level?

Dr. Brinner. All right. \$393 billion in 1976, \$421 billion in 1977 and \$448 billion in 1978.

Senator Brock. And where do you increase the taxes?

Dr. Brinner. Actually, we are talking about an increase relative to the program of President Ford. We are talking about an extension of the current cuts, so we are rally maintaining the current tax philosophy.

Senator Brock. But you said you had an increase in taxation.

Dr. BRINNER. Relative to the Ford program. Senator BROCK. You would not cut taxes——

Dr. Brinner. We would not cut taxes as much as he does, and we would not have a cut in expenditures.

Now, the exact numbers for Federal expenditures in 1976 calendar year, \$393 billion and in 1977 \$421 billion.

Senator Brock. What level of deficit would be projected for 1977?

Dr. Brinner. For 1977 we are projecting a \$38 billion deficit, and approximately a \$30 billion deficit for the succeeding 2 years as well.

Senator Brock. In other words, you say that if you increase spending and do not cut taxes as much as he has proposed, it would generate more revenue, and therefore your deficit will not be any greater than that which he has suggested?

Dr. Brinner. The first year, the effect might be to increase the deficit, but if you add them up over the next 5, and prevent the

recurrence of recession, then you come out ahead.

Senator Brock. How do you prevent the recurrence of inflation?

Dr. Brinner. Prevent the recession by an accommodative monetary policy, by maintaining expenditures, and by not cutting back on programs to retain public confidence.

I think Mr. Evans' statement was "return of inflation, plus prime

rates in the double-digit level."

Senator Brock. You do not think your approach would add to inflation?

Dr. Brinner. It would add somewhat to inflation.

Senator Brock. How much?

Dr. Brinner. Perhaps I percent a year. Given the current excess capacity we have in labor and capital resources, you would not find substantial extra inflation coming from the added stimulus I have suggested.

Senator Brock. I find that a remarkable statement to make, since

in the last 3 or 4 years, unemployment had no bearing on inflation.

Dr. Brinner. If you say unemployment has no bearing on inflation, you are not making the economists' assumption of "other factors

equal.'

If we had had higher unemployment, you would have seen greater wage pressure, which would have fed into prices. Careful studies have indicated that OPEC alone is responsible for from one-half to two-thirds of the inflation in 1975. If you add to that the actual price increases, you can explain the inflation. You do not have to look to the old-fashioned demand-pull type of inflation.

This was a new type of inflation that we can't control as easily.

Senator Brock. I did not think cost-push was that new.

Dr. Brinner. There as not a cost-push at all. The typical costpush was an effort to respond to falling profit margins. Our recent inflation primarily derives from external factors.

Arthur Burns, even if he would like to, cannot control the sheiks

in Arabia or the weather in Kansas.

Senator BROCK. Mr. Evans?

Mr. Evans. This commodity inflation is not new. It is one of the oldest explanations of inflation that has been around. In 1950, Professor Dusenberg of Harvard wrote an article that is often quoted, pointing out that increases in commodity prices has been one of the major causes of inflation.

So I do not think we can say this is a new measure of inflation. We have to say that recently when commodity prices have gone up, there have been productivity increases to offset them. We have run out of productivity increases. All of these are passed along. Until we get productivity going again, I think we are in for a worse inflationary spiral then we had last time. So I do not agree with Dr. Brinner's forecast.

Senator BROCK. Neither do I, but we will have to wait and see what happens, I guess.

Let me just ask one more question.

Dr. Brinner, you suggest that in your merging of individual and corporate taxation that the exempt portion would be that portion which paid out dividends, and that it would not be retained. Why?

Dr. BRINNER. I would favor retention of a tax levied on the retained earnings, because the corresponding capital gains are not taxed at

the personal level until they are realized.

Now, once a capital gain is realized on corporate equity, I would follow the recommendation of the Carter Commission that said we should allow accumulated taxes on retained earnings to be used as a credit against the capital gains tax. Indeed, I am calling for a vertical integration of corporate and individual income taxes that would tax the income as it accrues, rather than as it is realized.

Remember that the inflation accounting that I also proposed for capital gains taxation would also influence the capital gains. This

would be far beyond many of the current proposals to have a rising exclusion proportion and so forth. I am sympathetic to changes in the taxation of capital gains, but I want to maintain the equity of the tax system by doing it carefully and adjusting the personal income tax carefully.

Senator Brock. Wouldn't it be easier to compute retained earnings? Dr. Brinner. You could. That is the equivalent in my view, and

I would be just as happy to see that.

Senator BROCK. It is not quite equivalent. It depends on who pays

when. It is conceivable that if it is in effect——

Dr. Brinner. If you compute them, then individuals who have a higher personal tax rate than the corporate tax will end up paying higher taxes, and people with a lower personal tax rate would pay lower, and, of course. I would like that. I do not see that as politically feasible as the idea I proposed. If you support that I would support it, also.

Senator BROCK. One last question, and I would like to have any of you comment. There is a sort of interesting twist to capital formation in Sweden that you probably are familiar with, in which they allow a corporation to set aside 40 percent of the pretax earnings, of which 46 percent is paid into a special trust fund controlled by the Government, and that trust fund is released after 5 years, but any of it can be released at any time to give a shot to the economy.

But it is left there until released by the Government to reinvest it in activity or whatever. I find that sort of an interesting concept in the sense that it combines capital formation with the countercyclical applications. I think that is wise, but it is asking a lot more of Government that we usually get. It might be beneficial. I wonder if any of you have had experience with it, or would want to comment on it.

Dr. Walker. Senator, I think that it is certainly more preferable to the recommendations that we get almost with regularity of this country vis-a-vis the investment credit, that either it be varied by the powers-that-be, up and down for cyclical purposes, or through the political process that it be cut off by act of Congress as it was in 1965 or 1966, and I remember very well, from 1969.

Senator BENTSEN. Of course, you always get a tremendous lag in

whatever Congress does on something like that.

Dr. WALKER. Yes. I have a table over here to show that the cutoff in 1966 was almost at the month of turndown in business expenditure on plant and equipment. So this is full of human error and forecasting error, but it knocks the dickens out of the entrepreneur and the people making use of it.

This is somewhat in the middle. You can make your basic plans on the longer range aspect, and if there is a cyclical part that comes into the picture which you didn't expect, then that is sort of like

a little whipped cream on top of the dessert.

Dr. Brinner. I might add to the issue of planning problems that some studies that I have made indicate that variation in the effective cost of investment is much more due to the fluctuation of interest rates than it is to changes in the investment tax credit. If you could stabilize interest rates you would stabilize the cost factor. This would stabilize investment more than having a flexible tax credit.

Senator Brock. How would you stabilize interest rates?

Dr. Brinner. If you look at a graph of the rate of growth of the economy and the reserves provided by the Federal Reserve System over the past 20 years, there is marked similarity. You see the credit crunch, a shortage of reserves every time the economy expands strongly for 4 to 6 quarters. The Fed. in effect, jams on the brakes.

Senator BROCK. Would you require the Federal Reserve to have

a certain percent monetary increase each year?

Dr. Brinner. I believe some discretion is useful, but I would hope that the lessons in the past lead to an avoidance of extreme, stop-

go policies.

Senator BROCK. I think we all agree with that, but the question I asked, then, still remains—how? You would not suggest that we fix interest rates by statute, would you?

Dr. Brinner. No; I do not. They have a function that they perform,

but I am afraid that effective price moves too rapidly up and down.

Senator Brock. Thank you very much.

Senator BENTSEN. Gentlemen, thank you very much for your testimony. We are very appreciative. We have taken your entire testimony and put it in the record as submitted.

Thank you.

[The prepared statements of Messrs. Walker, Evans, Brinner, and Kendrick follow:]

STATEMENT OF DR. CHARLS E. WALKER, CHAIRMAN, AMERICAN COUNCIL FOR CAPITAL FORMATION

Mr. Chairman and Members of the Committee:

I am grateful for the opportunity to present the views of the American Council for Capital Formation to this Committee. The goals of the Council are supported by some 1600 individuals and businesses that believe a higher rate of capital formation is essential to the future well-being of this nation.

Summary

Mr. Chairman, the case that the American Council makes for a higher rate of capital formation can be summarized in six statements.

First, rapidly rising productivity provides jobs and economic growth, helps contain inflation, and enhances our competitiveness in world markets.

Second, trends in productivity reflect mainly the skills and habits of the work force, plus the quantity and quality of the stock of real capital, or productive investment.

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Third, changes in the quantity and quality of productive investment reflect decisions to consume, save and invest.

Fourth, although many factors affect such decisions, the impact of the nation's tax system is among the most important.

Fifth, in this nation, we overtax savings and investment and undertax consumption.

Sixth and finally, one of the most promising and feasible means of promoting faster capital formation is, therefore, to shift the tilt in the tax system away from excessively stimulating consumption toward fostering savings-and investment.

These six statements are by no means universally accepted; there are some who would argue that, left alone, the capital formation problem will take care of itself. But I submit that the views I express are gaining widening support, both among the public and in the Congress. This naturally leads to the question of why Congress has been relatively slow in addressing the problem, a matter I shall return to toward the end of my testimony. First, permit me to make a few remarks—concerning the relationship between capital formation and other important economic variables, and to summarize some of the tax actions recommended by the American Council.

Capital Formation Promotes Economic Growth and Productivity

To the best of my knowledge, all of the recent serious studies of our long-term capital outlook agree that the demand for capital will be increasing at a much greater rate than we have experienced in the recent

past. By the best estimates available, the U.S. will need the incredible sum of \$4.5 trillion in new capital funds in the next 10 years -- three times the \$1.5 trillion of the past decade. The Bureau of Economic Analysis of the Department of Commerce has concluded that private fixed investment must increase from the 10.4 percent of GNP that characterized the 1965-1974 period to 12 percent of GNP between now and 1980, if we are to have a capital stock sufficient to promote full employment, control pollution, and maximize development of our domestic energy resources.

It is true that some serious students of the capital formation problem have argued that the U.S. will just skirt the edge of a severe capital shortage. These experts have made the assumption, however, that the federal budget will come into balance by 1977 or 1978 at the latest and that the Federal government will be a net provider of savings (that is, produce a large surplus in its budget) for the last half of this decade.

Given the real world of Washington, and even with the early promise of the new Congressional budget process, there is serious question whether the Federal government will produce net savings for the economy on any sustained basis. On the contrary, we know from long experience that the cost of projects perceived as worthy and requiring Federal funding always exceeds available revenues. Thus, if we are realistic, the needed increase in necessary investment capital will have to come from the savings of the American people and the profits of American business.

It has been recognized by economists, at least since the days of Adam Smith, that in order for a society to grow and prosper it has to accumulate capital and channel it into productive investment. In other words, a society must consume somewhat less than it produces and use its savings to create capital goods which in turn increase productivity. The main source of our nation's prosperity has been our willingness and ability to save and produce productive capital.

The close relationship between capital investment and economic growth and productivity is well known and has been well documented.

Since 1960, the United States has had the lowest level of capital investment among its major competitor countries. Significantly, among these major industrialized nations, only the United Kingdom has shown a rate of productivity growth slower than that of the United States. Japan's rate has been triple our own; the rates in Germany, France and Canada are substantially higher than ours.

All of these nations give more favorable tax treatment to capital investment than do we. In today's highly mechanized world, productive investment is the keystone of productivity. If, through underinvestment, we lose the ability to compete effectively with other industrialized nations, we will find ouselves in an intolerable situation. Unless changes are made, we will suffer a further loss of markets and jobs to competitor countries, and a decline of our world political, economic and military position.

Capital Formation Creates Jobs

The U.S. Treasury estimates we will need to create almost 20 million new jobs by 1985 to reach a full employment economy. By contrast, we created about 13 million new jobs during the past decade.

Henry Wallich, of the Federal Reserve Board, and others have concluded that as a result of inadequate past investment, the United States is already experiencing an overall shortage of capital with respect to jobs. Under this condition, which we have experienced in the recent past, there are not enough jobs to provide full employment even when industry is operating close to desirable levels. Thus, capital capacity falls short of labor force capacity. Labor has fully as much interest as business in remedying this serious condition.

There is much evidence to show the importance of increasing investment to creating jobs. Data Resources, Inc. has determined that there was a positive correlation of 69 percent in the United States between changes in employment and investment for the period 1948-1974.

Yet, unfortunately, our capital to labor ratio for new workers is declining, while most of the European countries and Japan have been rapidly increasing their capital investment per worker ratio; Professor Paul W. McCracken, former Chairman of the Council of Economic Advisers, has concluded, by using historical figures reported in constant dollars, that the amount of nonresidential capital formation per person added to the labor force in the United States during the 1970's has declined by 22 percent from the levels reported in the 1956 to 1966 decade. Also,

Professor David Meiselman of Virginia Polytechnic Institute has calculated that in dollars of 1958 purchasing power, from 1961 to 1965 there was an increase of \$55,000 in the gross stocks of business capital for each person entering the labor force. During the 1966-1970 period, it had fallen to \$46,000, and during the 1971-1974 period, it had fallen again to only \$41,000.

To be more specific, during the 20-year period from 1947 to 1967, the shares of U.S. income going to labor in the form of wages and salaries and to capital in the form of before-tax profits, interest, and rents remained basically constant. Approximately 70 percent of the income went to labor and approximately 30 percent to capital. There was a rapid growth in capital stock during this period, averaging 3.7 percent per year while labor input grew at an average 1.4 percent per year. Thus, the capital labor ratio increased at an average of 2.3 percent per year, which was also essentially the same as the increase in the productivity of labor and in the real wage. The rate of return per unit of capital remained relatively stable during this period.

Since 1967, however, there has been a significant decline in both the capital share, with labor getting a much larger share, and in the pre-tax rate of return to business capital. The estimated pre-tax rate of return on the invested capital of non-financial corporations has declined from about 14 percent in 1967 to about 8 percent in 1974. The process of business adjusting to lower returns to capital results in a decline in capital formation until the stock of capital shrinks relative to

labor. As capital becomes less abundant relative to labor, its rate of return rises. But as a result, we end up with less capital relative to labor which in turn diminishes the productivity of labor. Diminished labor productivity in turn causes a lower wage rate in real terms which results in a decline in real economic growth, thus reducing new job formation.

In other words, without increased capital formation, increased productivity will be stifled, real economic growth will diminish, and fewer jobs will be created.

The slower rate of economic growth, as a result of the capital shortage, will not only reduce the employment opportunity among the firms that survive the shortage, but will totally eliminate employment opportunities among those marginal and smaller businesses which cannot survive the shortage.

Capital Formation Dampens Inflationary Pressures

During 1973 and the early part of 1974, our economy suffered major shortages in many basic industries including chemicals, steel, paper, and fertilizer. These shortages served to exacerbate inflationary pressures and hinder growth in the economy. This lack of sufficient industrial capacity was a result of inadequate prior investment -- a capital shortage in the affected industries.

Allen Sinai of Data Resources, Inc. and M.I.T., and Andrew

Brimmer of the Harvard Business School, have defined a capital shortage
as an economy in which (I) the financial system fails to provide the

necessary funds to finance the economy's expenditures at reasonably stable rates of interest; or, (2) capital expenditures are insufficient to generate enough capacity to meet the demands of the economy at reasonably stable prices. We have already experienced these results and, unless we take appropriate actions, a much more severe impact can be anticipated.

The Council of Economic Advisers has noted several inhibiting factors which may cause business to fail to provide the adequate new investment to avoid future shortages. For example, actual rates of return on business investments have lagged, in recent years, as a result of such things as increased price instability, experiments with wage-price controls, and increased costs resulting from environmental and safety regulations. These factors force businessmen to increase their "investment risk" premiums, in turn reducing the number of acceptable investments.

Also, general price inflation has raised corporate taxes by a greater proportion than the before-tax return on fixed capital. This has occurred because inflation-induced inventory profits have boosted the tax base. In addition, inflation has caused the real value of historical cost depreciation allowances to decline.

The increase in corporate debt-equity ratios has partially resulted.

from the tax treatment of interest as deductible expense. This has made debt financing particularly attractive during inflationary periods thus increasing business financing risks which in turn has increased the cutoff rate of return on many new projects.

Finally, fiscal policies have been biased against private investments by emphasizing the stimulation of consumption through Federal tax and expenditure policies rather than investment. When these policies have led to inflation, monetary restraint has been imposed which has led to incomplete capital formation through the business cycle.

To reiterate, inflation will occur as a result of insufficient productive capacity as the economy moves toward full employment. If there is adequate capital formation there will be no major widespread capacity shortages and thus inflationary pressures will be mitigated, even in a period of rapid economic growth.

Recommendation #1

- Elimination of double taxation of corporate dividends.

We must begin to eliminate the two-tier tax on corporate profits and tax business income only once. Whether the best approach is to grant the individual a credit for all or part of the corporate profits tax, permit dividends to be deductible against the corporate tax, a combination of the two or other variations -- all these approaches deserve additional discussion and debate. The important point is that we get started, one way or another, down this road. Most of the major European nations have done so.

Let me say that if we truly comprehended the benefits to our economy I believe we would repeal completely the corporate profits tax.

I know that sounds extreme. But such a repeal, if coordinated with strong control of Federal spending (reducing the rate of growth in the Federal establishment) or if tied in with an increase in taxes on consumption,

would have a very favorable impact on jobs, growth and price stability.

And the case is strengthened by the fact that we simply do not know who finally pays the corporate tax -- except that it is people, not corporations.

Recommendation #2

Permanently extend the Investment Tax Credit (ITC) at a 12 percent level, remove restrictions relative to earnings, and make it fully "refundable" (that is, grant it as a cash rebate to businesses which earn nothing or too little to realize the full benefits of the credit).

Arguments pro and con with respect to the ITC have been hashed and rehashed time and again since it was first enacted in 1962 on the recommendation of President John F. Kennedy. Most observers agree that the credit has been a valuable device for reducing the cost and increasing the supply of capital -- and, in so doing, providing jobs and material supplies which reduce inflationary pressures. (Labor members of the President's Advisory Council on Labor-Management Relations unanimously endorsed a 12 percent ITC in early 1975.)

Recommendation #3

Provide for simpler and more liberal depreciation allowances.

Depreciation allowances under the Tax Code are too small. For example, the United States has the most restrictive depreciation allowance provisions of almost any major industrial country. More realistic ways to permit businesses to depreciate assets and recover investments, particularly during these inflationary times, are needed. One approach would be to liberalize the Accelerated Depreciation Range by extending it

from the existing 20 percent up to 40 percent or more. Another would be to permit business to "catch up" with inflation by permitting depreciation on a replacement rather than original cost basis.

Recommendation #4

More equitable capital gains tax rates.

There have been a number of sound proposals which merit serious consideration for making the capital gains tax more rational by taxing a smaller portion of the gain the longer the asset is held. Such an approach would help free up locked-in capital, encourage new investment, and treat long-term investors and small businessmen more equitably. The existing minimum income tax, which falls heavily on capital gains, should be shifted from an "additional" tax to an "alternative" tax.

Recommendation #5

Provide tax incentives for stock ownership.

A plan allowing taxpayers to defer tax payments or providing for tax credits for income invested in common stocks up to some limit would have a number of desirable henefits. Such a plan would encourage additional savings and investment in productive equity markets, thus stimulating business expansion, which in turn will provide new jobs and greater material well-being. The program would have the desirable socially stabilizing benefits of expanding ownership of American enterprise to many more citizens and providing additional motivation and reward for individual nest egg savings.

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Recommendation #6

Provide tax deferment for dividend reinvestment.

Deferral of personal taxes on corporate dividends immediately reinvested in the same business would probably cost little in terms of revenue in the short run -- and practically none in the long run -- but at the same time provide a significant incentive to increasing the equity funds that a debt-heavy corporate structure so badly needs. Even though now taxable, the dividend reinvestment plans now offered by a number of companies attract a relatively large amount of funds. Tax deferment should increase that amount significantly.

Mr. Chairman, these six recommendations are not intended to be exhaustive, nor could they be achieved overnight, but they are goals that Congress could move toward in an effort to shift the tilt of the tax system from its current bias toward consumption in order to stimulate much-needed capital formation. If, as I have argued, the case for capital formation is so strong, and if the answers are—on paper at least—relatively simple, why has action not yet been taken in any significant degree?

Some Practical Problems

The answer to that question is not simple -- it is perhaps as complex as our system of government itself. But I submit that, from a practical political standpoint, there are three major stumbling blocks. And I fully understand, Mr. Chairman, that I as a layman am, in a sense, intruding on your "turf," for surely Members of Congress are fully aware of the practical problems involved. But the same cannot always be said for the public in general or even the press.

Mr. Chairman, after seven years of working rather closely with the Federal tax system. I have concluded that three widely held myths provide the greatest obstruction to shifting the bias in the tax laws so as to foster capital formation and productivity.

The first myth, propagated by the press and some politicians, is that the rich get away with murder when paying taxes. To be sure, disclosure that a handful of millionaires escape Federal taxes in any given year (the preceding or succeeding year may be a very different matter) makes the typical taxpayer's temperature rise and his blood boil. But the fact is that the rich do pay taxes -- and in large amounts, both absolutely and in percentage terms, These figures are available from Treasury -- and they not only give the lie to those who maintain that the rich pay little while the poor get clobbered; they also show that the situation has improved markedly since passage of the Tax Reform Act of 1969. The fact is that effective Federal income tax rates range from zero from nontaxpayers to 10 percent in the lowest bracket up to 33 to 40 percent in the top brackets. That's progressive enough for me and,

I think, most Americans. And it also indicates that our Federal individual income tax system is fundamentally fair.

The second myth is that corporations can be taxed without hurting people. This is nonsensical. Corporations are simply legal arrangements for doing business and the taxes levied on them are either passed forward to customers or backwards to owners and other factors of production.

If forward, they raise the cost of living. If backwards, they reduce the

attractiveness of investment in business and impede the very capital formation that is so crucial to jobs, growth and inflation control.

A third myth is that there are literally billions upon billions of "tax loopholes" that, if closed by the Congress, could result in sharp reductions in the rates applicable to the typical individual taxpayer.

Not so. Many of those tax preferences affect the "typical taxpayer" -- especially such things as the deductibility of interest on mortgages, state and local property and income taxes, charitable contributions, and employer contributions to employee pension plans. You would not know it from the press, but of the \$90+ billion in so-called tax preferences or "expenditures" ("loopholes" to some) more than \$70 billion accrue to individuals, instead of corporations, and largely to low and middle-income taxpayers at that.

So long as these myths prevail, Mr. Chairman, constructive structural changes in tax laws to promote capital formation are going to be hard to sell politically. One goal of the American Council for Capital Formation is to attempt to dispel these myths. To the extent we are successful, the task of those of you in Congress who perceive the real nature of the problem, as well as its solution, will be that much easier.

Thank you very much,

PREPARED STATEMENT OF MICHAEL EVANS, PRESIDENT, CHASE ECONOMETRICS, INC.

CAPITAL SHORTAGES AND PRODUCTIVITY SHORTFALLS

THE DECLINE IN PRODUCTIVITY GROWTH

The most critical issue facing the U.S. economy today is the lack of growth in productivity; it explains both high inflation and high unemployment. Like most other people throughout the world, Americans have become accustomed to a steadily rising standard of living. Yet this can be accomplished only if productivity continues to rise, for in the long run the difference between the percentage increase in the aggregate wage rate and the consumer price index is equal to the growth in productivity. Wage increases which are not offset by productivity gains can be offset only by higher prices or lower profit margins; but with average margins less than 5%, there is not much more room to squeeze in that direction. Thus if productivity gains are close to zero; wage increases are inevitably translated fully into price hikes, and the inflationary spiral continues to accelerate. Furthermore, an equal percentage increase in wages and prices implies a reduction in the standard of living as long as the personal income tax schedule is progressive and is based on current dollar levels of income. While boosts in exogenous prices such as food, fuel, or imported commodities are likely to intensify this process, it is quite capable of continuing indefinitely without shocks from outside forces. Unlike fluctuations in the real sector, inflationary spirals do not tend to gravitate toward an equilibrium position. Thus if we are to reduce the rate of inflation in the long term, we must increase the rate of growth in productivity; all the gimmicks to delay or retard price increases, including but certainly not limited to wage and price controls in all their various disguises, will not increase the standard of living one whit.

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One statistic goes far in explaining the problem of inflation which we have had during the past ten years. For the first twenty years of the postwar period, namely from 1947 to 1966, output/man-hour in the private sector increased at an annual average rate of 2.9%. For the next ten-year period, 1966 to 1975, it has increased by only 1.3%. These figures are based on official BLS estimates which, as we shall see below, are actually somewhat overstated for recent years. Even if we take into account that 1975 is a recession year and assume that productivity growth will rebound in this upturn just as fast as it has in other recoveries -- surely a generous assumption -- we find that the average annual increase over the twelve-year period 1966 to 1977 is only 1.8%.

1 contains the tabulation of the postwar record for increases Table in output/man-hour in the private sector. We have taken three-year averages rather than yearly figures in order to smooth out the fluctuations in productivity caused by sharp changes in output. While some traces of recessions still remain in these numbers, the overall swings in productivity emerge much more clearly than is the case in the series for annual changes. As is shown in the accompanying table, productivity rose very rapidly in the years immediately following World War II (no figures are available before 1948) because of the large proportion of GNP devoted to investment to replace obsolete plant and equipment. Productivity increases then declined to the 2.6% range for the period 1956-1961, slightly below the long-term average. They then rose rapidly from the period from 1962 to 1968, due to the increase in investment spurred by the investment tax credit and liberalized depreciation allowances, and also spurred by the substantial increases in Federal spending for research and development. Beginning in 1969, both of these

Table 1

Three-Year	Period	Average Annual Growth Rate
Ending	In	in Productivity, Private Sector
1950		5.3
1951		4.8
1952		4.3
1953		3.1
1954		2.8
1954		2.8
1955		3.7
1956		2.3
1957		2.5
1958		2.1
1959		3.2
.,,,,		3
- 1960		2.8
1961		2.9
1962		3.3
1963		3.9
1964		4.1
		•••
1965		3.6
1966		3.8
1967		3.2
1968		3.0
1969		1.8
		•••
1970		1.3
1971		1.7
1972		2.7
1973		3.3
1974		1.1
1975	•	0.1

driving forces toward higher growth were removed. The investment tax credit was cancelled, and recurring financial crises reduced the amount of money available for new investment spending. As we discuss below, the proportion of GNP devoted to R & D spending also declined substantially. The reinstatement of the investment tax credit in 1971 did raise investment above the levels which would otherwise have been reached, but this was offset by the substantial expenditures required for environmental and safety

standards. As a result, productivity actually declined for the first time in the postwar period last year and for the three-year period 1973-1975 has shown virtually no improvement. It should also be noted that this very low increase in productivity also explains how it is possible for the real wage to have declined by some 4% in the period from 1966 through April 1975.

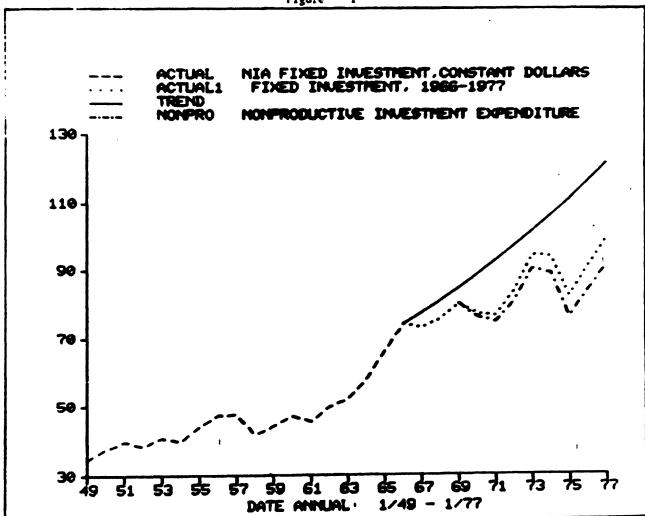
The principal factors determining the rate of increase in productivity are usually given as follows:

- 1) Proportion of fixed business investment to gross national product
- 2) Proportion of output devoted to spending on research and development (R & D)
- 3) Mix of employment: proportion of production to overhead workers
- 4) Mix of output: relative growth rates of the manufacturing and service sectors
- 5) Training and education of the labor force

While we believe that all of these factors have a bearing on the rate of technological growth over the long run, the evidence given in Figures 1.

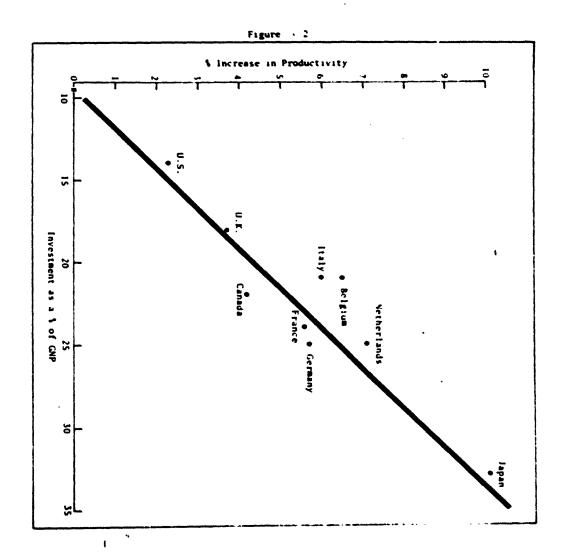
3 indicates clearly that the amount of investment spending has the greatest direct influence on productivity growth.

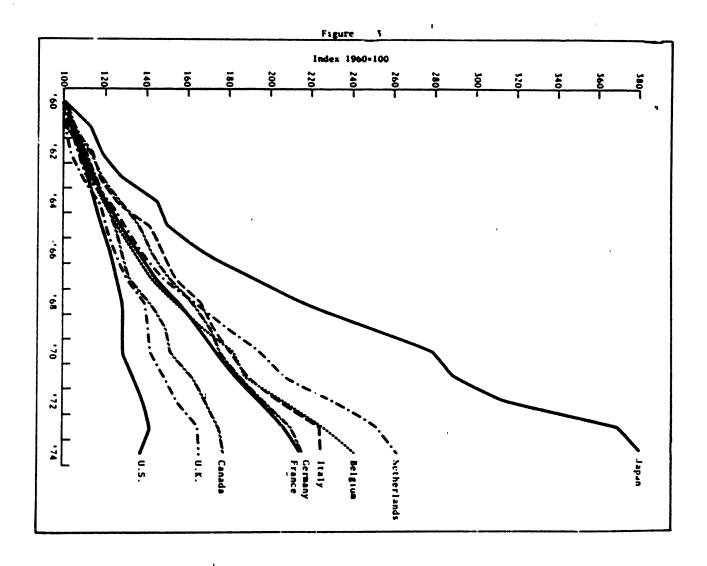
In Figure 1 we note the slowdown in constant-dollar plant and equipment spending which has occurred since 1966, particularly when we extract the estimated figures for spending to meet environmental and safety standards. Whereas it increased by 4.6% per year for the period from 1949 to 1966, it is projected to rise only 1.9% per year from 1966 to 1977. Even if we factor back in the nonproductive expenditures on plant and equipment, which clearly leads to an overstatement of the growth rate of productive capital, we obtain an annual increase of only 2.7% per year.



We can never be absolutely positive that the slowdown in productivity after 1966 was due to the reduced rate of growth in investment. However, additional supporting evidence can be gathered by examining the investment and growth patterns of the U. S. economy with those of the other leading industrialized countries of the world. These comparisons are provided in the next two graphs. In Figure 2 we find almost a perfect correlation between the proportion of GNP spent on fixed investment and the growth in productivity. Figure 3 documents the extent to which increases in output/man-hour in the U. S. have fallen behind growth in the rest of the world. Even when one adjusts these for lower wage gains in this country, the evidence explaining the weakness of the dollar seems compelling.







The other major factor contributing to a slowdown in the rate of productivity is a decline in the proportion of GNP spent for R & D spending. For this purpose, figures on Federal R & D spending are most relevant, since much R & D spending in the private sector is really aimed at the development and marketing of new products. R & D spending in high-technology areas is particularly likely to prove beneficial because of the spillover effects into the private sector; hence the important advances in miniturization are a direct result of the research done in the space program during the 1960's. The average lag between initial expenditures for R & D and actual increases in productivity is likely to be somewhat longer than for plant and equipment purchases; surveys have shown that the average payout does not begin for five years and the lagged effect is diffused over many more years. Even so. we can note the positive relationship between the increase in R & D spending in the late 1950's and early 1960's (the post-Sputnik boom) and the rise in productivity through 1968, and the slowdown since 1968 as a reflection on the very meagre increases in productivity recorded in recent years. Figures for Federal and total R & D spending as a proportion of total GNP are given in Table (V 2.

Table 2
Research and Development Spending as a Proportion of GNP

	(1) Fed. R & D	(2) Total R & D	(3) GNP Curr. \$	(4) (1)/(3)*100	(5) (2)/(3)*100
1954	3.138	5.651	364.8	. 86	1.55
1955	3.509	6.182	398.0	. 88	1.55
1956	4.859	8.375	419.2	1.16	2.00
1957	6.119	9.791	441.1	1.39	2.22
1958	6.791	10.734	447.2	1.52	2.40
1959	8.059	12.381	483.8	1.67	2.56
1960	8.752	13.551	503.8	1.74	2.69
1961	9.264	14.346	520.1	1.78	2.76
1962	9.926	15.426	560.3	1.77	2.75
1963	11.219	17.093	590.5	1.90	2.90
1964	12.553	18.894	632.4	1.98	2.99
1965	13.033	20.091	684.9	1.90	2.93
1966	13.990	21.894	749.9	1.87	2.92
1967	14.420	23.205	793.9	1.82	2.92
1968	14.952	24.669	864.2	1.73	2.86
1969	14.914	25.686	930.3	1.60	2.76
1970	14.764	26.047	977.1	1.51	2.67
1971	14.982	26.745	1054.9	1.42	2.54
1972	15.875	28.402	1158.0	1.37	2.45
1973	16.472	30.427	1294.9	1.27	2.35
1974	16.955	32.045	1397.4	1.21	2.29

Cols. (1)-(3) in billions of current dollars

Cols. (4)-(5) in percent

The other three factors listed on page 4 have also contributed to the recent slowdown in productivity, although the effects have not been as dramatic. Turning to the employment statistics, manufacturing workers represented 35.3% of total wage and salary workers in 1946, 32.9% in 1956, 30.0% in 1966, but only 24.7% in 1976. Detailed figures for production and overhead workers are not available outside the manufacturing sector, but it is likely that a similar trend has occurred across the economy. Finally, the number of working women entering the labor force has risen at an average annual rate of 2.0% since 1966, compared to an increase of less than half that amount. These workers in general have not had the training or education of primary workers, which tends to retard the increase in productivity. If we assume that these workers are paid their marginal product, which is a highly tentative assumption, that could account for as much as ½% per year decline in the rate of growth of productivity.

Even if we make generous allowances for these latter factors, however, we interpret the available evidence to mean that well over half of the decline in productivity growth over the past decade has been due to a slower rate of growth in the productive capital stock. We now turn to the major reasons why this has occurred and indicate how this will effect economic growth both during the next business cycle and over the coming decade.

FINANCIAL CONSTRAINTS ON INVESTMENT

While environmental and safety standards and a somewhat lower overall rate of growth during the past ten years have clearly reduced the amount of productive investment undertaken, the major factors for this slowdown are found in the financial sector. The major events which have occurred, all of which are somewhat interrelated, are as follows:

- 1) Internal liquidity has been sharply reduced relative to investment needs.

 These figures are shown in Table IV.3.
- 2) The costs of external financing in debt markets has risen substantially without a corresponding gain in the rate of return.
- 3) Equity financing has all but disappeared as higher interest rates have depressed many stock prices below book value.
- 4) Bank financing, the only other alternative source of funds, has been available only at interest rates which were well above long-term market rates. Furthermore, as we have already mentioned, even this source of financing will not be available to many firms during the next credit crunch.

We now examine each of these factors in turn.

The figures in Table IV.3 indicate that, when inventory financing needs are taken into account, firms now have to borrow almost three times as much as they did in the 1961-1968 period. While the need for external finance has subsided somewhat this year as a result of the decline in inventories, the problem will once again become serious in 1977 and 1978. Thus for the decade of the 1960's we find that the average borrowing requirement for the corporate sector was \$18 billion per year, compared to an estimated \$77 billion for 1977 and 1978.

Table 3
Internal Liquidity Ratios

	(1) Fixed Business Invest.	(2) Nonfarm Inventory Invest.	(3) Retained Earnings & Deprec.	(4) Inv. Val. Adj.	(5) Internal Liquidity ^(a) Ratio (IVA)	(b) Internal Liquidity(b) Ratio (II)
1947	23.4	1.3	19.7	-5.9	.716	.644
1948	26.9	3.0	22.6	-2.2	. 799	. 704
1949	25.1	-2.2	19.2	1.9	. 803	.914
1950	27.9	6.0	24.8	-5.0	. 799	. 638
1951	31.8	9.1	23.3	-1.2	.714	. 553
1952	31.6	2.1	22.5	1.0	. 728	. 688
1953	34.2	1.1	24.7	-1.0	. 708	.680
1954	33.6	-2.1	26.3	-0.3	. 778	. 827
1955	38.1	5.5	33.9	-1.7	. 867	. 748
1956	43.7	5.1	34.8	-2.7	. 765	. 676
1957	46.4	0.8	35.0	-1.5	. 738	.719
1958	41.6	-2.3	32.8	-0.3	. 785	. 828
1959	45.1	4.8	39.4	-0.5	. 868	. 78.2
1960	48.4	3.3	38.1	0.2	. 789	. 740
1961	47.0	1.7	39.7	-0.1	. 843	.814
1962	51.7	5.3	46.1	0.3	. 895	.813
1963	54.3	5.1	48.4	-0.5	. 887	. 808
1964	61.1	6.4	54.5	-0.5	.888	. 801
1965	71.3	8.6	63.1	-1.7	. 873	.773
1966	81.6	15.0	68.6	-1.8	.830	.697
1967	83.3	7.5	68.3	-1.1	.813	.743
1968	88.8	6.9	71.0	-3.3	. 781	.717
1969	98.5	7.7	72.4	-5.1	.709 -	.650
1970	100.6	4.3	70.6	-4.8	. 678	.644
1971	104.4	4.9	82.9	-4.9	.771	. 726
1972	118.2	7.8	95.2	-6.9	. 776	.716
1973	136.2	17.4	114.0	-17.3	.773	.691
1974	149.2	11.9	129.1	-35.1	.748	.658
1975	147.9	-17.7	121.5	-11.4	. 783	.858
1976	174.1	9.2	147.1	-13.7	. 806	.747
1977	201.7	20.1	165.2	-18.1	.774	.689
1978	215.9	8.6	161.4	-17.1	. 708	. 668
1979	220.6	2.7	167.7	-14.4	. 728	. 706
1980	243.0	14.8	192.1	-16.4	. 757	. 701
1981	274.6 .	21.9	213.0	-14.7	. 749	.684
1982	312.2	. 25.7	230.5	-14.4	.715	. 654
1983	351.7	28.3	250.5	-16.6	.689	.632
1984	390.7	29.8	275.4	-21.5	.677	.623

⁽a) $[(5) + \frac{1}{2}(4)] + 1$

⁽b) (3) + [(1) + (2) - (4)]

The figures in Table 3 indicate that the ratio of internal cash flow to investment needs will continue to decline during the next ten years. In addition, we believe that the profit and retained earnings figures used in these tables overstate the amount of internal liquidity available. As long as inventory valuation adjustment continues to be a significant part of total proportion of total profits, firms are paying taxes on profits that they did not really earn. Depreciation allowances are understated in times of inflation, as discussed below. In addition, creative accounting practices which tend to capitalize current expenses and treat all income gains as ordinary income but most losses as extraordinary income are still widespread and tend to mask the true seriousness of the aggregate liquidity problem. Thus we are drawn to the conclusion that firms will have to rely more heavily on outside sources of funds; however, it is not all obvious where they will raise these funds. We consider the three major possibilities: the bond market, the equity market, and the banking system.

During the period from 1966 to 1975, the long-term bond yield has risen from approximately 5% to 10%. Since the rate of inflation has also increased about 5%, the real rate of interest has not risen and for 1975 will average only about 1½% because of the recession; however, we expect it to return to its normal non-recession range of 3 to 4% during the next two years.

Many economists have argued that since the real rate of interest has remained unchanged, the incentive for investment likewise should not have been affected. Such economists proceed by estimating investment functions with the real, as opposed to nominal, rate of interest as the principal

financial independent variable. Upon somewhat closer examination, this turns out to be a remarkably poor argument. We consider the following points.

1) In the 1947-1966 period, interest rates remained under 5% and the average after-tax return on invested capital was about 12%. Thus entrepreneurs received a substantial additional return for investing their money in risky assets instead of putting it in the bank.

Nowadays the rate of interest has risen to 10%. If the return on equity had similarly increased to the 20% range, the differential would have been maintained. However, that is clearly not what happened, as the return on capital remains at about 12%. This extremely narrow differential offers much less incentive to reinvest corporate earnings. If these earnings can be loaned out at 10% with virtually no risk, why increase plant and equipment spending to earn a 12% rate?

- 2) The reverse side of the same argument has led to the demise of the stock market as a practical means of raising additional fields. Clearly the rate of return on equity must be somewhat greater than on fixed-income securities to compensate for the greater risk involved. With interest rates near the 10% mark, the practical result has been to push many stock prices below book value, and in some distorted cases below cash value. Even a recent 40% rise in the market averages has not been sufficient to pull stock prices of many firms above water.
- 3) Depreciation allowances are valued at historical rather than replacement cost. This has, of course, always been the case, but the problem was not very serious when the rate of inflation was 2 to 3% per year. The use of

accounting tax lives, which in general are somewhat shorter than actual economic lives, tended to offset the inflation bias. However, with capital goods prices rising in excess of 10% per year over a five-year period, the offset is clearly no longer sufficient. The problem is most serious for the utilities, many of whom are required by regulatory authorities to use straight line depreciation and unrealistically long tax lives; they are doubly penalized during periods of inflation.

4) As interest rates rise, debt service increases as a proportion of total profits. Net interest as a proportion of gross nonfinancial corporate product has risen from less than 1% in the 1946-1957 period to over 4% today. Besides reducing corporate profits it also increases the degree of risk because of greater leverage.

Many firms who did not choose or were unable to use the bond markets used to be able to turn to the equity market. The main problem with this approach is that the current stock price of many companies, particularly those who have the greatest need for borrowed funds, is below book value. It could be argued that this is a temporary phenomenon and that the rapid recovery will bring a return of investor confidence and rapidly rising stock prices. In order to evaluate this thesis, it is necessary to consider the long-term trends in relative returns for different types of financial assets and to make some predictions about where these are headed. It should be obvious that we are not trying to predict the stock market over the next few days, weeks, or even months, but we must examine some long-term trends to be able to determine whether stock prices will rise above book value again.

A number of studies, particularly by Lorie and Fisher at the University of Chicago, have examined the alternative yield of financial assets during the past 50 years. However, for purposes of our analysis, it seems more relevant to examine the behavior during the past twenty years. For the period 1954-1975 we find the following summary statistics:

Average Ass corporate bond yield	5.7 %	
Average rate of inflation (CPI)	3.4 %	
Average increase in stock prices (S&P 500)	5.3 %	
Average dividend on these stocks	3.7 %	
Total return on equities	9.0 %	

It is interesting to note that the total 9% return on equities is identical to the 9% return calculated by Lorie and Fisher for the period 1926-1960. The spread between total yields on bonds and stocks is 3.3%, slightly below the 4% figure estimated by others. However, the real rate of return on bonds is only 2.3%, well below the 3½% figure usually quoted as the "real" rate of interest. Part of this is due to the lagged response of bond rates to changes in the rate of inflation. We have found that a five-year period of adjustment is needed to account fully for this phenomenon; if we take an average 2½-year lag in the CPI, the average rate of inflation for the 1952-1973 period is only 2.4%, which puts the real rate of interest at 3.3%.

Our forecast shows that we expect the rate of inflation to average 8% for the next five years, and we expect the real rate of interest to remain about 3½%. Based on this analysis, we predict an <u>average</u> corporate bond yield of about 11½% for the remainder of this decade. This would indicate that the total return on equities would have to be in excess of 15% per year. We predict that after-tax corporate profits will grow no more than 10% per year during the forthcoming decade. Hence in equilibrium this implies a dividend yield (i.e., dividend/stock price) of between 5 and 6%. The latest

yield figure indicates that yields are now about 44%. Thus our gloomy forecasts, if true, can spell only disaster for the stock market. While short-term rallies may occur from time to time during the next year, the overall trend for the next three years would appear to be in the negative direction. Under such circumstances, the equity markets simply cannot be considered a reasonable source of external financing.

That would appear to leave the commercial banking system as the only major source of external financing. However, the banking system is unlikely to serve such a function. Rapid loan expansion cannot occur unless it is matched by an equally rapid deposit expansion. Yet with continuing higher and rising interest rates, deposit expansion in all types of financial institutions is likely to slow rather than accelerate. It is of critical importance that banks themselves cannot expand their loan base without increasing their capital, but they are just as vulnerable to the constraints of equity financing as the firms to whom they would loan money.

PATHS TO GREATER PRODUCTIVITY OVER THE NEXT DECADE

During the past ten years the principal thrust of fiscal and monetary policy has been to reduce the growth in productivity. Clearly the lawmakers have not structured their bills with that language in mind, but the net result has been the same. Little question exists that fiscal policy has tilted in favor of expanding consumption, both through lower personal income taxes and greatly increased transfer payments. While husinesses have been helped somewhat by one cut in the corporate income tax rate, the liheralization of depreciation allowances, and a now-you-sec-it-now-you-don't investment tax credit, the cumulative effect has clearly been unequal. Monetary policy has created three credit crunches in the past ten years, which have left massive scars on investment plans without significantly affecting consumption. Finally, the thrust of environmental and safety legislation has increased fixed business investment by approximately \$10 billion per year without offering any help or even suggestions for additional funding. As a result, the amount of productive investment which would otherwise have been undertaken has been considerably reduced. This grand scheme has resulted in a decline in the growth rate of productivity from 2.9% for the 1947-1966 period to only about 14 for the last ten years.

The set of policies we really need, therefore, is not one which causes recessions every four years on schedule, or even one which manages to contain these cyclical patterns by continuously pumping more money into the consumer sector. We need a comprehensive policy which is designed to foster economic stability and rapid growth, and this can be accomplished only by tilting in favor of investment. As we have mentioned several times throughout this report, only by increasing productivity can we lower the rate of inflation and hence return to a path of economic stability which is unmarred by

recurring crises of rapidly rising prices. We have tried the alternative path for the past decade, and it has been found sadly wanting.

How much investment would be needed? According to our no-recession alternative, the growth rate of real GNP will average 3.7% per year over the forthcoming decade. This can be divided into a 2.3% annual increase in man-hours and a 1.4% annual increase in output/man-hour. According to Okun's Law, which still continues to be a very useful approximation, every 1% increase in real growth results in a decline of 1/3% in unemployment. Turned around, this means that every 1% increase in real growth raises employment 1/3% and output/man-hour, or productivity, 2/3%. Thus if we were to return productivity to its earlier average of 2.9%, this would represent an increase of 1.5% per year. Thus real GNP would have to increase 2½% faster per year, or rise at an average annual rate of 6% over the decade. This would be well above the previous record of 4.7% per year from 1958 to 1968.

If we use the no-recession alternative as the baseline for this calculation -- since we would obviously need at least an even-handed monetary policy for such growth to exist -- a 6% growth could be accomplished by adding approximately \$0.8 trillion to investment over the next ten years. This number is obtained by cumulating the right-hand column in the following table.

	GNP, 1958 \$ no recession	GNP, 1958 \$ 6\$ growth	Incremental	Investment Needed		
Year	baseline	rate	GNP	1958 \$ ^(a)	Current \$(b)	
1975	793	793	•	•	•	
1976	846	841	•	. •	•	
1977	891	891	•	• `	•	
1978	925	944	19	6	14	
1979	950	1001	51	17	41	
1980	978	1061	83	28	72	
1981	1008	1125	117	39	106	
1982	1041	1192	151	50	145	
1983	1074	1264	190	63	195	
1984	1103	1340	237	79	261	

- (a) Using long-term investment multiplier of 3.0
- (b) Using implicit deflator for fixed investment taken from the no-recession alternative

We thus arrive at the conclusion that it would require a total of \$4.6 trillion investment over the next decade to return the rate of increase in productivity to the levels which were obtained in the 1947-1966 period. This could reasonably be called the "high investment" alternative.

It is, of course, all very well to pull numbers out of thin air to explain how we can return to a satisfactory rate of growth. It is equally clear that we can accomplish no such thing unless the savings can be generated to produce this amount of investment. We cannot tilt in the direction of more consumption and more investment at the same time. Thus we must now look for the sources of an additional \$0.8 trillion in savings.

In determining the sources of this needed savings, it may be useful to look at the income distribution of the additional GNP. If we use the numbers given in the above table and convert to current dollars by multiplying them by the estimates of the implicit GNP deflator given in the no-recession alternative, we find that current-dollar GNP is some \$2.4 trillion higher over the

decade if real GNP grows at 6% rather than 3.7%. We do not assume that prices are any higher, since the increased productivity will at least offset the pressures due to greater demand and lower unemployment.

Under ordinary circumstances, an increase in GNP is distributed as follows: 2/3 goes to disposable income, 20% goes to the government, and the remaining 13% goes to after-tax profits and depreciation. These marginal figures are somewhat different from the averages; the combined government sector now comprises 36% of GNP, but (a) the overall tax system is regressive, due to its heavy dependence on social security and real estate taxes, and (b) as employment and income rise, unemployment compensation insurance and welfare payments fall rapidly. Thus this means that of the extra \$2.4 trillion, \$1.6 trillion would go to consumers, \$0.5 trillion to the combined government sector, and \$0.3 trillion to businesses. The \$0.5 trillion can be further disaggregated into approximately \$0.4 to the Federal government and \$0.1 trillion to state and local governments.

We can assume without any hesitancy that the additional \$0.3 trillion received by businesses will be used for greater investment. However, that still leaves a gap of \$0.5 trillion. The consumer sector cannot be counted on supplying the major portion of this. If we assume that the savings rate stays at approximately 7½, the increase in additional personal savings will be only slightly more than \$0.1 trillion. This leaves a gap of \$0.4 trillion, which coincidentally (maybe) is the size of the additional revenues accruing to the government sector.

Thus our conclusion boils down to the following. If the Federal government is willing to take the extra \$0.4 trillion in revenues which they would receive under a 6% growth rate and return this total sum to the corporations,

the economy will be able to generate enough investment to reach this 6% growth rate; otherwise investment and savings will both fall short. The same objective simply cannot be accomplished by returning all or part of the money to the consumer sector, since then the needed investment would not be available to support the large increase in jobs which would occur. Bottlenecks and inflation would result, and we would return to the same treadmill on which the economy is now operating.

Me must now ponder how Congress might go about reducing corporate taxes and increasing depreciation allowances by \$0.4 trillion over the next ten years. This would amount to approximately \$20 billion in 1975 and climb to about \$60 billion per year by 1984. After-tax profits plus depreciation will total \$200 billion this year and about \$500 billion in 1984. Hence we are suggesting that these amounts be increased by 10% per year. Stated in these terms, the numbers do not seem quite that huge, although they would dwarf any previous changes made to corporate cash flow. Yet the combination of decreased taxes and increased transfer payments this year, which was denounced by some Congressmen as being too small, did increase personal disposable income by over 5% for the year. At any rate, we now suggest some of the changes which might be used to generate this increased cash flow. Wherever possible we have indicated approximate magnitudes.

1) Decrease the corporate income tax rate to 40%. This cut is very similar to the one which was called for by President Ford earlier this year and was quickly buried by Congress. Yet this method would be not only the simplest but would be the most efficient, since it would not cause firms to undertake certain types of expenditures instead of others because of tax ramifications.

This cut would add about \$7 billion to cash flow this year and about \$20 billion in 1984, or about one-third of the additional funds needed.

It is probably worth noting, however, that in Congressional hearings this method has repeatedly been rejected in favor of more complicated schemes, ostensibly on the grounds that other plans are specifically designed to create jobs or spur investment, whereas the extra corporate profits might not be used for any productive purpose. The logic of such an approach is not strong enough to warrant any comment, but since this is a popular political view, businessmen may be well advised to push for other combinations of incentives which would serve to increase cash flow by the needed amount.

2) Depreciation allowances should be based on replacement rather than historical costs. The same overall effect could undoubtedly be accomplished by further shortening of tax lives on plant and equipment, yet it seems that now is the time to face up to the problems which are caused by inflation and the degree to which reported profits are actually overstated. This method would not be without its problems, since it would require an estimate of replacement costs. However, this problem could be met in principle by using the BLS and NIA price indexes for detailed components of plant and equipment. Even if these indexes understated the true rise in prices, the discrepancy between depreciation allowances and actual replacement costs would be smaller than it is now by an order of magnitude.

It is difficult to estimate exactly how much additional cash flow this would generate, since it depends on the method used, the average life of machinery and plant, and the rate of inflation. If we assume that the average life of equipment is twelve years and the rate of inflation is 6% per year, then on average each new purchase of capital equipment costs twice as much as did its predecessor. However, we also have to take into consideration that corporate taxes are already reduced through rapid depreciation allowances in early years which represent tax savings. Thus a more likely plan would allow additional depreciation hased on replacement value only on the undepreciated portion of the asset. While under this plan a firm might theoretically take no depreciation until the life of the asset had expired only, that would occur only in the unreal case where the interest rate stayed below the rate of inflation. Depending on the modifications in such a plan, it could account for all of the additional cash flow needed, although it seems extremely unlikely that Congress would want to put all of its eggs in such an untested basket.

discussed for many years, but the first steps have yet to be taken in this direction. The basic aim of such a proposal would be to end the double taxation on corporate dividend payments; this could be accomplished in a number of ways. The simplest would be to treat dividends like interest payments, i.e., deductible by corporations as a business expense. Other more complicated ways would involve giving individuals a credit for the tax which was paid by the corporations on the profits used to pay the dividends. It has been estimated that such a scheme would reduce total tax payments by \$15 billion per year, which would also account for almost all of the additional cash flow needed.

4) Additional expansion of the investment tax credit could be undertaken in two_ways. First, the rate itself could be increased, and the restrictions with respect to the amount of deductions which can be taken could be eased substantially. An increase from the present effective rate of 6.5% to 12.0% would raise approximately \$4 billion. Furthermore, the tax credit should be extended to cover a larger proportion of the investment expenditures which must be undertaken due to environmental, safety, or consumer regulatory standards. We estimate these expenditures to be at least \$10 billion per year; a tax credit which permitted the writeoff of half of these expenditures against taxes would certainly not seem unreasonable. Thus nearly half of the needed funds could be raised from a widening and broadening of the investment tax credit.

We are not suggesting that Congress is about to rush out and implement these tax changes during the next session. However, the figures which we have developed here suggest that the additional amount of national savings needed to generate \$4.6 trillion of investment during the next decade can be obtained if the Federal government is willing to redirect its share of the increased revenues back to the corporate sector. Our estimates indicate that this job is feasible, although they certainly do not suggest that it is without its short-term political drawbacks.

THE CHOICE OF ALTERNATIVES

Fiscal and monetary policy have been much maligned in recent years, and indeed the weight of the evidence suggests that the last three cycles could have been ameliorated if we had not engaged in the arcane art of fine tuning. Yet this certainly does not imply that the best way to run the country is to sit back and do nothing at all. The U. S. economy is badly out of equilibrium, and while it will eventually head back there under its own steam, we need to undo many of the problems which have been created by government policy during the past ten years.

If the traditional measures of monetary and fiscal policy are used, which call for budget-cutting and monetary stringency whenever inflation begins to reappear, we will continue to have major business cycles indefinitely. We are in fact headed for a recession in 1978 more severe than the one from which we have just emerged if monetary policy follows its previous pattern and leads to yet another credit crunch. At a minimum we need an even-handed set of monetary and fiscal policies to permit the economy to grow steadily for a few years and regain its long-term momentum.

Yet setting the economy back on the road to equilibrium is only the first task which awaits us. Once we have accomplished this, the economy will find itself at a watershed. During the entire postwar period, the size of the government sector has been increasing, and investment as a proportion of GNP has gradually declined. In the past ten years this has caused the rate of productivity gain to fall from 3% to 1% per year, and has resulted in a decline in the real wage which can be reversed only by continuing tax cuts. We must decide if we are to regain our rising standard of living at home and our economic dominance abroad, or whether we are to

follow Great Britain down the road to the status of a second-rate economic power.

This decision is clearly a painful one, for it involves reducing the size of either the consumer or the government sector. Yet the public and the Congress should at least be made aware that we face a rather narrow alternative set of choices. A return to higher productivity, lower inflation, and a resumption of increases in the standard of living can be accomplished only by raising the ratio of investment to GNP, and that in turn can happen only if the importance of the other major sectors in the economy are reduced. Faced with this decision, many other countries have chosen to restrict the growth of the consumer sector. While this is certainly a logical outcome of our comments, we would expect that given the decision to increase investment, a reversal in the growth of the government sector would be the preferred outcome in this country.

STATEMENT OF DR. ROGER E. BRINNER, SENIOR ECONOMIST, DATA RESOURCES, INC., AND ASSISTANT PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY

The possibility of a capital shortage has received substantial attention during the past year, but a significant amount of confusion still exists. There are two basic issues: how to recognize a capital shortage if one stares at you and how to respond if one challenges you. Unanimity is impossible on the answers to these questions, but the following comments should command general agreement with only minimal reservations:

- 1. A capital shortage is a different type of problem than, say, an oil embargo or a crop shortfall. The effects of a capital shortage are felt indirectly because society consumes the product of capital, not capital itself. One measure of the adequacy of capital formation is thus the adequacy of the corresponding aggregate output growth, given the expected increases in labor and raw material inputs. However, a secular deceleration of output is not necessarily a sign of capital shortage, particularly in a free market economy.
- If the growth of demand were to exceed that of potential, a <u>physical capital</u> shortage would eventually manifest itself in increased inflation. This type of shortage would self-destruct as higher prices encouraged greater supplies and reduced demands.

- 3. Hany authorities analyzing this issue focus primarily on the symptoms of a financial capital shortage: double-digit long-term interest rates, rising debt-equity ratios and declining cash flow capital expenditure ratios. The economic recovery which began in mid-1975 has helped to rebuild corporate liquidity and strengthen balance sheets but DRI estimates that in the absence of new tax policies the next ten to fifteen years will see an extension of, although not an acceleration of, the financial pressures which have been building since the mid-1960's. Corporations will find that profits and depreciation allowances provide a continually smaller share of funds for capital expenditures. The residual financing will be heavily dependent on debt, with short-term financing bearing a rising share of the burden. As a result, interest rate risk premia are likely to remain high, creating especially serious financing problems for firms without prime credit ratings.
- 4. The type of shortage under debate is not a temporary credit crunch such as the half-dozen or so the U.S. economy has experienced in the postwar era. It is a major, sustained shortfall in capital formation.
- 5. If a capital shortage should develop, the list of contributing factors will be headed by stop-go monetary and fiscal policies, a tax structure which ignores the impact of inflation on capital replacement costs and favors debt finance over equity finance, and a weak economy producing large government deficits.

The remainder of my remarks will be devoted to providing a quantitative background for these comments and to clearing up a fundamental confusion about capital "needs." The major thrust of my argument is that the introduction of new legislation to aid capital formation cannot be justified on the basis of vague arbitrary determinations of national needs. The legitimacy of any change must be properly derived from a recognition of the capricious, inflation-induced distortions in personal and corporate income taxation or a new perception of the net efficiency costs of the current tax structure relative to its distributional benefits.

The Selection of an Arbitrary Growth Standard

In attempting to assess the adequacy of capital formation, two choices for an output growth standard come immediately to mind -- maintaining the average historical rate of growth in total output or in per capita output. In either case, it is most appropriate to speak in terms of potential, full-employment output rather than actual output with its associated business cycle fluctuations.

5

An econometric analysis of the historical record* suggests that from 1960 to 1975 potential GNP increased by:

- -1.4% each year through productivity increases.
- .4% for each 1% increase in the capital stock.
- .6% for each 1% increase in the labor force.

The particular combination of 1.8% labor force growth and 3.7% capital stock growth witnessed during the past 15 years produced an estimated 4% compound rate of growth in potential output. The individual contributions were the following:

- 1.4% productivity increases
- +1.5% capital stock growth effect (.4 x 3.7% capital stock growth)
- +1.1% labor force growth effect
 (.6 x 1.8% labor force growth)
- = 4% potential GNP growth

The population increased at 1.1% per year, hence per capita potential output increased at 2.9% (4%-1.1%) per year.

Capital Formation Required to Achieve the Targets

Let us use 1975-1990 as the planning horizon.

Assuming that the growth of productivity is sustained at its historical rate of 1.4%, the capital stock growth rates required to achieve 4% total or 2.9% per capita growth can be derived. The Bureau of the Census predicts that population will increase at a slower rate, approximately .9% per year. The full employment labor force will expand approximately 1.5% per year, reflecting 1.2% growth in the 18-64 age-group population and .3% growth in labor force participation.

^{*}R. Brinner, "The Growth of Potentional GNP," <u>Data Resources U.S. Long-Term</u>
<u>Bulletin</u>, Winter 1976

Table 1 uses these assumptions to derive the required capital stock growth rates.

Table 1. - Derivation of Capital Stock Growth Requirements: 1975-1990

Capital Stock Growth Requirements:

Te	Hatch 2.9% Trend Growth in Per Capita Output	To Hatch 4.0% Trend Growth in Total Output	
Target Growth Rate of Potential Outpu	it 3.8% (2.9%+.9%)	4.0%	
Less Contribution of Increased Productivity	-1.4%	-1.45	
Less Contribution of Labor Force Growth (.6 x 1.5%)	<u>9</u> \$	<u>9</u> %	
Equals Required Capital Contribution	1.5\$	1.7%	
Implies Required Capital Stock Growth (Capital Contribution +4)	3.75%	4.25%	

This straightforward arithmetic suggests that capital stock growth at 3.75%, a rate approximately equal to that achieved during the past 15 years, would be sufficient to achieve the 2.9% historical average growth rate of per capita output. A virtually impossible acceleration of capital formation would be required to match the 4% total potential output target because very substantial investment would be necessary to offset the deceleration in labor force growth.

Expected Future Capital Formation

The forecasts of future capital stock growth from the Data Resources' model suggest that neither the per capita nor the total output target will be met: capital stock growth will approximately equal 3.3% per year from 1975 to 1990, primarily due to the weak economy foreseen between no and 1980.* The previous arithmetic of output-capital growth linkages suggests that the per capita output

^{*}Like all forecasts over a 15-year horizon, there is uncertainty associated with this forecast. Let us consider a range of 3.0% to 3.6% as feasible.

growth target of 3.8% would be missed by approximately 2% per year and thus by 1990 output would be 24% below the targeted level.*

The Necessity of Tax Policy Changes

In assessing the meaning of capital formation projections below those required by the arbitrary growth standards, it is worth noting that the idea of capital "requirements" or "needs" may seem somewhat out of place in a market economy: the choices of citizens determine the allocation of national income between consumption and saving and, hence, the extent of capital formation. However, in our mixed economy the tax structure influences both the level of savings and the allocation of savings among sectors of the economy.

The tax influence on individual choices is generally viewed as a balancing of efficiency costs against distributional benefits. The tax structure was devised to serve various purposes and as circumstances change it deserves re-examination. The most substantial reasons I see for change today are: 1) inflation has produced capricious distortions of capital taxation and, 2) the corporate income tax bias in favor of debt finance has led to undesirably high debt-equity positions for many corporations.

Inflation-Induced Distortions of Capital Income Taxation

Inflation creates serious problems for the measurement of capital income. The classic definitions of income are those of Henry Simons: "a) ... the amount by which the value of a person's store of property rights would have increased, as between the beginning and the end of the period, if he had consumed nothing, or b) the value of the rights which he might have exercised in consumption without altering the value of his store of rights."** With

^{*}The answers are contingent upon a host of critical assumptions, some apparent such as 1.4% growth in productivity and other less so. If anything, these are optimistic results. It is quite easy to postulate an alternative, plausible set of assumptions which produce potential output growth of 3% to 3.5% per year rather than the 3.6% embodied in the current set of assumptions. However, such a shortfall would be largely due to factors other than an inadequacy of capital formation.

^{**}Henry Simons, Personal Income Taxation, 1938, p. 49.

respect to capital, these definitions clearly imply that income should not include that portion of the gross return which merely maintains the purchasing power of the original investment. The yield properly subject to taxation is the nominal yield minus the inflation rate. It can be readily shown that taxation of the nominal yield produces a rising tax burden as inflation increases even if the legislated tax rate remains constant.*

Table 2 demonstrates this phenomenon with respect to interest earned on seasoned AAA corporate bonds. The entries all relate to a hypothetical taxpayer with a 40% marginal personal income tax rate. Because taxes are levied on the nominal interest rate, and not this rate minus the inflation rate, the effective tax rate ranged from 64% to 71% during the period of mild, 1%-2% inflation prior to 1966. Furthermore, the effective tax rate frequently exceeded 100% during the past 10 years: the income tax thus absorbed more than the true income and was effectively extended to be a wealth tax. This was apparently not a conscious tax policy, but rather a capricious result of inflation. The results are more dramatic if one uses the lower interest rate paid on savings account deposits, thus this is not a penalty levied only on the wealthier members of society.

Fortunately, the remedy is relatively simple. First, instruct financial institutions to calculate and report to taxpayers the inflation-adjusted real return paid on deposits and the real interest cost charged on loans. Then require the reporting of the inflation-adjusted net interest receipts on individual income tax returns rather than the nominal receipts currently reported. Second, in the case of bonds, permit the taxpayer to write-up the purchase price of each bond (by the amount of inflation between purchase and sale) before calculating the Schedule D capital pain ** Schedule D capital gain. **

^{*}This distortion is, therefore, entirely separate from the well-known effect created by a progressive tax rate structure under conditions of inflation. The progressive rate effect produces rising tax burdens for both capital and labor income, while the other effect discussed above distorts only the measurement of capital income.

^{**}I have detailed these procedures elsewhere and would be happy to explore them further in the oral presentation if you so desire.

R. Brinner (1973), "Inflation, Deferral and the Neutral Taxation of Capital Gains," <u>National Tax Journal</u>, December.
R. Brinner (1974), "Taxation of Capital Gains: Inflation and Other Problems," <u>New England Economic Review</u>, September/October.
R. Brinner (in press), "Inflation-Induced Tax Problems for the Capital Markets," to be published by Rockefeller Commission on Critical Choices for Americans.

Table 2. - The True Tax Burden on Interest Income (assuming a 40% personal tax rate)

	(1) Nominal Rate	(2) After-tax Nominal Return	(3) Inflation Rate	(4) After-tax Real <u>Return</u>	(5) Effective Tax Rate on Pre-Tax Real Return
1950	2.6%	1.6%	1.2%	.48	71%
1955	3.1	1.9	1.4	.5	71
1960	4.4	2.6	1.6	1.0	64
1965	4.5	2.7	1.8	.9	67
1966	5.1	3.1	2.8	. 3 .1	87
1967	5.5	3.3	3.2	.1	96
1968	6.2	3.7	4.0	3	114
1969	7.0	4.2	4.8	6	127
1970	8.0	4.8	5.5	7	128
1971	7.4	4.4	4.5	1	103
1972	7.2	4.3	3.4	1.0	76
1973	7.4	4.4	5.6	-1.2	167
1974	8.6	5.2	10.3	-5.1	•
1975	8.8	5.3	8.8	-3.5	**

Explanation of Columns:

- (1) Average yield on seasoned AAA corporate bonds (Source: Federal Reserve Board)
- (2) Assuming a 40% tax rate for purposes of illustration = .6 x Col.(1)

 (3) Percentage change in GNP deflator from preceding year

 (4) Col.(2) Col.(3)

 (5) Tax collected as percentage of pretax real return = (Col.(1) Col.(2)] + (Col.(1) Col.(3))

^{*}The pretax, real return [Col.(1) - Col.(3)] was negative and a loss should have been recognized as an offset to other income. Instead a tax was, of course, levied. The ratio is thus negative and misleading.

^{**}The pretax, real return was nil. The ratio is therefore infinite.

The definition of income from the sale of corporate equity, homes, livestock and other capital assets suffers from the same type of distortion during periods of inflation. Table 3 analyzes the income and tax burdens corresponding to hypothetical equity investments. The remedy is the same as that suggested for bonds in the previous paragraphs -- permits taxpayers to write-up the asset purchase price when calculating the capital gain on Schedule D.

Table 3. - The "Inflation Tax" on Capital Gain Income An Analysis of Hypothetical \$10,000 Investments in a Typical Portfolio

(a)	(b)	(c)	(d)	(e)	(f)	
Date of Hypothatical Stock <u>Purchase</u>	Nominal Gain	Approximate Tax	Inflation- Adjusted Gain	Effective Tax Rate (%)	Extra Inflation Tax	<u> </u>
1950 1955	\$3945 1220	\$986 305	\$1210 79	82% 384	\$684 285	Gain overstated
1960 1965 1966 1967	771 68 228 37	193 17 57 9	-45 -386 -269 -366	-430 -4 -21 -3	204 114 124 101	Apparent gain actually corresponds to pur- chasing power loss: tax should be a credit
1968	-69	-17	-403	4	84 >	Loss understated: 'ed should be greater.
1969 1970 1971	39 136 16	10 34 4	-295 -186 -246	-3 -18 -2	84 81 66	Apparent gain actually corresponds to purchasing power loss: tashould be credit.
1972 1973	-141 -41	-35 -10	-341 -203	10 5	⁷⁵ }	Loss understated: cred should be greater.
1974	412	103	316	33	24 >	Gain overstated.

Notes:

- (a) The fourth quarter average value of the Standard and Poor Composite Index (S&P) is the hypothetical purchase price. The sale price is 98, a recent peak value of the index.
- (b) Nominal Gain = $$10,000 \times ((98/S\&P at purchase) 1]$
- (c) .25 x (b)
- (d) Inflation-adjusted gain = \$10,000 (98/CPI today) -1
- (e) (c) + (d) \times 100 = Tax as percent of inflation-adjusted gain
- (f) (c) .25 x (d) = Approximate tax collected minus 25% of inflation-adjusted gain

As a quid pro quo, the inflation-adjusted gain should be fully included in taxable income. If Simons' definition of income is accepted, then it is proper to recognize his other prime rule: the tax due on income should be independent of the source of such income. The current structure embodying partial exclusion of nominal gains and separate tax rate schedules for wage and capital income is largely a set of unsuccessful approximations of Simons' philosophy. Of course, even with the inflation adjustment, capital gain income would still receive preferential treatment because the accrued tax is deferred until the gain is realized, or the tax is forgiven altogether at the death of the investor." Thus the effective rate on the nominal gain is closer to 7% than the apparent 25% or 35% ceiling.**

Table 3 largely speaks for itself. Once the purchase price of the hypothetical portfolio has been written-up to reflect the inflation between date of purchase and date of sale, most gains are found to be illusory. The value today is below its inflation-adjusted purchase price for each portfolio purchased between 1960 and 1973. The only portfolios showing meaningful gains are those over two decades old or those purchased in the fourth quarter of 1974 at the recent bottom of the market.

These aggregates present an important problem, yet they hide an equally significant horizontal equity problem apparent from some other research I have recently completed: the inflation distortion is proportionately greatest at the low and middle ranges of the income spectrum. These groups typically invest in stocks with a lower appreciation rate due to their (tax-induced) preference for stocks with relatively high payout ratios. Therefore, their nominal gains are proportionately smaller and real losses proportionately greater.

One can examine these statistics and draw other interesting conclusions, but I should warn against one singularly unwarranted conclusion. The apparent pattern of larger "extra taxes" correspnding to longer holding periods might initially suggest that a larger fraction of capital gains should be excludable from taxable income the longer an asset has been held, a proposal received with some enthusiasm in the past by the Senate Finance Committee and the House Ways and Means Committee.

^{*}The preceding value judgments are the responsibility of this author and are not intended to represent the official position of Data Resources, Inc. or Harvard University.

^{**}The 7% estimate is drawn from George Break and Joseph Pechman, <u>Federal Tax</u> Reform, the Brookings Institution, page 92.

Unfortunately, such a rule would exacerbate the distortion in years with nominal losses and increase the lock-in effect by discouraging sales. Moreover, inflation does not truly provide a logical basis for such treatment. The arithmetic of compound interest indicates that, for example, in an environment of constant inflation and appreciation rates, the inflation-adjusted, true gain actually rises as a share of the nominal gain the longer an asset has been hald: given 8% appreciation and 4% inflation, the inflation-adjusted gain as a share of the nominal gain rises from 50% (4% + 8%) at the end of one year to 54%, 59%, and 72% at the end of 5, 10, and 25 years, respectively. In brief, an additional 1% of this nominal gain could legitimately be included for each year of ownership in a world of steady inflation and appreciation at these rates.

The assertion that inflation calls for increasingly favorable treatment the longer an asset has been held stems from a confusion between the <u>proportional</u> and the <u>absolute</u> effect of inflation. The compounded appreciation of each asset will outpace the inflation bite if the inflation and appreciation rates are stable.*

The distortion of personal income taxation by inflation is only one-half of the story of disincentives to save and invest due to inflation. The other half relates to tax definitions of corporate income from inventory profits and deductions for depreciation and net interest paid. Inventory profits from price changes can be illusory in the same sense as the capital gains discussed above. The per unit replacement cost of inventory goods is analogous to the Standard and Poor price index used in the preceding analysis.

Similarly, the value of the plant and equipment capital stock should be adjusted to reflect the increase in the replacement cost of the remaining stock. In the simplest world, a world in which the prices of all machines and buildings merely match aggregate inflation, the correct depreciation charge is usefully approximated by the assumed depreciation fraction multiplied by the <u>current</u> cost of an equivalent new machine, rather than the <u>original</u> machine cost. (On the other hand, if machinery or building price inflation exceeds aggregate inflation, there is an argument for recognizing a partially offsetting gain.) The impact of the implied changes in tax accounting would differ substantially across firms, but careful studies suggest that, on average, reported income would be reduced to 60-70% of current levels and tax revenues might fall by \$10-15 billion. On the other hand, many corporations are heavily debt-financed and the real burden on this debt is reduced by inflation.

^{*}Let n=rate of appreciation, p=rate of inflation and k=number of years the asset has been held. The nominal gain per dollar invested (NG) thus equals $\{(1+n)^K-1\}$ and the inflation-adjusted gain (IAG) equals $\{(1+n)^K-(1+p)^K\}$. In the latter case, the \$1\$ purchase price is written up by the inflation over the k years the asset is held. After one year, the ratio of the IAG to the NG equals the real return divided by the nominal rate of appreciation, (n-p)/n. As k increases, the numerator grows more rapidly than the denominator and the ratio approaches a value of one as the examples in the text suggested.

Recognition of this implicit gain to shareholders partially offsets the previously discussed inflation losses, increases "inflation-adjusted corporate income" to a median value of 90-95% of reported income and, therefore, cuts the potential revenue loss substantially. However, the minimal aggregate impact hides an extremely large spread of effects at the firm level. The most thorough study to date (S. Davidson and R. Weil, "Inflation Accounting," Financial Analysts Journal, January/February 1975) suggests that redefined income would range from approximately 10% to 200% of currently reported income. Therefore, it would probably be necessary to phase in any changes in the measurement of corporate income to avoid severe disruptions in the financial markets."

An equally important aspect of inflation-neutral accounting would be the restatement of stockholder equity on a comparable basis with debt. Fixed assets valued at depreciated <u>purchase</u> cost substantially understate the current equity of the shareholder. In contrast, the dollar value of debt is the correct measure of current liabilities and needs no redefinition. Therefore inflation-adjusted balance sheets would demonstrate that debt-equity ratios have not been rising as dramatically as current accounts would indicate. I suspect that the differential impacts at the firm level would be especially enlightening. From the point of view of encouraging growth and technological progress, it is highly likely that the accounting changes would indicate relatively improved earnings for high growth industries. Such industries have newer capital stocks and more leveraged positions, hence the depreciation adjustments would be relatively low and the inflation gains relatively high.

In any event, it should be clear that inflation has contributed to the potential for a capital shortage in several ways. It has produced an excessive taxation of personal and corporate income and thereby reduced the private saving possible from any given gross income.

If tax policy is not changed, capital markets can be expected to adjust to the inflation with sustained high interest rates as the result. For example, to achieve the 1.5% real, after tax return roughly characteristic of 1950-1965, a taxpayer in the 40% bracket expecting sustained 5% inflation would demand a nominal yield of 10.8%. The 40% tax due on 10.8% would be 4.3%, offering an aftertax 6.5% nominal return, and a 1.5% real return after subtraction of the 5% inflation premium. Interest rates of 10-11% would obviously discourage investment. The most likely equilibrium result combines interest rates near 9% with correspondingly lower saving and capital formation. Rough calculations suggest that 100 to 200 basis points could be shaved from interest costs if the suggested inflation adjustments were made in the definition of income.

The "bottom line" message of this analysis is that the tax structure must be changed merely to return to the intended, effective policies in place prior to the onset of virulent inflation.

^{*}Extremely low values primarily reflect poor profit performance in the year examined such that a modest change in expenses will produce a large percentage change in profits. The very high values correspond to highly-leveraged utilities.

A Proposed Tax Package

I have intentionally avoided mentioning the perennial favorites in discussions of tax policy and capital formation - the investment tax credit and accelerated depreciation. The economics profession appears to have reached a consensus here:

- The investment tax credit gives "a larger bang per buck" of tax revenue foregone.
- 2) The potentially beneficial countercyclical effect of the credit is weakened by legislative and corporate decision lags.
- The "bang per buck" is diluted because the credit is permitted on all qualified investment rather than only investments over the average level of prior years.
- 4) It is appropriate to view these incentives as crude adjustments of taxation for the problems created by inflation and by the taxation of corporate income at both the corporate and the personal level.

The fourth point is particularly important. The distortions are now sufficiently large that it would be appropriate to discard the investment tax credit and excessively accelerated depreciation in favor of a revised structure.

A useful approach would be to exchange the current set of <u>ad hoc</u> adjustments for 1) a redefinition of capital income in the personal and the corporate tax laws to reflect the burden of inflation plus 2) partial integration of the personal and corporate income taxes. The redefinitions of capital income would reduce corporate liabilities only slightly at current inflation rates if the legitimate gains from debt were recognized as well as the higher depreciation costs. The revenue impact of inflation-adjustments to personal interest and capital gain income depends critically on the rate of inflation. Assuming adjustments of tax rate schedules to maintain aggregate revenue, it appears that low and middle income groups would be the primary beneficiaries during mild inflation and that upper income groups would gain during rapid inflation.

The integration proposal I favor would permit full deductability of dividends but retain the tax on undistributed profits. Econometric analysis completed by a respected authority, Professor Martin Feldstein, suggests that such an integration program would increase dividends by 83% and increase retained earnings by a small amount.* For example, in 1974 corporate dividends were

^{*}Martin Feldstein, "Corporate Tax Integration," <u>Encouraging Capital Formation</u>
Through the Tax Code, Cummittee on the Budget, United States Senate, September 18 and 19, 1975.

\$33 billion, retained earnings equalled \$52 billion and corporate income tax revenues equalled \$56 billion. According to the Feldstein estimate, full deductability of dividends would have stimulated an increase in dividends of \$27 billion to the \$60 billion level. This would have reduced corporate tax liabilities by approximately \$29 billion (48% of \$60 billion), thus augmenting retained earnings by \$2 billion - the tax saving minus the dividend increase. Assuming that personal tax rates would be increased to compensate for the corporate revenue loss, a personal tax increase would approximately offset the dividend increase, therefore leaving disposable income and personal savings largely unchanged. (\$10 to \$15 billion of the new personal tax revenues would automatically come from personal taxes on the dividends. The tax rate changes would thus be required to raise \$15 to \$20 billion.)

The integration would, however, still have a very significant impact. It would remove the incentive to finance capital expenditures through the sale of debt rather than equity. Equally important, it would increase the attractiveness of stock market investment for middle income investors. For example, the total corporate and personal tax burden on a dollar of corporate source income for a taxpayer with a 30% personal tax rate would decline from a current level near 50% to approximately 35%." As a result, stocks could effectively compete with other investment vehicles at all income levels.

The Tax Package and Capital Formation

This package would primarily improve the allocation of savings across sectors of the economy and remove the bias in the choice of debt or equity finance within the corporate sector. The redefinition of capital income would protect the return to saving from capricious increases during periods of inflation, but it is unclear that total savings would increase in response. There simply is no conclusive evidence that a higher rate of return encourages individuals to save a larger fraction of their income. Each dollar saved makes a larger contribution to eventual retirement or bequest funds if the interest rate is higher, thus if the individual has a fairly rigid conception of the "nest-egg" he is seeking for his old age, a higher rate of return will in fact reduce current savings. Unless the share of income saved responds positively to the rate of return, aggregate saving and hence capital formation cannot be increased by any fiscal policy except by stimulating aggregate income or reducing government deficits. The efficiency gains from a better allocation across sectors and the distributional equity benefits from a correct definition of income are sufficient grounds to support the package. A stimulus to aggregate capital formation would be a useful but nonpredictable bonus.

^{*}The tax rates are calculated on the basis of the previous 1974 data plus an assumption that the capital gain tax is equivalent to a 7% tax on retained earnings.

STATEMENT BY JOHN W. KENDRICK, PROFESSOR ECONOMICS, THE GEORGE WASHINGTON UNIVERSITY

INCENTIVES POR CAPITAL PORMATION

In my prepared statement I shall try to do three things briefly:

- Review trends in capital formation or "investment" using broader definitions than those underlying the official
 national income accounts;
- Comment on capital requirements 1976-1980 with reference to the 1976 Annual Report of the Council of Economic Advisors; and
- 3. Express my views regarding possible incentives for capital formation.

Trends in Capital Formation.

Based on the official national income and product accounts, gross private domestic investment has maintained a relatively stable ratio to GNP in good years at around 1/5, and business fixed investment likewise at a bit over 10%. The ratios dropped cyclically from 1973 to 1975.

For purposes of analyzing economic growth, it is useful to define and ceasure investment more broadly to include all outlays that add to (or replace) income- and output-producing capacity for future periods. So defined, "total investment" includes tangible capital formation of the personal and government sectors, as well as of business, plus intangible investments of all sectors; research and development (R&D), education and training, health and safety, and mobility outlays. In a recent study for the National Bureau of Economic Research, summarized and extended in a paper just printed for the Joint Economic Committee, I have developed estimates of U. S. total investment and the associated stocks of capital, by type and by sector.

The estimates show that the ratio of total investment to GNP (adjusted for consistency) rose from about 43% in 1929 and 1948 to 501% in 1966. Thereafter, it dropped back to 49% in 1969 and 482% in 1973.

The increases from 1948 to 1966 cape in the intengible investment category, which rose from 12% to about 21% of adjusted GIP. The increases were concentrated in the public sector, reflecting both the increasing share of GIP accruing to governments (at the expense of the personal sector) and an increase in the proportion

John W. Kendrick, The Formation and Stocks of Total Capital (New York: National Bureau of Economic Research, in press).

^{2&}quot;Economic Growth and Total Capital Formation," A Stady Prepared for the Use of the Subcommittee on Economic Growth of the Joint Economic Committee, Congress of the

of revenues devoted by governments to total investment objectives.

An analysis of the decline in the total saving-investment ratio after 1966 is instructive from the viewpoint of formulating policies to stimulate capital formation in the period ahead. The most important point to note is the inter-sectoral shifts of disposable income away from business, which has the highest ratio of investment to income, and to a lesser degree away from governments, in favor of the personal sector, which has the lowest ratio of total investment to disposable income, at 33½ in 1973. (See Table 4 of the Joint Committee Print.) This was compounded by a decline in the personal investment ratio, not fully offset by a rise in the business investment ratio.

Business disposable income (cash flow) dropped from 12% adjusted GNP in 1966 to 9.3% in 1973. Although the ratio of business investment to disposable income rose from 100% to 120%, business investment as a share of GNP fell from 12.0% to 11.9%. In my view, the decline in profit rates was due to macro-economic policies designed to combat inflation which prevented prices from rising as fast as unit costs in the booms of 1969 and 1973. Purther, the wage-price controls of 1971-7% tended to distort profit and investment patterns, aggravating the capacity shurlages which developed in 1972-73.

The government share of GNP also dropped by more than 2 percentage points 1966-73, and its investment ratio by over one percentage point. Although disposable personal income rose from 63% of GNP in 1966 to almost 69% 1973, total personal investment remained a constant 26% of GNP. As the CEA annual report emphasizes, fiscal and other macro-economic policies have definitely favored consumption in recent years.

One other highly significant recent trend, often overlooked, has been the tarked slow-down in capital productivity, which has been even nore pronounced than the slow-down in labor productivity. The average annual rate of increase of real gross product per unit of real gross tangible capital stock in the business economy slowed from 1.0% 1948-66 to only 0.2% 1965-73. This was not due to a deepening of capital per worker. Indeed, due to the accelerated growth of the labor force and employment, real gross capital stocks per person engaged slowed from a 2.3% average annual growth rate 1948-66 to 1.8% 1966-73. This was one element in the slow-down in labor productivity, as measured by real gross product per person engaged, from a 3.2% growth rate per annua, on average from 1948 to 1966, to 1.8% 1966-73.

The increase in capital formation required for environmental protection, occupational health and safety, and other social programs was undoubtedly a factor in the slow-down in growth of real product as measured in relation to real capital. But I believe that the more important factor must have been a slowing down in the rate of cost-reducing innovations. I cannot agree with the overly-dramatic phrasing of the title of an article in Business Week (Feb. 16, 1976), "The Breakdown of U. S. Innovation." But there were several important reasons for a "slow-down." In the first place, research and development expenditures have declined markedly as a percentage of Gross National Product since the cid-1950s. This has slowed the rate of increase of inventions and thus of

³These estimates will be published in a forthcoming publication by The Conference Board, New York, "The Gross National Wealth of the United States, by Sector and Industry."

potential innovations actually undertaken by business.

This is significant, since a renewed acceleration of capital productivity would clearly reduce the amount of new capital required for any given rate of increase in real GGP.

Capital Requirements.

The CEA in its recent annual report infers from a HEA study that the ratio of business fixed investment to GNP would need to be at least 12 percentage points higher in the latter half of the decade 1971-30 than it was in the first half in order to achieve a full employment level of real GNP in 1980, and to seet the capital requirements of the 1970 and 1972 Pollution Control laws and of greater energy independence goals.

My chief criticism of the ZEA study is that the projected capital requirements may be on the high side, since a net increase in the capital coefficients was projected based on 1963-70 trends. But as noted earlier there were net declines in capital coefficients (the inverse of capital productivity) in the prior 15 years and I believe that appropriate policies could result in somewhat lower, rather than higher, capital coefficients in 1960 than in 1970.

In general, however I agree with the CEA that higher saving-investment ratios to GNP may well be needed for several years to come in view of:

- The continued rapid increase in the labor force in prospect, until the late 1970s;
- The need to increase capital per worker in order to maintain
 past trends of rising real income and product per torker, which
 most Americans seem to desire;
- 3. The requirements of environmental and energy programs; and also
- 4. The need to accommodate possible new initiatives in the national security and social velfare areas.

It seems to be that even recognizing the probable margins of error in the projections of RPA and others of capital shortages, there is less risk in adopting policies to stimulate saving and investment than there is in doing nothing. A faster increase in capital formation will strengthen the forces of recovery, and reduce excessive unemployment faster than would otherwise be the case. It will also decrease the likelihood that expansion will run into capacity bottlenecks before full employment is senieved. And by deepening capital and reducing the average age of plant and equipment, it will help accelerate labor

Economic Report of the President, January 1976, pp. 39-47.

productivity and the associated increases in real income per worker. These factors will have the added benefit of helping sitigate the accelerated increases in unit costs that typically appear in the latter phase of a business cycle expansion. It should also be noted that by the end of the decade, when labor force growth is projected to decelerate and anti-pollution programs will be in place policies can be modified to permit relative increases in consumption as required to maintain high levels of aggregate decand.

Incentives for Capital Forrstion.

The most important force working to raise investment is the current recovery of corporate profits and the net income of proprietors. Macro-economic policies should continue to promote that recovery back up to rates of return comparable to those earned in the mid-1960s, with due allowance for inflation effects. Since tusiness typically ploughs back all of its cash flow (retained carnings plus capital consumption charges) and more, on balance, into capital formation, the increase of 2 to 3 percentage points in the business cash flow share of GMP over the 1973 proportion, which this objective implies, should mean a similar increase in the capital formation ratio.

This objective implies a conetary policy that would continue to hold interest rates within a coderate range and a fiscal policy that would prozote the reduction of the Federal Government deficit in step with the recovery of net private borrowing to finance the growth of capital formation. Ultimately, a full-employment surplus would contribute both to a high rate of private investment and to the mitigation of inflationary pressures which normally build up as full employment is approached.

To play on the safe side, I believe that Congress should give serious consideration to supplementing the forces of recovery by a modest reduction of business income taxes. As I noted in the Joint Committee print, this could take one or more of several forms:

A decrease in corporate income tax rates:

An exemption of a portion of dividends from double taxation;

Recognition of some form of "inflation accounting" in calculation of taxable business income;

A further increase in the investment tax credit; and

Possibly an expansion of the tax credit to apply to R&D outlays as well as to plant and equipment expenditures.

The exemption from taxation of some portion of corporate profits paid out in will form the special attraction of promoting equity financing vis-a-vis the febt financing of capital formation. This would help restore a better balance to corporation balance sheets?

But the proposal which I should like to conclude by discussing further is one which has received less attention than the others: the enactment of an R&D tax credit. R&D is, of course, an investment in that it enhances future ireo e-producing capacity just like plant and equipment outlays do. R&D is particularly toportant as the fountainhead of technological progress and the source of cost-reducing product and process inventions and innovations. As noted earlier, I believe the reduction of P&D as a fraction of GRP over the past decade contributed importantly to the productivity slow-down. A stimulation of R&D outlays would accelerate the completion of projects now in the pipe-line and increase the number of projects that could be undertaken in coming years, some of which would bear fount during the current recovery. A portion of these would be capital-saving developments, which would help meet the capital requirements projected for 1900 with less new tangible capital formation.

An alternative to an R&D tax credit of, say 10%, would be a larger credit, say 30%, on incremental outlays for R&D (over and above outlays of the prior year, or some other base). This would cost the government less in revenues foregone, and possibly provide a greater incentive for increasing private R&D. A novel feature which I would add is that R&D outlays by manufacturers of producers' goods be allowed a larger tax credit. A more favorable treatment of R&D for producers' goods recognizes the dual importance of process and product innovations in those industries. Improvements in the quality of producers goods result in productivity improvements in the purchasing industries. Further, cost-reducing innovations in the manufacture of producers goods, by reducing relative prices to purchasers, encourage tangible investments, the carriers of technological progress.

[Whereupon, at 1:40 p.m., the subcommittee recessed, to reconvene at 10 a.m. on February 19, 1976.]

TAX POLICY AND CAPITAL FORMATION

THURSDAY, FEBRUARY 19, 1976

U.S. SENATE,
SUBCOMMITTEE ON FINANCIAL MARKETS
OF THE COMMITTEE ON FINANCE,
Washington, D.C.

The subcommittee met, pursuant to recess, at 10:04 a.m., in room 2221, Dirksen Senate Office Building, Senator Lloyd Bentsen (chairman of the subcommittee) presiding.

Present: Senators Bentsen and Fannin.

Senator Bentsen. These hearings will come to order.

OPENING STATEMENT OF SENATOR LLOYD BENTSEN

This morning the Senate Financial Markets Subcommittee begins the second day of hearings on the vitally important issue of tax policy and capital formation. Our witnesses this morning are Senator Paul Fannin, one of my colleagues on the Finance Committee, Alan Greenspan, chairman of the Council of Economic Advisers, Assistant Secretary of Treasury Sidney L. Jones and Alex Sheshunoff, a specialist in bank analysis.

The purpose of the hearings is to examine the importance of enacting a responsible tax policy this year to help meet our Nation's growing capital needs, to create new jobs for our expanding labor force

and to promote stable non-inflationary economic growth.

We must steer our economy to a course of stable, durable growth and avoid a sorrowful repetition of the boom and bust cycles of the past which have been accompanied by painful inflation and unem-

ployment distortions.

Without the adoption of sound economic and tax programs our economy will be unable to generate sufficient job opportunities for our growing work force and the American worker will be the loser. Without a tax policy that will help meet our economy's future capital needs, we will be unable to prevent shortages of scarce resources and manufactured products in the years ahead and the American consumer will be the loser.

As our economy recovers from the recession, we need economic and tax policies that will encourage industrial expansion and modernization, boost productivity and prevent inflationary bottlenecks and capacity shortages from developing in the future. This is essential to keep prices down for the American consumer. Increased productivity will enable employers to raise wages without raising prices to customers. Stable economic growth that puts more goods on the shelf is our economy's best defense against inflation.

The Treasury Department has estimated that capital requirements for gross private domestic investment will be in excess of \$4 trillion during the 1974 to 1985 time period. Our capital requirements are indeed large and require much greater public attention.

Unfortunately today there is substantial evidence that the United States has not been keeping pace with other industralized nations

with respect to economic growth and capital investment.

An important starting point in any discussion of capital formation is the pattern of economic growth. The average annual rate of real economic growth during the 1960's for the 20 nations belonging to the Organization of Economic Cooperation and Development (OECD) ranged from a high of 11.1 percent for Japan, to a median of about 5 percent for Australia, the Netherlands and Norway to a low of 2.8 percent for the United Kingdom. The United States during this time experienced an average growth rate of 4 percent a year-17th among the 20 nations.

AVERAGE ANNUAL RATE OF CHANGE IN REAL GROWTH FOR MEMBER NATIONS OF OECD, 1969-70

	(In per		
Japan	11.1	Norway	5.0
Greece	7.6	Belgium	4.9
Portugal	6.3	Denmark	
Yugoslavia	6.7	West Germany	
France	5.8	Austria	4.8
Italy	5.6	Iceland	4.3
Canada	5.2	United States	
Finland	5.2	Luxembourg	
Australia	5.1	United Kingdom	
Netherlands	5.1	Ireland	4.0

Source: Organization for Economic Development and Cooperation.

Of the many factors that influence economic growth rates, none is more important than the level of capital investment. A strong rate of new capital investment is required to generate sustained economic growth. However during the 1960's, the United States had the worst record of capital investment among the major industrialized nations of the free world. A study prepared by the Department of the Treasury indicates that total U.S. fixed investment as a share of national output during the time period 1960 through 1973 was 17.5 percent. The U.S. figure ranks last among a group of 11 major industrial nations; our investment rate was 7.2 percentage points below the average commitment of the entire group.

INVESTMENT AS PERCENT OF REAL NATIONAL OUTPUT 1960-73

	Total fixed '	Nonresiden- tial fixed
Japan	35.0	29.0
West Germany	25.8	20.0
France	24.5	18.2
Canada	21.8	17.4
Italy	20.5	14.4
United Kingdom	18.5	15.2
United States	17.5	13.6
11 OECD Countries	24.7	19.4

¹ Including residential. Source: U.S. Department of the Treasury.

We can take steps to remedy this problem.

I have proposed several tax measures to help our economy generate

sufficient capital for sustained economic growth.

Earlier in this Congress I introduced the "Stockholders Investment Act." to encourage greater individual savings and investment and to stimulate our capital markets. Under this proposal, the maximum capital gains rate would decrease annually during the holding period of an asset until—after 15 years—the maximum rate dropped to 14 percent. The tax treatment of capital losses would also be liberalized. The amount of capital losses allowable as a deduction against ordinary income would increase from \$1,000 to \$4,000.

My capital gains proposals would encourage the risktaking spirit in America. They would restore the incentive for potential investors to take the risks inherent in equity investing. This is vitally important to our efforts to expand job opportunities, thereby providing a larger tax base that will more than compensate for these tax code changes.

America's economic growth has always depended upon the rise of dynamic new companies like Polaroid, Xerox and IBM in the past two decades. Historically, firms of this type have initially been financed by individual investors. But if the individual investor has left the stock market, if the bulk of investment funds are flowing through institutions--which play "follow the leader." concentrating their holdings in a few stocks other institutions favor—the dynamic young companies—the IBM's of the next decade won't get off the ground.

Another proposal to promote greater savings and investment is my

"educational savings plan."

This proposal will also stimulate the depressed housing and construction industries and help hard-pressed middle-income Americans finance the education of their children. The Educational Savings Plan would provide a Federal tax credit for parents who save for either vocational or other higher educational expenses of their children. Under this proposal a taxpayer would contribute as much as \$250 annually for each dependent child to an educational savings plan and subtract a tax credit equal to 20 percent of that contribution. These savings must be placed in a financial institution which invests at least 50 percent of its assets in housing-related investments. The educational savings plan is intended to improve the performance of the American economy in several ways: First, it encourages the American people to save more. Second, it will help parents finance the education of their children and hence the long-run productivity of the American labor force will be enhanced. Third, since a tax credit is provided for savings accounts in financial institutions whose portfolios tend to include large holdings of residential mortgages, the housing sector will be benefited with a stable supply of long-term mortgage money.

An effective way to create new jobs and reduce the unacceptably high level of unemployment would be to enact an employment tax credit. Giving a 10-percent credit on the wages of new employees hired this year and next—up to \$800 per worker—could create from

600,000 to 1 million new jobs by the end of 1977.

I introduced the "Employment Tax Credit Act of 1975," to help strengthen our economic recovery by giving American businesses a tax incentive to hire new workers in 1976 and 1977. The current unemployment rate is unacceptably high. We must look for new remedies such as an employment tax credit to supplement existing

programs for combating this problem.

Under my proposal, a firm would receive a credit against its 1976 Federal Income Tax for every worker hired in 1976 over its work force level of 1974 and 1975, whichever is higher. The bill also allows a firm a credit against 1977 income taxes for every worker hired in 1977 over its work force level in 1974, 1975, or 1976, whichever is highest. The amount of the credit is 10 percent of the wages paid to each new qualifying employee up to a maximum credit of \$800 per new worker.

My proposal has several distinct advantages compared to other unemployment programs. The cost per jobs created is significantly lower than under other programs. The direct Treasury revenue loss under my employment tax credit proposal would be about \$800 for each new worker hired. This compares very favorably with the various public sector employment programs which have a cost of between \$8,000 and \$12,000 per job. In addition, Americans hired as a result of this employment tax credit will have a job with a future. Public sector jobs programs provide no guarantee that permanent jobs in the private sector will be available upon termination of the public employment program.

These proposals would help our economy meet our growing capital

needs.

At this point in the hearing record, I would like to insert three fact sheets describing my proposals.

[The information follows:]

FACT SHEET OF SENATOR LLOYD BENTSEN'S PROPOSED STOCKHOLDERS INVESTMENT ACT-S. 443

1. Limitations on the Stock Holdings of Pension Managers-No pension fund could qualify for favorable tax treatment unless the assets of the fund were placed in the hands of a manager who invests no more than 5 percent of its aggregate discretionary pension assets in any one equity security and in addition who acquires no more than 10 percent of any equity security of any one company with respect to the aggregate discretionary pension accounts. This limitation would not apply retroactively. Managers of pension accounts would not be forced to dispose of current stock holdings to meet these limitations, but they could not acquire additional shares of any security in which the pension manager had reached the limitation.

If any manager of tax exempt pension funds exceeds these limitations (for example by purchasing an additional I percent of the total equity securities of a company in which it already holds 10 percent a penalty tax equal to 5 percent of the excess holdings would be imposed on the manager by the Internal Revenue Service. In the event that the manager fails to dispose of the excess holdings within 180 days, IRS will impose an additional penalty of 100 percent of the excess on the manager.

Excess holdings that result exclusively from fluctuations in market values will not he subject to a penality tax. These limitations will not apply to investments in companies with a capital account of less than \$25 million. These limitations apply only to pension

plans and not profit sharing plans.

Limits on institutional holdings are necessary to protect the more than 30 million on priviate pension plan participants from excessive concentration of pension investments in only a few select stocks and to encourage greater institutional interest in well-managed small and medium size companies. In addition, these limits would help prevent a small number of large institutional investors from achieving too much control over our economy.

2. Venture Capital From Pension Funds-Pension managers would be given Iceway to invest I percent of the assets of any pension plan in companies with capital accounts of less than \$25 million. This would be an exemption from any prudent man rule for I percent of the pension assets. However, the Iceway clause would not relieve fiduciaries from any prohibitions against self-dealing or fraudulent transactions. The "leeway clause" would relieve a fiduciary from liability with respect to the risk of an investment.

This provision would facilitate the flow of pension investments to new and expanding smaller companies that are in great need of equity capital and which present a higher

than normal risk but offer the possibility of a higher than normal return.

3. Graduated Capital Gains Tax—Under present law maximum capital gains rate is 35 percent without regard to the special minimum tax provisions or any other provisions. This legislation would decrease the maximum rate annually over the holding period of a capital asset until the maximum rate was reduced to about 14 percent for assets held 15 years. Capital losses would be provided comparable sliding-scale treatment over the holding period of the asset. The present 6-month holding period for capital gains treatment would be extended to 12 months. This would be phased in by I month per year.

This provision would help reduce the lock-in of long term assets and provide greater liquidity in our capital markets. A graduated capital gains rate would also encourage the risk-taking spirit in America which has been so important to economic growth

and the creation of new jobs.

4. Liberalized Capital Loss Treatment-Today, if an individual's capital losses exceed his capital gains he can deduct up to \$1,000 against his ordinary income each year. This hasn't changed since 1942 yet per capital disposable income has risen over 400% since then. This bill would allow the individual to deduct up to \$4,000 of capital losses against ordinary income. It would also allow a three year carryback of capital losses against capital gains.

Liberalized loss treatment would encourage more risk investment which is so important in starting new businesses and creating new jobs. It would also encourage investors

to take their losses, thus providing greater liquidity in our capital markets.

PROVISIONS OF THE "EDUCATIONAL SAVINGS PLAN" S. 666

1. A taxpayer can contribute as much as \$250 annually for each dependent child to an "educational savings plan" and subtract a tax credit equal to 20 percent of that contribution from the taxpayer's Federal Income tax. If no plan is opened for an individual by his parents or guardian, he can contribute \$250 annually to an educational savings account for his own education and subtract a credit equal to 20 percent of that contribution.

Example: A family saving for the education of two dependent children in a

qualified plan could save \$500 annually and reduce their tax liability by \$100.

2. Any funds which are withdrawn from an educational savings plan and used for an educational purpose such as tuition or fees at an eligible educational institution or for reasonable living expenses during participation in such a program would be free of any further taxation. However, if the plan is terminated or the funds withdrawn for other than an educational purpose, the tax credits must be repaid to the Treasury. This provision is waived if the person for which the plan was established has died or become disabled.

3. The definition of "cligible educational institution" would closely follow the definition of post-secondary education adopted by the National Commission on the Financing of Post Secondary Education. This would include institutions-of higher education and vocational schools either accredited by an official accrediting agency and recognized by the Office of Education or institutions otherwise eligible to participate in Federal programs, such as those recognized by the Veterans' Administration. Presently, approximately 10,000 public and private post-secondary educational institutions would be accessible to students and families under this definition.

 A plan established for dependents could continue until the youngest child reaches 25 years of age or as long as the child remains a student at which time the plan automatically would terminate. A plan established by the taxpayer for himself could continue until the taxpayer was 25 years old or as long as he remains a student.

5. During the years that a taxpayer withdraws money from one of these plans, the taxpayer would be required to file a supplemental tax form specifying the use of these funds. Falsification of this supplemental return would subject the taxpayer

to existing penalties for tax fraud.

6. Educational savings plans can be administered by savings and loan associations mututal savings banks, and other federally insured financial institutions that invest at least 50 percent of their assets in housing. The earnings in these plans would be determined by competition as well as the existing authority of the various Government agencies that regulate such financial institutions.

IMPACT OF THE "EDUCATIONAL SAVINGS PLAN"

The savings plan is directed at meeting two of these basic goals of the American

people—the opportunity for a better education and for home ownership.

The Department of the Treasury estimates that 15 million families would save for the education of 33 million children through these plans and that approximately \$9 billion would be deposited annually in the thrift institutions which offered them. Most of these funds would be channeled into home mortgages and provide the Nation with a more stable source of financing for as many as 300,000 new homes a year.

The Treasury estimates a \$1.7 billion annual revenue loss from the tax credits allowed on educations savings plans. However the building of an additional 300,000 homes would result in over a billion dollars in Federal revenue from taxes on wages and profits in the home building industry. Reductions in Government expenditures or unemployment compensation for construction workers would further reduce this revenue

DESCRIPTION OF THE EMPLOYMENT TAX CREDIT ACT

Title. The title of the bill is the "Employment Tax Credit Act of 1975." S. 2629.

General Description: The bill would give any firm or other employer a tax credit against its 1976 Federal income tax for every worker hired in 1976 over its employment level of 1974 or 1975 whichever is higher. The bill also allows an employer a tax credit against 1977 income taxes for every worker hired in 1977 over its employment level of 1974, 1975 and 1976 whichever is highest. The amount of the credit is 10 percent of the wages or salary paid to each qualifying worker, up to a maximum credit of \$800 per qualifying worker. To obtain the credit, the firm must hire workers who have been unemployed or not working for at least 6 weeks prior to the date of employment. Finally, the dollar value of the credit earned for all but the first two employees hired must be plowed back into new investment.

SPECIFIC PROVISIONS

1. The tax credit applies to tax years ending on or before December 31, 1976, and December 31, 1977. All business firms and other employers who pay Federal

corporate or other income taxes are eligible.

The amount of the credit is 10 percent of the wages or salary paid to each qualifying employee, up to a maximum credit of \$800 per qualifying employee. The tax credit formula automatically prorates the credit earned for employees not on the payroll for the entire year.

3. To provide the greatest employment stimulus without giving windfall credits to firms hiring workers who would have been hired even without the tax credit, the

bill uses the following provisions to determine the firm's tax credit.

a. The number of employees qualifying for the \$800 credit during a tax year is to be the *smaller* of:

1. The number of workers hired during the year who had been not working at least 42 days-prior to the date of employment and who remained on the firm's payroll for at least 13 consecutive weeks or for any 30 weeks during the year. The term "not working." includes these unemployed, on unemployment compensation, and

those just entering the labor force: and

2. The net increase in the firm's payroll employment during the tax year over its base period employment. For 1976 the net increase is the difference between the firm's average employment in 1974 or 1975 whichever is higher. For 1977, it is the difference between the firm's 1977 employment average and that for 1974, 1975, or 1976 whichever is highest. "Average employment" for a year is computed as the average of the daily employment for the firm for all business days during the year, with part-time employees converted to full-time equivalents and excluding employees not actually on the payroll, such as those on sick leave, layoff, or on unpaid leave.

b. The dollar value of the tax credit earned for all but the first two qualifying employees hired by the firm during the tax year cannot exceed the firm's net investment in new plant and equipment for the year. "Net investment" is defined as the difference between the firm's total investment during the tax year which qualifies for the 10% investment tax credit and the depreciation allowance taken by the firm in computing its Federal income tax liability for the year. If the net investment made by the firm is less than the employment tax credit earned by the firm, then the tax credit is

reduced to the net investment level.

Example: A firm hiring 4 more workers in 1976 that it did in either 1974 or 1975 and which hired at least 4 workers during the year who were previously not employed for at least 6 weeks would qualify for a credit of up to \$3,200 against its 1976 business taxes (4 times \$800). The first \$1,600 of this it would receive regardless of how much investment it made during the year; the remainder would be allowed only if the firm made at least \$1,600 net investment during the year. However.

a. If the firm hiared 4 more workers in 1976 but hired no previsouly unemployed workers (e.g. simply hired workers from other firms) it would qualify for no tax

credit; or

b. If the firm hired 4 previously unemployed workers but did not expand its total employment (e.g. simply hired workers to replace some who were fired or laid off), it would receive no tax credit.

4. Only workers employed in the United States or its possessions could qualify

for the employment tax credit.

Employment Effect and Cost: As part of a comprehensive recovery program, this bill could create about 300,000 to 500,000 jobs per year for the next two years above the number that would be created without the tax credit. This could reduce the unemployment rate by as much as I percentage point below what it otherwise would be.

The direct cost to the Treasury would be in the range of \$500 to \$600 million per year. Much of this revenue loss, however, would be immediately recouped from reduced unemployment compensation, reductions in welfare costs, and increased income taxes paid by newly hired workers. The increased tax payments alone would come to about \$240 million yearly, while the reduced welfare and unemployment compensation costs could add sufficiently to this to reduce the Treasury loss to near zero.

Senator Bentsen. Our first witness this morning will be Senator Paul Fannin, one of my colleagues on the Finance Committee.

Mr. Alan Greenspan, Chairman of the Council of Economic Advisers, is now at the White House and he will be here later this morning. In addition. we have the Assistant Secretary of the Treasury Sidney Jones who will be offering comments.

Senator Fannin?

STATEMENT OF HON. PAUL J. FANNIN, A U.S. SENATOR FROM THE STATE OF ARIZONA

Senator Fannin. Thank you, Mr. Chairman, and may I first commend the chairman for his leadership in this very important activity. What he has stated this morning is so factual as to the tremendous need we have for capital formation incentives. We have great opportunities in this Nations especially in the energy field if we can obtain the capital that is so badly needed.

It is estimated that in the next decade we will need over \$1 trillion for the financing of the energy programs that can be carried forward. I know the distinguished chairman, with his vast experience in this field and coming from a State that produces a large portion of the petroleum products which are essential to the welfare of this Nation, realizes that we need to do something about natural gas and other energy problems. He has specifically brought out the need for developing coal gasification projects. It is estimated that a single coal gasification plant could cost up to \$2.1 billion.

That is just one of the great needs that we have. In many areas where smaller amounts of capital are needed and smaller companies

will be involved, there are problems also.

I refer to the geothermal programs, one in California by San Diego Gas and Electric. I know the problems they have had with financing which are indicative of the problems others are running into in getting to programs that would be very beneficial to this country.

Mr. Chairman, this morning I especially appreciate this opportunity to testify before your committee on what is as you brought out clearly the Nation's principal economic problem—the lack of adequate capital resources to meet the Nation's needs. As my colleagues on the committee know, it has been my position for some time to express alarm at the increasing financial weakness of the private sector of our econo-

my.

The distinguished chairman has brought out comparisons of our Nation with other countries of the world. The causes of this shortfall of capital resources have developed over a period of years. Our Federal fiscal and tax policies have contributed directly to this pressing problem. Federal deficits have required the Government to borrow massive amounts from the private sector, thereby depeleting the resources available for private endeavors and at the same time stimulating inflation. Deficit spending has never carried with it more precarious consequences than it does at the present time. There continue to be serious questions as to how much money can be drained out of the economy to meet Federal spending extravagances without stifling the economic recovery presently underway.

Mr. Chairman, we are here today, however, to examine the adequacy of current Federal tax policies to meet the Nation's capital needs. It is my conviction that our present tax structure clearly encourages consumption and discourages investment by placing a heavier tax liability on dollars saved or invested than on dollars spent. This misdirected policy stifles the need for increased capital formation which is the fundamental prerequisite for sound economic growth. A new tax policy must be adopted to counter this trend and renew the interest and ability of individuals and corporations to invest in

our Nation's future economic well-being.

Regardless of the economic system employed by a society, the ability to employ its citizens in constructione jobs and improve the well-being of all its people is directly related to its savings and investment policies. Capitalist, Socialist, and Communist societies share this economic reality. A fundamental difference between these economic systems is the manner in which resource allocation decisions are made. Socialist and Communist economies utilize a central decision-making system in which the government determines what portion of the national income is invested and what is available for consumption. Capitalist societies depend upon the market mechanism to allocate financial resources. National policies affect those market allocation decisions, but they do not mandate them. Individuals and businesses maintain the prerogative to invest or consume.

Mr. Chairman, it is nothing short of tragic that current rhetoric labels as tax loopholes any Federal policies which encourage and strengthen the private sector. The plain facts are that in October 1975, 83 percent of the labor force was employed in the private sector with the remaining 17 percent working for various levels of government. An 8-plus percent unemployment rate cannot be reduced in any significant way by enacting massive temporary public employment jobs. The only way to provide sufficient numbers of permanent jobs to meet our employment needs is by strenthening the Nation's

Mr. Chairman, the United States retains a position of economic leadership because it has enjoyed an adequate combination of several economic variables, along with political stability and improving social

mobility. This ability to exert economic leadership has wanted in recent years due to a comparatively inadequate investment in productice

capacity.

The Congress must face up to the harsh economic facts confronting the Nation. The United States lags behind most industrial societies both in capital investment and productivity growth. We ranked 17th among 24 OECD nations in the rate of real economic growth during the decade of the 1960's. Treasury Department figures indicate that total U.S. fixed investment as a share of national output during the period 1960 through 1973 was 17.5 percent which ranked the United States last among a group of 11 major industrial nations. These facts disturb me greatly.

Believing that Congress must address this problem in the immediate future. I introduced S. 2909, the Investment Incentives Act of 1976. This bill is designed to bring new savings and investment incentives to individuals and to corporations both small and large. It is my belief that a carefully designed series of tax incentives must be adopted in order to stimulate investment throughout our complex society. No single tax incentive would achieve this objective. S. 2909 is drafted to reach broadly across the private sector to create new jobs for our expanding labor force, increase productivity, improve our environment and working condition and achieve energy independence.

Mu hill takes action in air anacific areas

My bill takes action in six specific areas.

1. There is an exclusion of \$500 of interest income from savings

accounts and similar savings devices with savings institutions.

2. There is an exclusion from income of the first \$1,000 (\$2,000 if a joint return) of net capital gain on sales or exchanges of securities. This applies only to the extent that an equivalent amount is invested in securities of a domestic corporation within the same taxable year. The provision would result in a deferral of tax, but not in an elimination of tax.

3. The corporate surtax exemption would be increased to \$100,000 and the surtax rate would be reduced from 26 percent to 22 percent over a 5-year period. The normal tax rate of 22 percent is replaced

by a series of rates ranging from 18 to 22 percent

4. The investment tax credit rate is increased to 10 percent on a permanent basis for all taxpayers, including public utilities. The used property limitation is to be set at \$100,000 and any unused credits may be carried over to future years without limitation until fully utilized. Except in the case of utilities, no more than 50 percent

of tax liability may be offset by the credit in any one year.

5. The double taxation of corporate earnings is addressed in two ways. First, individuals may exclude from gross income dividends which are reinvested in common or preferred stock—but not debt instruments—with the limitation that no more than 25 percent of an individual's taxable income could be reduced by use of this exclusion. Second, domestic corporations my deduct dividends paid on preferred stock issued after enactment.

6. The cost of required but non-productive pollution control facili-

ties and equipment may be written off in one year.

Mr. Chairman, the Joint Committee on Internal Revenue Taxation has calculated the revenue impact of the various features of S. 2909. In addition, Chase Econometrics has placed the provisions of S. 2909

into its econometric model. The resulting figures provided by Chase are very encouraging. While the Joint Committee estimates that the potential revenue loss to the Treasury is as much as \$10.2 billion in 1976 and \$24.2 billion 1981, the Chase figures indicate a potential net gain to the Treasury by 1978 or \$5.7 billion, increasing to \$9.8 billion in 1981. Therefore, while the various provisions of the Investment Incentives Act may be viewed as costing the Treasury specified sums, this type of isolated analysis does not take into account the new revenues resulting from an expanded economic base which these investment incentives would foster.

Mr. Chairman, I believe this comparison between the Joint Committee's figures and those resulting from an econometric analysis should be instructive to the Finance Committee and the Congress. The Joint Committee's figures are not inaccurate, they simply do not reflect the effect these various tax measures would have on the economy in total.

Mr. Chairman, again, I express my appreciation for this opportunity to appear before this subcommittee to address this difficult and challenging problem.

I ask that my full introductory statement on S. 2909 as well as

the bill itself be made a part of the hearings.

Senator Bentsen. Thank you very much Senator Fannin. We will be very pleased to do that.

[The remarks on S. 2909 introduced by Senator Fannin follows:]

[From the Congressional Record, Feb. 2, 1976] By Mr. Fannin:

S. 2909. A bill to amend the Internal Revenue Code of 1954 to provide incentives for additional capital formation in the United States. Referred to the Committee on

Mr. FANNIN. Mr. President, today I introduce the Investment Incentives Act of 1976. This bill is designed to provide the private sector of our Nation with the ability to meet our future economic and social needs. Action must be taken immediately to establish Federal tax policies which will expand the ability of the private sector to provide new jobs for our growing labor force, increase productivity, improve our environment and working conditions and achieve energy independence.

The Investment Incentives Act includes tax incentives to promote increased savings and investment by both individuals and corporations. Our present tax structure clearly encourages consumption and discourages investment by placing a heavier tax liability on dollars saved or invested than on dollars spent. This misdirected policy stifles the need for increased capital formation which is the fundamental prerequisite for sound economic growth. A new tax policy must be adopted to counter this trend and renew the interest and ability of individuals and corporations to invest in our Nation's future economic well-being. My bill represents such a new direction.

Mr. President, regardless of the economic system employed by a society, the ability to employ its citizens in constructive jobs and improve the well-being of all its people is directly related to its savings and investment policies. Capitalist, socialist, and communist societies share this economic reality. A fundamental difference between these economic systems is the manner in which resource allocation decisions are made. Socialist and Communist economies utilize a central decisionmaking system in which the government determines what portion of the national income is invested and what is available for consumption. Capitalist societies depend upon the market mechanism to allocate financial resources. National policies affect those market allocation decision, but they do not mandate them. Individuals and businesses maintain the perogative to invest or consume.

Mr. President let us look at the harsh economic reality facing our Nation. The United States lags behind most industrial socieities in both capital investment and productivity growth. The average annual rate of real economic growth during the decade of the 1960's for the 20 OECD nations ranged from a high of 11.1 percent for Japan to a median of about 5 percent for Australia, the Netherlands and Norway,

to a low of 2.8 percent for the United Kingdom. The United States during this time experienced an average growth rate of only 4 percent a year-17th among the 20 nations.

Capital investment is the key element influencing economic growth. The United States retains a position of economic leadeship because it has enjoyed an adequate combination of several economic variables along with political stability and improving social mobility. However, a quick examination of the relative rate of capital investment in this country during the 1960's will illustrate that our present economic position is in jeopardy. The gap has increased between the U.S. level of investment measured as a share of national output and the commitment of other leading industrial nations. Treasury Department figures indicate that total U.S. fixed investment as a share of national output during the period 1960 through 1973 was 17.5 percent which ranks the United States last among a group of 11 major industrial nations. Our investment rate was 7.2 percentage points below the average commitment of the entire group.

I ask unanimous consent that this Treasury Department table be printed in the

Record at this point.

There being no objection, the table was ordered to be printed in the Record, as follows.

INVESTMENT AS PERCENT OF REAL NATIONAL OUTPUT, 1960-73 1

	Total fixed *	Nonresiden- tial fixed
Japan	35.0	29.0
West Germany	25.8	20.0
France	24.5	18.2
Canada	21.8	17.4
Italy	20.5	14.4
United Kingdom	18.5	15.2
United States	17.5	13.6
11 OECD Countries	24.7	19.4

Mr. FANNIN. Mr. President, Prof. Paul W. McCracken, former Chairman of the Council of Economic Advisers has estimated that the amount of nonresidential capital formation per person during the 1970's is 22 percent below the level reported in the decade of 1956 to 1965. It is true that the United States still maintains a considerably higher capital to labor ratio than does Europe or Japan.

However, our advantage has deteriorated as other nations have increased their capital investments per worker. The Commerce Department estimates that since 1960 the existing base of plant and equipment assets has nearly doubled in France and Germany and more than tripled in Japan. The United States experienced an increase of no more than 50 percent during the same period.

I ask unanimous consent that a table prepared by Dr. McCracken for use during his statement before the Committee on Ways and Means, January 29, 1975, be printed

in the Record.

There being no objection the table was ordered to be printed in the Record, as follows:

GROSS NONRESIDENTIAL FIXED INVESTMENT PER PERSON ADDED TO CIVILIAN LABOR FORCE

(In 1958 dollars)

eriod:	Amoun
1956-60	\$49,500
1961-65	
1966-70	46,400
1971–74	41.000

¹ Estimate based on incomplete data for 1974.

¹OECD concepts of investment and national product. The OECD concept includes nondefense government outlays for machinery and equipment in the private investment total which required special adjustment in the U.S. national accounts for comparability. National output is defined in this study as "gross domestic product," rather than the more familiar measure of gross national product to conform with OECD definitions.

³ Including residential.
Source: U.S. Department of the Treasury.

Mr. Fannin. Mr. President, the problems addressed by the Investment Incentives Act are shared by individuals and corporations. Individuals add to the capital base by depositing money in a variety of savings institutions, purchasing various forms of securities and by investing in unincorporated business ventures. Corporations add to the capital base by actions similar to those taken_by individuals with the emphasis on investing in actual productive capacity.

Corporations have four sources of capital available to them. There are serious

problems associated with each of these four sources.

First, depreciation charges are a source of funds as they allow a business to set aside a certain percent of funds as a reserve to replace worn out equipment. However, depreciat ion is based on cost without considering replacement costs. As a result, profits are artificially high thereby causing higher taxes and less cash for investment. It has been estimated that corporations have understated depreciation by \$29 billion in the period 1970-1973. Although current depreciation provides cash flow available for capital expenditures, it is not new capital but a recovery of capital already committed to productive resources.

Second, retained earnings have been a major source of capital with shareholders taking out about 40 percent of earnings in the form of dividends. Shareholders have realized the advantage to them in having business reinvest the remaining 60 percent because their share values would be enhanced by the earnings. In recent years, however, as share values have been depressed, dividend payments have been substantially higher.

Third, a substantial portion of companies are finding it necessary to borrow funds for investment. Many have already reached their maximum debt capacity as the debt-to-equity ratio for industrial companies has increased from 25 to over 40 percent in the last decade.

Fourth, the balance of needed funds must be obtained through the issue of new equity securities. There has been a substantial decline in the amount of new equity capital raised in the past few years. It has become increasingly difficult to float large issues of equity except at prices that are not acceptable either to management or to the shareholders.

Mr. President, Congress must take steps at once to modify our Federal tax policies in order to direct more financial resources into productive capacity. The Investment Incentives Act accomplishes this required redirection. The provisions of the bill are as follows:

First, an exclusion of \$500 of interest income from savings accounts and similar savings devices with savings institutions.

Second, an exclusion from income of the first \$1,000-\$2,000 on a joint return-of net capital gain on sales or exchanges of securities, but only to the extent that an equivalent amount is invested in securities of a domestic corporation within the same taxable year. Thus, the exclusion is to apply to changes in investment, but not where the taxpayer withdraws his funds for use for other purposes.

not where the taxpayer withdraws his funds for use for other purposes.

The taxpayer's basis in the "replacement securities" is to be reduced by the amount excluded from income on the sale or exchange of the "original securities." As so modified, the provision would result in a deferral of tax, but not in a climination

of tax.

Third, the corporate surtax exemption is increased to \$100,000 and the surtax rate is reduced from 26 percent to 24 percent over a 5-year period. The normal tax rate of 22 percent is replaced by a series of rates ranging from 18 to 22 percent. I ask unanimous consent that tables depicting these corporate tax reductions to be printed in the Record at this point.

There being no objection- the table was ordered toprinted in the Record as follows:

[In percent]

	Nor
Taxable income:	lav
\$50,900 or less	
\$50,000 to \$100,000	
\$100,000 to \$500,000	
\$500,000 to \$1,000,000	
\$1,000,000 and over	***************
	•
[In percent]	
	Surtax Sui
	exemption i
1976	
1977	60,000
1978	70,000
1979	80,000
1980	100,000

Mr. FANNIN. Fourth, the investment tax credit rate is increased to 10 percent on a permanent basis for all taxpayers including public utilities. The used property limitation is to be set up at \$100,000 and any unused credits may be carried over to future years without limitation until fully utilized. However, except in the case of public utilities no more than 50 percent of tax liability may be offset by the credit in any one year. Utilities would be able—pursuant to the Tax Reduction Act—to reduce tax liability by 100 percent in 1976 and by decreasing amounts until the 50 percent figure is reached in 1981.

Fifth, a partial elimination of double taxation of corporate earnings is included in this legislation. First, individuals may exclude from gross income dividends on common stock of domestic corporations to the extent those dividends are reinvested in common or preferred stock-but not debt instruments-of domestic corporations. A limitation is placed on the exclusion so that no individual could use the exclusion to reduce his taxable income by more than 25 percent. Second, domestic corporations may deduct dividends paid on preferred stock issued after the date of enactment of the legislative proposal. To qualify, preferred stock would have to be nonvoting, limited, and preferred as to dividends, and entitled to a liquidating preference.

Sixth, a complete writeoff in I year of required but nonproductive pollution control

facilities and equipment is provided.

Mr. President, the staff of the Joint Committee on Internal Revenue Taxation has provided an estimate of the reduction in Federal individual and corporate income tax revenues for calendar years 1976-81 resulting from enactment of the Investment Incentives Act. I ask unanimous consent that the analysis of the Joint Tax Committee staff and a compilation of these figures be printed in the Record at this point.

There being no objection the analysis was ordered to be printed in the Record

as follows:

ESTIMATED REDUCTION IN FEDERAL INDIVIDUAL INCOME TAX LIABILITY UNDER THE CAPITAL FORMATION PROPOSAL, CALENDAR YEARS 1976-81

C [Dollar amo					·	
	1976	1977	1978	1979	1980	198
INDIVIDUAL INCOME TAX LIABILITY						
Interest income exclusion: Exclusion of \$500 interest (\$1,000 for joint return) from savings accounts, etc., with savings institutions	\$2.0	\$2.1	\$2.2	\$2.3	\$2.4	· \$2.
Exclusion from income of certain capital gains received by individuals: Exclusion of the 1st \$1.000 of net capital gains (\$2,000 for joint returns from the sale of securities to the extent an equivalent amount is invested in securities of a domestic corporation:						-
(a) 90 percent utilization 1 2 (b) 50 percent utilization 1 2 Exclusion of dividends on common stock of Exclusion of dividends on common stock of a domestic corporation (up to 25 percent of taxable income) to the extent they are reinvested in common or preferred stock:	.5	.5 .3	.6 .3	.6 .4	.7	
(a) 90 percent utilization 1	2.8 1.6	3.1 1.7	3.4 1.9	3.7 2.1	4.1 2.3	4.
(b) 50 percent utilization 1	1.0	1.7	1.7	2.1	2.3	2.:
CORPORATE INCOME						
Reduction in corporate tax rates: Normal tax Surtax	1.3	1.4	1.5	1.7 1.4	1.8 3.1	1.9
ncrease in surtax exemption to \$100,000 by 1979	1.6	2.3	3.0	3.6	4.7	5.0
credit rate and repeal of the time limitation on carryovers	(3)	3.3	3.5	3.7	3.9	4.
ferred stock	.1	.2	.3	.4	.5	.:
One year amortization of pollution control facilities	1.9	1.6	1.5	1.3	1.2	1.
Compilation of estimated reduction in Federal individual and corporate income tax liability:						
(1) Individuals:			4.3			7.0
High Low	5.3 3.9	5.7 4.1	6.2 4.4	6.6 4.8	7.2 5.1	7.9 5.5
(2) Corporation	4.9	8.8	11.1	12.1	15.2	16.3
(3) Total: Individuals and Corporation:		120	166	14.0	20.2	21.0

These levels of possible degree of utilization are illustrative only.

Low

High

Mr. FANNIN. The gradual implementation of the several tax incentives in this bill explain the increase in its cost to the Treasury over the years 1976-81.

8.8

10.2

12.9

14.5

17.3

16.9

18.7

20.3

22.4

21.8

24.2

Mr. President, it always is essential to consider the revenue impact of any tax proposal before the Congress. The intent of the Investment Incentive Act is to increase the productive capacity of the Nation's private sector and thereby create new sources of revenues which in turn will increase everyone's income including that of the Federal

Chase Econometrics has run the provisions of the investment Incentives Act through its econometric model. The resulting figures clearly indicate that enactment of the Investment Incentives Act would result over a period of 5 years in an expanded national economic base with an increase in gross national product, jobs and Federal revenues.

These estimates do not reflect the impact of change in basis.
Less than \$50,000,000.

Chase's Standard Forecast estimates that the gross national product will be \$1.673 trillion in 1976 increasing to \$2.592 trillion in 1981. Enactment of the Investment Incentives Act would increase those figures to \$1.679 trillion in 1976 and \$2.689 trillion in 1981, an increase of \$16 billion and \$97 billion respectively.

Gross private investment is projected by Chase's Standard Forecast to be \$230 billion in 1976 and \$402 billion in 1981. Enactment of the provisions of my bill would increase these totals to \$242 billion in 1976 and \$421 billion in 1981, a gain of \$12 billion and \$19 billion respectively.

Of particular note is the negligible effect this proposal would have on the Federal deficit. Chase's standard forecast shows a \$60.2 billion deficit in 1976 and a \$79.5 billion deficit in 1981. Again, enactment of the Investment Incentives Act would slightly increase the 1976 deficit by \$3.5 billion to \$63.7 billion but decrease the 1981 figure by \$9.8 billion to \$69.7 billion. Therefore, while the Joint Tax Committee estimates a potential revenue loss from my bill of \$10.2 billion in 1976 and \$24.2 billion in 1981, those figures do not take into account the increased revenues resulting from the expanded economic base which these tax investment incentives would create.

Noteworthy also is the positive effect the Investment Incentives Act would have on the Nation's unemployment rate. The standard projection used by Chase Econometrics is an unemployment rate of 7.66 percent for 1976 and 9.3 percent for 1981. Enactment of the Investment Incentives Act would decrease the 1976 figure by 0.27

percent to 7.39 percent and the 1981 figure by 1.3 percent to 8 percent.

Mr. President, I ask unanimous consent that a series of figures be printed in the Record comparing Chase Econometrics' standard economic projection for the years 1976–81 with those projections premised on the enactment of the Investment Incentives

There being no objection, the table was ordered to be printed in the Record as follows:

[Dollar figures are in billions]	Dollar	figures	are in	billions
----------------------------------	--------	---------	--------	----------

	•	· · · · · · · · · · · · · · · · · · ·	•			
	1976	1977	1978	1979	1980	1981
1. GNP in current dollars:						
(a)		\$1,865	\$1,991	\$2,097	\$2,334	\$2.592
(b)	1,679	1,907	2,058	2,176	2,432	2.689
	16	42	67	79	98	97
(c)						
2. GNP in constant dollars:	***	***	****	****	***	***
(a)	\$852 861	\$892 914	\$879 910	\$866 900	\$913 952	\$964 1.000
(0)			710			
(c)	9	22	31	34	39	36
3. Gross private investment:						
(a)	\$230	\$273	\$270	\$262	\$336	\$402
(b)	242	298	306	294	371	421
(c)	12	25	36	32	35	19
4. Unemployment rates						
(percent):						_
(a)		7.3	8.7	10.7	10.6	* 9.3
(b)	7.39	7.0	8.0	9.8	9.0	8.0
(c)	27	3	7	9	-1.6	-1.3
5. Federal Government deficits:						
(a)	- \$60.2	- \$56.0	\$64.3	\$92.2	\$90.6	\$79.5
(b)	- 63.7	- 56.4	58.6	81.7	78.0	69.7
(c)	-3.5	4	+ 5.7	+10.5	+ 12.6	+ 9.8
6. Personal income:					•	
(a)	\$1,390	\$1,561	\$1,688	\$1.800	\$1,961	\$2,151
(b)		1.579	1,722	1.848	2,022	2.222
(c)	5	18	34	48	61	71
•						
7. Consumers Price Index:	172.7	186.0	202.0	216.5	229.3	241.7
(a)		185.4	201.4	216.0	228.9	241.9
-						
(c)	+.2	6	+.6	+.5	4	+.2
8. Interest rates 91-day Treasury bills (percent):					•	
(a)	7.22	8.84	9.31	6.69	5.36	5.38
(b)	7.20	8.14	9.19	6.20	4.70	5.43
(c)	02	70	12	49	66	+.05
9. 4 to 6 mo. commercial paper (percent):						
(a)	7.86	10.19	11.03	8.16	6.37	6.81
(b)	7.74	9.14	10.67	7.27	5.70	6.45
(c)	12	- 1.05	36	89	-1.17	36
10. Prime commercial bank						
rate (percent):						
(a)	8.80	11.12	12.32	9.82	8.48	8.38
(b)	8.69	10.18	11.98	9.07	7.82	8.23
(c)	11	94	34	75	66	15

Note: (a) Chase Econometric Standard projections. (b) Enactment of the Investment Incentives Act. (c) b-a (subtracting the "standard projection" figures from the Investment Incentives Act figures gives the actual effect the tax proposals would have on the economy).

Mr. Fannin. Mr. President, the time has come for Congress to take the necessary steps to enact capital formation incentives. The Nation's economy must have the solid boost that the Investment Incentives Act would give it. Anything less than a resolute commitment to updating and expanding the capital base of the Nation's economy would be a dereliction of duty on the part of the Congress.

Mr. President, I ask unanimous consent that the text of the Investment Incentives Act of 1976 be printed in the Record.

There being no objection, the bill was ordered to be printed in the Record as follows:

\$ 2909

He it enacted by the Senate and House of Representatives of the United States of American in Congress assembled.

That this Act may be cited as the "Capital Formation Incentive Act of 1975"

Sec. 2. Partial exclusion from gross income of interests and dividends from savings deposits and of certain gains

(a) In General.—Part III of subchapter B of chapter I of the Internal Revenue Code of 1954 (relating to items specifically excluded from gross income) is amended—

(1) by redesignating section 124 as section 126, and

(2) by inserting after section 123 the following new section:

"See: 124. Partial Exclusion of Interest and Dividends from Savings Deposits

"(a) General Rule.—Gross income does not include any amounts of interest received by, or credited to the account of, a taxpayer from a financial institution as interest or dividends on savings deposits or withdrawable savings accounts during the taxable year to the extent that the aggregate amount of such interest and dividends does not exceed \$500 (\$1,000 for joint returns).

"(b) Financial Institution.—For purposes of this section the 'Term financial institution'

means-

"(1) a commercial or mutual savings bank whose deposits and accounts are insured by the Federal Deposit Insurance Corporation or otherwise insured under State law,

(2) a savings and loan, building, and loan, or similar association, the deposits and accounts of which are insured by the Federal Savings and Loan Insurance Corporation or otherwise insured under State law, or

"(3) A credit union, the deposits and accounts of which are insured by the National Credit Union Administration Share Insurance Fund or otherwise insured under State law.

"Sec. 124 Partial Exclusion of Certain Capital Gains

"(a) General Rule.—In the case of an individual, gross income does not include amounts realized as gain by the taxpayer during the taxable year from the sale or exchange of stock or securities which are capital assets in the hands of the taxpayer to the extent that during such year such taxpayer purchases stock or securities issued by a domestic corporation for an amount which equals or exceeds the amount of such gain.

"(b) Limitation.—The amount of the exclusion allowed under subsection (a) may

be not exceed \$1,000 for any taxable year. (\$2,000 if joint returns)

"(c) Domestic Corporation.—For purposes of this section the term 'domestic corporation' means any corporation which is incorporated under the laws of any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico or

any possession of the United States.

"(d) Application With Section 1202.—No amount taken into account under this section for the taxable year shall be taken into account purposes of section 1202 (relating to deduction of capital gains). No amount taken into account under section

1202 for the taxable year shall be taken into account under this section.

(b) Adjustment to Basis.—Section 1016 (a) of such Code (relating to adjustments to basis) is amended by striking out the period at the end of paragraph (22) and inserting in lieu thereof a semicolon and "and" and by adding at the end thereof the following new paragraph.

"(23) for amounts allowed as exclusions for capital gains realized on the sale or exchange of stock or securities under section 125."

(c) Clerical Amendment.-The table of sections for such part III is amended by striking out the last item and inserting in lieu thereof the following:

"Sec. 124. Partial exclusion of interest and dividends from savings deposits.

"Sec. 125. Partial exclusion of certain gains. "Sec. 126. Cross references to other Acts."

SEC. 3 REDUCTION IN CORPORATE TAX RATES AND INCREASE IN SURTAX EXEMPTION.

(a) Normal Tax.—Section 11(b) of the Internal Revenue Code of 1954 (relating to normal tax on corporations) is amended to read as follows:

'(b) Normal tax.—The normal tax shall be determined in accordance with the follow-

ing table:

\$1,000,000 "	"If the taxable income is: Not over \$50,000 Over \$50,000 but not over \$100,000 Over \$100,000 but not over \$500,000 Over \$500,000 but not over \$1,000,000 Over \$1,000,000	The tax is: 18% of the taxable income. \$9,000, plus 19% of excess over \$50,000. \$18,500, plus 20% of excess over \$100,000. \$98,500, plus 21% of excess over \$500,000. \$203,500, plus 22% of excess over \$1,000,000."
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(b) Surtax.—Section 11(c) of such Code (relating to surtax on corporations) is amended-

(1) by striking our "and" at the end of paragraph (2),

(2) by striking out the period at the end of paragraph (3) and inserting in lieu thereof a comma and "and", and

(3) by adding at the end thereof the following new paragraphs:

"(4) 25 percent, in the case of a taxable year beginning after December 31, 1977 "(5) 24 percent in the case of a taxable year beginning after December 31, 1979.".
(c) Surtax Exemption.—Section 11(d) of such Code (relating to surtax exception)

is amended to read as follows:

"(d) Surtax Exemption.—For purposes of this title, the surtax exemption for any taxable year shall be determined in accordance with the following table, except that with respect to a corporation to which section 1561 or 1564 (relating to surtax exemptions in case of certain controlled corporations) applies for the taxable year, the surtax exemption for the taxable year is the amount determined under such section:

"If the taxable year begins after December 31 of:	Then the surtax exemption is:
1975 1976 1977	60,000.
1978 1979 and thereafter	80,000.

(d) Technical and Conforming Amendments.-

(1) Paragraph (7) of section 12 of such code (relating to cross references for

tax on corporations) is amended by striking out "\$50,000".

(2) Section 962(c) of such Code (relating to surtax exemption for individuals electing to be subject to tax at corporate rates) is amended by striking out "\$50,000" and inserting in lieu thereof "the amount of such exemption in effect for such taxable

(3) Paragraph (1) of section 1561(a) of such Code (relating to limitations on certain multiple tax benefits in the case of certain controlled corporations) is amended by striking out "\$50,000".

SEC. 4 CHANGES IN THE INVESTMENT CREDIT

(a) 10 Percent Credit.—Section 46(a)(1)(d) of the Internal Revenue Code of 1954 (relating to amount of investment credit is amended)-

(1) by striking out "and before January 1, 1977," ir. clause (i),

- taxpayer before January 1, 1977, and placed in service by the taxpayer before January 1, 1977, and" in clause (ii) and inserting in lieu thereof "and", and
- (3) by striking out "after January 21, 1975, and before January 1, 1977" in clause (iii) and inserting in lieu thereof "after January 21, 1975."

(b) Limitation on Amount of Credit .-

- (1) In General.—Section 46 (a) (2) of such Code (relating to limitation based on amount of tax) is amended to read as follows:
- "(2) Limitation based on amount of tax.—Notwithstanding paragraph (1), the credit allowed by section 38 for the taxable year shall not exceed 50 percent of the liability for tax for such taxable year."
 - (2) Public Utilities. Section 46 (a) of such Code is amended -

(A) by striking out paragraphs (4) and (5),

(B) by redesignating paragraph (6) as paragraph (4), and

(C) by striking out "subparagraph (C) of" in subparagraph (A) of paragraph (4), as redesignated by subparagraph (B) of this paragraph.

(c) Carrybacks and Carryovers.—Section 46 (b) of such Code (relating to carryback

(c) Carrybacks and Carryovers.—Section 46 (b) of such Code (relating to carryback and carryover of unused credits) is amended—

(1) by striking out "7" in paragraph (1)(B),

(2) by striking out "10" and "9" in the second sentence of paragraph (1),

(3) by striking out "7 taxable years" in the third sentence of paragraph (1) and inserting in lieu thereof "taxable years", and

(4) by striking out "by substituting '13 taxable years' for '10 taxable years' and '12 taxable years' for '9 taxable years' in the preceding sentence." and inserting in lieu thereof "by substituting '13 taxable years' for 'taxable years' the first time it appears in the preceding sentence and by substituting '12 taxable years' for 'taxable years' the second time it appears in the preceding sentence." years' the second time it appears in the preceding sentence.

(d) Public Utility Property.—Section 46 (c) (3) of such Code (relating to public utility property) is amended by striking out "4/7 of" in subparagraph (A).

(e) Conforming Amendment.—Section 48 (f) of such Code (relating to estates and trusts) is amended by striking out "\$25,000" each place it appears in paragraph (3).

SEC 5 PARTIAL EXCLUSION FROM GROSS INCOME OF CERTAIN DIVIDENDS.

(a) In General.—Part III of subchapter B of chapter 1 of the Internal Revenue Code of 1954 (relating to items specifically excluded from gross income), as amended by section 2 of this Act, is amended-

(1) by redesignating section 126 as section 127, and

(2) by inserting after section 125 the following new section:

SEC. 126. PARTIAL EXCLUSION OF DIVIDENDS PAID BY DOMESTIC CORPORATIONS.

"(a) General Rule.—In the case of any taxpayer other than a corporation gross income does not include any amounts of dividends received by, or credited to the account of, a taxpayer during the taxable year to the extent that, during such year, such taxpayer purchases common or preferred stock issued by a domestic corporation for an amount which equals or exceeds the amount of such dividends.

"(b) Limitation.—The amount of the exclusion allowed under subsection (a) may not exceed 25 percent of the taxable income of the taxpayer for the taxable year

determined without regard to this section.

(c) Definitions. for purposes of this section—

"(1) Dividend.—The term 'dividend' means a dividend, as defined in section 316,

paid by a domestic corporation with respect to its common stock.

(2) Domestic Corporation.—The term 'domestic corporation' means any corporation which is incorporated under the laws of any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, or any possession of the United States."

(b) Clerical Amendment.—The table of sections for such part III, as amended by section 2 of this Act, is amended by striking out the last item and inserting in lieu thereof the following.

"Sec. 126. Partial exclusion of dividends paid by domestic corporations.

"Sec 127. Cross references to other Acts.".

SEC 6. DEDUCTIONS FOR DIVIDENDS PAID

(a) In General.—Part VIII of subchapter B of chapter 1 of the Internal Revenue Code of 1954 (relating to special deductions for corporations) is amended by adding at the end thereof the following new section.

SEC. 251 DIVIDENDS PAID ON CERTAIN PREFERRED STOCK OF DOMESTIC CORPORATIONS.

"(a) Amount of Deduction.—In the case of a domestic corporation, there shall be allowed as a deduction an amount equal to the amount of individuals paid during the taxable year on its preferred stock.

"(b) Definitions.—For purposes of this section—

"(1) Domestic Corporation.—The term 'domestic corporation' means any corporation which is incorporated under the laws of any State of the United States, the District of Columbia, the Commonwealth of Puerto Rico, or any possession of the United

'(2) Preferred Stock.—The term 'preferred stock' means stock issued after December 31, 1975, if the dividends in respect of such stock cumulative are limited to the same amount, and payable in preference to the payment of dividends on other stock.

"(c) Application with Section 247.—No amount taken into account under this section for the taxable year shall be taken into account for purposes of the taxable year

shall be taken into account for purposes of section 247 (relating to deduction for dividends paid on certain preferred stock of public utilities). No amount taken into account under section 247 for the taxable years shall be taken into account under this section.

(b) Clerical Amendment.—The table of sections for such part VIII is amended by

adding at the end thereof the following new item:

"Sec. 251. Dividends paid on certain preferred stock of domestic corporations.".

SEC. 7. ONE YEAR AMORTIZATION OF POLLUTION CONTROL FACILITIES

Section 169 of the Internal Revenue Code of 1954 (relating to amortization of pollution control facilities) is amended—

(1) by striking out "60 months." and "60 month" in subsection (a) and inserting in lieu thereof "12 months." and "12-month", respectively.

(2) by striking out "60-month" in subsection (b) and inserting in lieu thereof

"12-month'

(3) by striking out "January 1, 1969," in subsection (d)(1) and inserting in lieu thereof "January 1, 1976,", and

(4) by striking out subsections (d)(3) and (d)(4) inserting in lieu thereof the following.
"(3) Federal Certifying Authority.—The term 'Federal certifying authority' means

the Administrator of the Environmental Proection Agency.

"(4) New Identifiable Treatment Facility.—For purposes of paragraph (1) the term 'new identifiable treatment facility' includes only tangible property (not including a building and its structural components, other than a building which is exclusively a treatment facility) which is of a character subject to the allowance for depreciation provided in section 167, which is identifiable as a treatment facility, and which is property-

"(A) the construction, reconstruction, or erection of which is completed by the taxpayer after December 31, 1975, or

"(B) acquired after December 31, 1975, if the original use of the poperty commences

with the taxpayer and commences after such date.

In applying this section in the case of property described in subparagraph (A), there shall be taken into account only that portion of the basis which is attributable to construction, reconstruction, or erection after December 31, 1975.

SEC. 9 EFFECTIVE DATES.

(a) In General.—Except as otherwide provided, the amendments made by this Act apply to taxable years beginning after December 31, 1975.

(b) Section 8.—The amendment made by section 8 applies to property placed in

service after the date of enactment of this Act.

Schator Bentsen. We have with us also this morning Mr. Sidney Jones, Assistant Secretary of the Treasury. You may proceed.

STATEMENT OF SIDNEY L. JONES, ASSISTANT SECRETARY OF THE TREASURY FOR ECONOMIC POLICY, ACCOMPANIED BY BILL GOLDSTEIN, DEPUTY ASSISTANT SECRETARY FOR TAX POLICY

Mr. JONES. Thank you Mr. Chairman. I will summarize my statement as rapidy as I can and then present it for the record. I also asked Mr. Bill Goldstein of the Treasury Deputy Assistant Secretary for Tax Policy to be with me.

Senator Bentsen. Why doesn't he just move up here

Mr. Jones. In case you had questions on tax policy.

I welcome this opportunity to discuss the process of capital formation because I agree with both you as chairman and Senator Fannin about its importance. Adequate capital formation is required for economic growth and the creation of job opportunities, along with the moderation of price increases and maintaining competitive position in international markets.

However, capital investment is only one of the diverse claims against the national output. Therefore the quantity and type of capital formation in the future will depend upon what national priorities are established and what time periods are used for planning economic policies. I firmly believe that the challenge of achieving capital formation goals can be met but success will not be automatic and we must accomplish several basic changes in policy.

As Senator Fannin has pointed out there are many variables which shape economic growth and the United States is indeed fortunate

in having a favorable mix of these variables.

They change over time and they differ from country to country; however, I think there is almost universal agreement that a strong rate of new capital investment is fundamental to sustain economic growth.

The United States, unfortunately, has had a disappointing record in several of these categories. We rank 17th in a list of 20 nations belonging to the OECD in annual growth in real output per year.

Second, we rank last in a list of 11 major industrial nations in terms of capital investment as a share of our gross national product.

Not by coincidence we also rank last in a list of important nations in terms of average rate of growth in manufacturing output per man-hour and gains in the gross domestic product per employed person.

I think it should be clear from every economic study that I am familiar with that there is a close relationship between capital investment and various measures of economic growth and productivity. A dynamic economy is needed to create jobs by applying new technology and expanding productive capacity as a basis, in fact the only basis, for raising the general standard of living.

Inadequate capital investment limits new job opportunities and leads to inflation as productivity fails to rise as rapidly as labor and material

costs.

Third, there have been many specific examples of production bottlenecks resulting from inadequate capacity during periods of economic expansion. This was certainly our experience under the Cost of Living Council. When the economy began to grow we discovered that several of our basic industries had inadequate capacity. It is true that current statistics concerning the utilization of plant and equipment suggest that there is extensive slack in the economy. However, I think it should be emphasized that this slack can disappear very rapidly as economic growth occurs.

Furthermore, it is naive to assume that companies will operate at 100 percent of their physical capacity. In reality, the average rate

of plant utilization has been 83 percent over the last 15 years.

Only once did it exceed 90 percent and that was in 1966.

Fourth, I think there is a growing recognition as Chairman Greenspan will emphasize, that changing labor and material costs, particularly energy prices must also be considered in evaluating the adequacy of existing plant and equipment.

The fifth problem that has developed concerns our financial markets which have experienced considerable strain as the combination of

private financing needs and public claims have increased rapidly.

Corporations have traditionally relied on retained earnings and capital consumption allowances for approximately two-thirds of their financing requirements. However by 1974 nonfarm, nonfinancial corporate businesses relied on external funds up to 55½ percent of their total needs. It is estimated that over 80 percent of the rise in corporate long-term funds over the past decade involve the sale of debt issues. This strong preference for debt issues particularly the influence of tax laws, which allow interest payments to be deducted from taxable income, has brought about a doubling of the debt-equity ratios.

The resulting fixed charges consisting of payments of principal and interest have made corporate financial positions much less liquid and less flexbile in reacting to the adversities that accompany problems

and the general pressures caused by economic recessions.

I would also agree with Senator Bentsen's opening comment that the market for new issues has dried up considerably and the dynamic and creative aspect of that sector of our economy is in rather serious trouble at the moment.

Fortunately, these problems have been recognized and major efforts are now underway to correct the liquidity and solvency positions

of American businessmen.

Considerable progress has been made and companies are clearly intent on continuing the correction process. The major factor in this adjustment has been the sharp improvement in corporate profitability beginning in 1975, which is expected to be continued this year. This important turnaround follows a long period of deteriorating profits beginning in the mid-1960's and lasting until last year.

For example in 1965 the adjusted—that is, adjusted for the inventory evaluation adjustment and the inadequacy of depreciation charges which are based on historical costs—these adjusted after-tax profits of nonfinancial corporations represented 6.8 percent of total national

income. By 1973 that figure had declined to 3.3 percent.

Similarly, if one looks at a profit margin concept, the profits fell from 10.2 percent in 1965 to 5.1 percent by 1973.

Most important, if one looks at the rate of return on capital invest-

ment, that figure declined from 10.1 percent to 6.1 percent.

I believe that these figures partially explain the loss of investment incentives and the financing problems that have occurred. A major factor in the achievement of our future national capital formation goals will involve a continued recovery of business profits necessary for encouraging future investment and for providing an important source of financing.

A listing of these five problems does not mean that the United

States has not had economic progress—it has.

Over the last 15 years the increase of real output of goods and services has gone up 60 percent. The real income of the average American has risen by over 50 percent. The number of Americans living in families with income below the poverty level has declined to 10.2 percent. And 20 million new jobs have been created.

I would also like to emphasize that part of the explanation for why we rank last in capital investment and productivity is related to the type of economy we have. For example, the United States is a very large and relatively mature economy, which means that

other nations are still trying to catch up to our level.

Second, our economy has traditionally emphasized consumption. That consumption has been a vital part of our economy, it has sustained output, encouraged employment and actually led to capital investment.

Third, much of the U.S. investment is for what we might call services, that is, housing, government services and the services com-

ponent of personal consumption.

Fourth, the United States has a large share of its capital investment committed to the replacement and modernization of existing facilities. We did not have our plant and equipment destroyed by the Second World War and thus ours tend to be somewhat older and replacement and modernization is very important.

Fifth, many companies have provided a diversified group of Government incentives to encourage investment. In fact, in several countries, the basic industries are frequently controlled by their foreign governments and special financial and operating assistance may be provided to preferred private companies to assist in their development if it is considered to be in the national interest.

I might comment that I recently returned Saturday from a trip to five other nations. I was very impressed with the questioning mood that I found in these countries. I believe they are beginning to seriously question the efficiency of these nationalized industries and the planned and controlled economies which they are operating. I believe they look to the United States as a more viable, a more creative and a more productive system and for that reason our economic recovery is particularly important as a signal or example for other nations.

Fortunately, the United States has avoided most of the capital allocation and special incentive programs used in these other countries but there are many Federal programs which do provide direct financial support through the Economic Development Administration, the Small Business Administration, and some 169 different Government credit

programs.

However, most important, the Federal Government influences capital investment through its budget decisions and through specific legislative requirements involving safety, health and environmental standards.

Total government spending at the Federal, State and local levels now represents over one-third of the total gross national product and its actual influence is even broader since it frequently provides capital grants to stimulate new projects, extensive funding and research and development and other specific incentives.

In summary there are four major points concerning private fixed

domestic investment which should be emphasized.

First, capital investment is a fundamental factor in national economic development. And the absolute level of such spending has been very large in the U.S. economy over the years.

Second, other industrial nations have tended to allocate a substantially larger share of their national output to new capital formation

in recent years and the gap has tended to increase.

Third, there are several underlying economic reasons for the relatively low position of the United States as to capital formation commitments as a share of total economic output.

But a review of these moderating influences provides only an ex-

planation, not a solution.

And fourth, the quantity and quality of capital investment in the United States should not be evaluated in terms of simplistic comparisons with other nations, with historical patterns, or some arbitrary growth goals. Instead, the adequacy of capital outlays can only be judged in terms of the achievement of our basic economic goals of creating more jobs for a growing labor force, a stabilizing of prices, of increasing the productivity of our workers, and of meeting specific environmental safety, health and resource development objectives.

I might add as an economist, as one observes the level of unemployment, the level of inflation, the inadequacy of productivity, and other concerns which we have I think that is the true measure of the inadequate level of capital investment in recent years, not some esti-

mate of what the shortage might have been.

Let me turn briefly then to the estimates of future capital formation needs. These are extremely difficult to estimate because the exact nature of the future course of economic development cannot be fore-told in advance. Some industries will need more capital than estimated; others will need less. Entirely new needs will appear. In short, we cannot predict with extreme accuracy the level of capital investment we will require. However, I think there are at least two basic trends that should be obvious.

First, that total private domestic investment will be very large compared to historical totals as the economy grows from the current level of output of \$1.5 trillion, to over \$3 trillion by the mid-1980s.

Second, the relative share of private investment in new plant and equipment as a claim against the total gross national product will

have to rise to achieve the desired national economic goals.

I am aware that Chairman Greenspan will follow me and he will discuss in detail the study prepared by the Bureau of Economic Analysis of the Department of Commerce for the Council of Economic Advisers and I will not repeat findings.

However, in summary, they are that we will have to substantially increase the relative share of capital investment in the gross national product over the coming years if we are to achieve the underlying goals of the U.S. economy.

Let me conclude finally by jumping to my third section which

is labled "Government Policies."

Here I would like to review in detail some of the problems which have developed. I believe that future fiscal and monetary policies will have a very major impact on the achievement of capital formation goals. In particular, inflation must be better controlled and the Government must avoid disrupting the capital markets if the private sector is to acquire the necessary investment funds.

A balancing of the Federal budget over time is a necessary prerequisite to achieve the goals discussed earlier. Unfortunately, the Federal Government will have reported a deficit in 16 of the past 17 years ending with fiscal year 1977.

During a single decade from fiscal year 1968 through fiscal year

1977, the cumulative Federal deficits will total \$267.5 billion.

The net borrowings for supporting over 100 of-budget Federal programs are expected to total another—and this is only the net borrowings, not the total loans—are expected to total another \$229 billion during that single decade.

That means that the Federal Government will have usurped a total of one-half trillion dollars out of the capital markets in a single decade

beginning with fiscal year 1968 and ending in fiscal year 1977.
But I believe that the most disconcerting point of all is the upward momentum of Federal outlays which will have risen from \$268 billion in fiscal year 1974, to \$374 billion this fiscal year, a jump of 40 percent in just two fiscal years. Another large increase in Federal outlays will occur in fiscal year 1977 at least according to President Ford's recommendation that the budget be held to \$395 billion.

Part of this sharp increase in outlays is, of course, the result of automatic stabilizers such as unemployment compensation benefits which respond to recession problems. But a review of the budget, I believe, will clearly indicate that most of the added spending has become part of the permanent programs of government and will ex-

tend out into the future.

Government spending both for temporary stimulus and for permanent programs has increased at a rate that is creating serious resource allocation problems which will not conveniently disappear as the current recovery soon moves into its second year.

We must recognize the basic reality that when a combination of public and private demands for goods and services exceeds the underlying productive capacity of the system the inevitable result is an overheating of the economy followed by inflation and eventually economic recession.

The strong underlying growth trends of the U.S. economy will continue to provide for further economic progress but we cannot realistically expect to satisfy every new public claim by shifting resources away from the private sector.

This simple guideline has been frequently violated, as total demand has been stimulated beyond the capacity of the economic system twice within the past decade creating an unfortunate boom and recession sequence with severe inflation and unemployment distortions.

If escalation of government spending levels has seriously eroded our fiscal flexibility, the lag impact of past spending decisions will affect the allocation of resources far into the future.

In summary, the achievement of private domestic fixed investment goals will require more realistic and sustainable government policies.

My final point is to briefly refer to the tax policies which clearly affect capital investment with regard to the level of corporate income taxes and the incidence of where they are levied, the investment tax credit depreciation guidelines and other tax incentives which frequently are used by the government.

I can only point out that Treasury officials have frequently presented testimony on all of these fundamental tax policy issues and Secretary of the Treasury Simon made statements on July 8 and July 31 before

the House Ways and Means Committee.

Senator Bentsen. We will accept that for the record.

Mr. Jones. In conclusion then I would like to emphasize that the United States has a strong cyclical recovery underway. The rapid growth of the U.S. economy will continue. However, continued prosperity cannot be taken for granted. It must be earned.

We must be willing to allocate more of our resources to current investment rather than to current consumption if we are to prepare

for the future.

The logic of this recommendation is not based on any arbitrary investment level assumed to be necessary to avoid some capital shortage; or on statistical comparisons with other nations or earlier

time periods.

Instead the required emphasis on investment reflects the nation's fundamental economic goals of reducing both inflation and unemployment, of improving productivity, of remaining competitive in international markets and of achieving specific environmental safety and resource development objectives.

resource development objectives.

With so many unfulfilled current needs, this is a difficult concept for some to accept because they would prefer current consumption. However, I am convinced that our potential ability to achieve our economic goals will be unnecessarily restricted if we fail to prepare for the future.

The simple truism that we cannot consume more than we produce needs to receive greater attention in the discussion of national priorities

Thank you very much.

Senator Bentsen. Thank you very much, Mr. Secretary.

When you are talking about debt/equity ratios in this series of tables, I am not sure that you have it here, but how do we compare now with other nations in our debt/equity ratios?

Mr. Jones. We do not have as high debt/equity ratios as say, Japan or many European nations, because of the different economic system. In Japan, for example, the government has a very close relationship with business and through the Bank of Japan they are allowed to

use much more extensive debt than would be customary in the United States.

However, I think that the important point is that as we have seen during the last business cycle, as we have increased debt/equity ratios from about 20 percent, where they were historically, up to about 40 percent at the present time, when you have specific company problems or you have general economic problems in a cycle, they are unable to react and handle these changes so it is not the absolute level that is of concern; it is instead the growing fixed charges of principal and interest which companies appear to be having more difficulty in handling during periods of economic strain.

Senator Bentsen. When you talk about an 83 percent utilization

of capacity, was that for a period of 10 years, that number?

Mr. JONES. Over the last 15 years the average figure——

Senator BENTSEN. How many years?

Mr. JONES. Fifteen. The average figure has been 83 percent.

Senator Bentsen. What was it last year?

Mr. Jones. In the fourth quarter it was 70 percent. So we are historically below the average but, as I pointed out in my testimony and as we saw in 1972-73-74, that slack can disappear very rapidly. It should be emphasized that this is a general measure. It does not apply to specific industries where that slack can disappear even more rapidly. Nor does it account for the change in energy costs which may actually have caused some of the older equipment to be obsolete.

Senator Bentsen. That is one of the questions I wondered about. When you talk about an 83 percent or 70 percent utilization, I wonder how you really work out the percentage? I would assume in many

instances the capacity that is put aside is the oldest manufacturing capacity and the least efficient.

Mr. JONES. Absolutely. Absolutely. Senator Bentsen. Senator Fannin.

Senator Fannin. Thank you, Mr. Chairman.

Mr. Secretary, I appreciate very much your statement and your comments. We have some serious problems. I know in my own State of Arizona the mining industry is in the doldrums, affected both by the price of copper on the world market being very low, and then their costs of production have gone up appreciably because of the requirement for pollution equipment. Does the Treasury prefer to have a longer writeoff than the 1-year requested by industry for pollution equipment depreciation?

Mr. Jones. Let me ask Bill Goldstein if he will respond. He is

our Deputy Assistant Secretary for Tax Policy.

Mr. GOLDSTEIN. Thank you.

Senator Fannin, I don't think we have a firm position on that, but that is one of the things we are studying. The difficulty is, as you know, we are having great struggles in trying to draft regulations is how you identify the pure extra burden of pollution control equipment and separate it out from equipment which has productive use as well.

Senator Fannin. If the equipment is added in at the time of construction I can understand that, but if the equipment is specifically required by the EPA then there shouldn't be any doubt about it. It is required equipment and not only is there a problem from the standpoint of the cost of the equipment, but then it is the retardation of the efficiency of the plant, consequently a reduction in productivity.

So there shouldn't be any question in that case, should there?

Mr. GOLDSTEIN. No. As you know, though—and of course it varies from industry to industry. The mining industry may be unique but frequently the equipment is designed to produce valuable byproducts even if it is added on later. But I think we would agree with your position that to the extent you can identify exactly what you are talking about, a fair writeoff would be an appropriate incentive.

Senator Fannin. One of the problems we have facing us is, as you suggest, government spending is increasing at a rate that is creating serious resource allocation problems. Of course, it will not disappear as the recovery moves into its second year. What do you believe to be the broad effect of the government program in the public

works, public employment area?

Mr. Jones. As you know, the spending next year for manpower training total will be about \$8 billion for a variety of institutional and on-the-job training. During the fiscal year 1977 we anticipate that a number of public service employee jobs will begin to phase out. These were put in place in 1973, 1974, partly in 1975.

The administration hopes that the strong recovery in the private sector will begin to create permanent meaningful jobs and that the public service jobs can then be phased out. But there will continue

extensive spending for various manpower programs.

Senator FANNIN. You are consistent with the President's veto of the measure that is going to be voted upon today as far as the override is concerned.

Mr. JONES. Assistant Secretaries are always consistent and as an economist I have some skepticism about public service employment.

As Senator Bentsen pointed out there are other ways of doing it.

Senator FANNIN. One of the great problems we have is to get labor and management working together and to get the individuals to, I think, realize the benefits that many tax measures offer. It seems to me the future of jobs in this country and good jobs and good paying jobs, quantity and quality of jobs, depends on the ability of the companies to finance their programs. Now, I am sure if we are talking about what I just asked you about, the plans that we have as far as the depreciation schedules are very important. But also the investment tax credit which has been before us and it's off again on again, as you know, with the utilities that have a very serious problem in investment programs today. They have had a lower rate, 4 percent against a 10 percent when we did approve it, now of course they are at 10 percent. Don't you think that we should do everything we can to convince the union leaders that organized labor should support these programs. As to estimates of specific increases in jobs, for instance, when we go from say, 9 percent to 10 percent or 10 to 11 percent, what it might do in the way of affecting jobs that would be made available?

Mr. JONES. I think, Senator, that there is among the leadership of labor a recognition of this important point. The Labor-Management Advisory Committee did join, I think, unanimously, in fact, in supporting recommendations for the investment tax credit and also involving the 6-point program proposed in October concerning electric utilities.

I have long believed that when businessmen come to Washington to present their views that they would be well advised to bring their union representatives so that there would be a combination presentation made, because, for example, Mr. Woodcock in a television program on one occasion very explicitly emphasized that it was indeed corporate profits which provided part of the financing and incentives which provided jobs for his union members.

I think the leaders do recognize this. The problem is convincing

the general public that this is in their interest.

Senator Fannin. I wish you were totally right on that. I just can't agree with you you have the support when we needed it really, and in another vein, another subject, just recently of course we saw what happened with the natural gas deregulation that we all were working toward accomplishing as one objective. The administration had that objective and many of us in the Congress had and we did not get the support of the labor leaders because I don't think they understood just exactly what was involved and this does mean jobs to them. I think it is the same idea but that is really on a different subject than what we are talking about but I do appreciate your testifying.

Mr. JONES. Thank you.

Senator BENTSEN. Mr. Jones, I was concerned about the January housing start figures that the Commerce Department released yesterday. They are down for the fourth month in a row. Are we tilting back toward recession in the housing industry?

Mr. JONES. Unfortunately, Senator, I have been out of the country, just arriving back a few days ago. I have not had time to analyze

those in detail. I can give you my general observations. In planning for 1976 we did not include a very large increase in housing starts as part of our economic outlook. I believe they finished the fourth quarter of 1975 at an annual rate of about 1.4 million starts and I thought that for the year in total we might go up to perhaps 1.6 million starts as a target or 1.5 million. In January starts were disappointing and did fall as you indicated. There was a decline in December also.

The problem in housing appears to be, in my mind at least, more of a price issue and uncertainty about energy, the availability of energy, and whether they will be able to commute. The price of a new home, I understand, has jumped from about \$37,000 up to about \$43,000, which means that it is very difficult for people to buy homes. And even though mortgage and interest rates have begun to come down slowly, as we all know they are very sticky on the way down. So housing was not looked to as a booming area in the economy. However, I do not believe given the very large inflows of money into the mortgage markets that has been occurring now for several months, that a decline or certainly not a collapse in housing will occur.

Senator Bentsen. Mr. Secretary, we appreciate your testimony very much. We appreciate your presence this morning. Thank you.

Mr. JONES. Thank you.

[The prepared statement of Mr. Jones follows.]

STATEMENT OF SIDNEY L. JONES, ASSISTANT SECRETARY OF THE TREASURY FOR ECONOMIC POLICY

Mr. Chairman and Members of this Subcommittee:

I welcome this opportunity to discuss the process of capital formation, financial institutions and possible incentives for encouraging capital investment. These topics are of fundamental importance in establishing national economic priorities. Experiences with sharp cyclical swings, unprecedented double-digit inflation, unacceptable levels of unemployment and uncertainties about the future adequacy of raw materials and productive capacity have created increased concern about our national economic prospects.

Adequate capital formation is required for economic growth, creation of job opportunities, moderation of price increases and maintaining our competitive position in international markets. However, capital investment is only one of the diverse claims against the national output. The quantity and type of capital formation in the future will depend upon what national priorities are established and what time periods are used for planning economic policies. The challenge of achieving capital formation goals can be met but success will not be automatic and major policy changes are required to: (1) eliminate the chronic Federal deficits which divert resources and disrupt financial markets; (2) reverse the long-term decline of business profits which are the basic incentive for new investment and an important source of financing; and (3) provide a positive tax environment which is not biased against savings and investment.

Capital Investment Background

Economic growth depends upon: (1) the accumulated stock of productive assets; (2) the pace of new capital

investment; (3) the application of advanced technology; (4) the quality of the national labor force -- its education, training, discipline and commitment; (5) the available infrastructure of transportation, communication, financial institutions and services; (6) access to raw materials; (7) managerial skills; and (8) the organization of the economic system. The mix of these economic factors varies for each country and changes over time as substitutions occur. However, most analysts agree that a strong rate of new capital investment is required to sustain economic growth.

The United States retains a position of economic leadership because it has had a favorable mix of the important economic variables, along with political stability and improving social mobility. The absolute amount of gross private domestic investment has grown rapidly over the years, as summarized in Table 1, and should begin to improve in 1976 following the declines in spending caused by the recession. Nevertheless, it is unrealistic to assume that the historical patterns of investment and productivity will be adequate to meet the economic priorities of the future. A review of the performance of the U.S. economy indicates several areas of concern.

First, during the decade of the 1960's, the United States ranked 17 in a list of 20 industrial nations belonging to the Organization for Economic Cooperation and Development (OECD) as to the average annual growth rate of real output (see Table 2).

Second, a study prepared by the Treasury Department indicates that total U.S. fixed investment as a percent of national output during the time period 1960 through 1973 was 17.5 percent using OECD definitions for comparing the different countries. The U.S. figure ranks last among a group of eleven major industrial nations. Furthermore, the gap between the level of private fixed investment in the U.S. economy, measured as a share of national output, and the commitments of other industrial nations tended to increase over time. When only nonresidential investment is considered the total amounts are lower but the relative position of the United States is not changed. As discussed below, the low ranking of the United States is the result of several basic characteristics of our economic system. However, it is a useful signal for calling attention to fundamental concerns about the undesirable levels of inflation, unemployment and productivity over the past decade.

Investment as Percent of Real National Output 1960-73*

-	Total Pixed**	Nonresidential Fixed
Japan	35.0	29.0
West Germany	25.8	20.0
France	24.5	18.2
Canada	21.8	17.4
Italy	20.5	14.4
United Kingdom	18.5	15.2
U.S.	17.5	13.6
11 OECD Countries	24.7	19.4

- * OECD concepts of investment and national product. The OECD concept includes nondefense government outlays for machinery and equipment in the private investment total which required special adjustment in the U.S. national accounts for comparability. National output is defined in this study as "gross domestic product," rather than the more familiar measure of gross national product, to conform with OECD definitions.
- ** Including residential.

Source: U.S. Department of the Treasury

Third, the United States also ranks last in a list of seven major industrial nations as to the average annual rate of growth of manufacturing output per manhour and gains in the gross domestic product per employed person from 1960 through 1973. During that period the amount of "real" capital investment per additional civilian employee declined and the historical U.S. advantage in "real" output per employed civilian compared to other industrial nations significantly narrowed. Various studies have indicated the close relationship between capital investment and various measures of economic growth and productivity. A dynamic economy is needed to create jobs by applying new technology and expanding productive capacity as a basis for raising the general standard of living. Inadequate capital investment limits new job opportunities and leads to inflation as productivity fails to rise as rapidly as labor and materials costs.

Productivity Growth, 1960-1973 (Average Annual Rate)

-	Gross Domestic Product per employed person	Manufacturing output per manhour
United States	. 2.1	3.3
Japan	9.2	10.5
West Germany	5.4	5.8
France	5.2	6.0
Canada	2.4	4.3
Italy	5.7	6.4
United Kingdom	2.8	4.0
11 OECD Nations	5.2*	6.1

^{*} Average for 6 OECD countries listed.

Source: Department of the Treasury

Fourth, there have been many specific examples of production bottlenecks resulting from inadequate capacity during periods of economic expansion. During the period of wage and price controls extending from August 1971 until June 1974 the Cost of Living Council became increasingly concerned about the prospects for inflation resulting from raw materials shortages and inadequate productive capacity in several basic industries. Current statistics concerning the utilization of existing plant capacity suggest that extensive slack exists in the system since the operating rate was 70.8 percent in the fourth quarter of 1975. However, it should be recognized that this figure can change rapidly as economic recovery occurs. It should also be emphasized that the concept of operating at 100 percent of physical capacity is misleading. Over the last fifteen years government figures indicate that manufacturing capacity utilization averaged 83 percent despite some periods of intense output. The highest figure reported during those fifteen years was 91.9 percent in 1966. Most companies need to preserve some reserve capacity to handle unexpected output requirements and to accommodate maintenance and replacement needs. Changing labor and material costs -- particularly energy prices -- must also be considered in evaluating the actual adequacy of existing plant and equipment. While it is unlikely that widespread productive capacity bottlenecks will develop during the next few months of economic recovery, achievement of the Nation's longer-term economic goals will require increased capital formation.

Fifth, the financial markets have also experienced considerable strain as the combination of private financing needs and public claims have increased rapidly. Corporations have traditionally relied on retained earnings and capital consumption allowances for approximately two-thirds of their financing requirements. However, in 1974 nonfarm nonfinancial corporate businesses required \$101.8 billion of external funds out of total financing needs of \$183.3 billion, or 55.5 percent. It is estimated that over 80 percent of the rise in corporate long-term funds of \$270 billion over the past decade involved the sale of debt issues. This strong preference for debt issues -- particularly the influence of tax laws which allowed interest payments to be deducted from taxable income -- has brought about a doubling of the debtequity ratios. The resulting fixed charges, consisting of payments of principal and interest charges, have made corporate financial positions less liquid and less flexible in reacting to the adversities of company problems and the general pressures caused by economic recessions.

Fortunately, these problems have been recognized and major efforts are now underway to correct the liquidity and solvency positions of American businesses. Considerable progress has been made already and companies are clearly intent on continuing the correction process. The major factor in this adjustment has been the sharp improvement in corporate profitability beginning in 1975 which is expected to be continued this year. This important turnaround follows a long period of deteriorating profits beginning in the mid-1960's and lasting until last year. For example in 1965 the adjusted after tax domestic profits of nonfinancial corporations represented 6.8 percent of total national income; by 1973 that figure had declined to 3.3 percent. Similarly, adjusted after tax profits of nonfinancial corporations as a percent of gross product originating in nonfinancial corporations fell from 10.2 percent in 1965 to 5.1 percent by 1973. Finally, over the same period the rate of return on capital investment declined from 10.1 percent to 6.1 percent.

These figures partially explain the loss of investment incentives and financing problems that have occurred. A major factor in the achievement of our national capital formation goals will involve a continued recovery of business profits necessary for encouraging future investment and for providing an important source of financing.

The five problem areas described above do not mean that economic progress in the United States has not occurred. In fact, over the past fifteen years the U.S. economy has

increased the real output of goods and services by 60 percent; the real income of the average American has risen by over 50 percent; the number of Americans living in families with incomes below the poverty level has declined to 10.2 percent of the population; and 20 million new jobs have been created.

In describing the relatively slower rate of capital investment in the United States and the disappointing productivity figures, it should be recognized that there are many factors that influence a nation's level of investment.

First, the unusually large size of the U.S. economy and its relatively advanced stage of development, particularly the accumulated total of previous capital investments, creates a different investment environment. Having already developed an impressive productive capacity it is to be expected that our rate of additional growth would be lower than the development rates of other nations who are still striving to achieve our relatively advanced level of economic activity.

Second, the U.S. economy has traditionally emphasized consumption which has contributed to strong demand for goods and services leading to sustained output, employment and investment. In 1975 personal consumption totaled \$963 billion, or 64 percent of the total gross national product and government purchases of goods and services amounted to \$331 billion, or 22 percent. By way of comparison gross private domestic fixed investment was \$112 billion, or 7.5 percent of the GNP (this figure does not include residential construction or inventory spending). Personal and government consumption outlays have long dominated the GNP so that gross savings flows required for private capital investment have been relatively low in the United States throughout the postwar period.

A third, important factor affecting the pattern of U.S. investment, compared with other nations, is the relatively large share of total capital outlays committed to the services category, which includes housing, government and other services. Our heavy investment in the services category emphasizes consumption but moderates the expansion of productive capacity relative to other nations (see Table 3).

A <u>fourth</u> influence on the pattern of capital investment in the <u>United</u> States is the relatively large share of our investment that must be used for replacement and modernization of existing facilities. It is estimated that 62 percent of U.S. capital investment from 1960 to 1971 was committed to

replacement needs, compared to the United Kingdom, 61 percent; Canada, 52 percent; France, 54 percent; West Germany, 53 percent; and Japan, 31 percent. This divergent pattern reflects the advanced status of economic development in some nations and the postwar experience of Europe and Japan in restoring their devastated industrial facilities following World War II. The heavy replacement requirement does provide a continuing opportunity to introduce new technology into the U.S. economy. However, the replacement outlays do not add to the net total productive capacity of our economy.

Fifth, many countries provide a diversified group of government incentives to encourage investment. Basic industries are frequently controlled by foreign governments and special financial and operating assistance may be provided to preferred private companies to assist in thier development if it is considered to be in the national interest. The United States has avoided most of the capital allocation and special incentive programs used in other countries but there are some Federal programs which provide direct financial support through the Economic Development Administration, the Small Business Administration and some 169 different government credit programs. The Federal Government particularly influences capital investment through its budget decisions and specific legislative requirements involving safety, health and environmental goals. Total government spending at the Federal, State and local levels now represents over one-third of the total GNP and its actual influence is even broader since it frequently provides capital grants to stimulate new projects, extensive funding of research and development and other specific incentives. The wide array of government credit and incentive programs emphasizes the mixed nature of the current U.S. economy.

In summary, four major points concerning private fixed domestic investment should be emphasized:

- 1. Captial investment is a fundamental factor in national economic development and the absolute level of such spending has been very large in the U.S. economy over the years.
- 2. Other industrial nations have tended to allocate a substantially larger share of their national output to new capital formation in recent years and the gap has tended to increase.
- 3. There are several underlying economic reasons for the relatively low position of the United States as to capital formation commitments as a share of total economic

output but a review of these moderating influences provides only an explanation, not a solution.

4. The quantity and quality of capital investment in the United States should not be evaluated in terms of simplistic comparisons with other nations, historical patterns or some arbitrary growth goals. Instead, the adequacy of capital outlays can only be judged in terms of the achievement of our basic economic goals of creating more jobs for a growing labor force, the relative stability of prices, the productivity of our workers and the degree of progress in meeting specific environmental, safety, health and resource development objectives.

II. Future Capital Formation Needs

The dynamic nature of the U.S. economy makes it impossible to predict the exact amount of future capital needs. The pattern of economic growth can only be estimated in gerneral terms and actual events are often much different than expected. The relationship of capital investment to future output is particularly difficult to predict because capital/output ratios change over time. Some industries will require more capital per unit of output in the future and others will require less. The replacement rate of existing assets will also change as labor and materials costs -- particularly energy prices -- affect the mix of production factors. Unexpected private capital demands will undoubtedly develop and anticiapted claims may moderate or completely disappear. In short, the timing and magnitude of actual investments will likely be quite different from the current projections.

Despite the forecasting difficulties, it is possible to identify two basic trends: (1) total private domestic investment will be very large compared to historical totals as the economy grows from the current level of output of \$1-1/2 trillion to over \$3 trillion by the mid-1980's; and (2) the relative share of private investment in new plant and equipment as a claim against the total GNP will have to rise to achieve the desired national economic goals. Both of these basic trends were recently identified in a major study prepared by the Bureau of Economic Analysis of the Department of Commerce for the Council of Economic Advisers which was published last month in the Economic Report of the President (see pages 39 to 47). The major conclusions of that study are attached to this testimony. Table 4 summarizes the shift in business fixed investment as a share of GNP from an annual average of 10.4 percent in 1965-70 and in 1971-74 to an annual average of 12.0 percent during the time period 1975-80. For the entire decade of the 1970's

the growth rate is estimated to be 11.4 percent but the rate must be accelerated to compensate for the sluggish pace of investments during the 1974-75 recession. In Table 5 some cumulative estimates of the dollar amounts -- stated in constant 1972 dollars -- required during the decade of the 1970's are indicated for a series of different assumptions involving changing capital to output ratios for different industries and fulfillment of existing pollution control and energy resource development goals. Once again, it should be emphasized that actual events may be significantly different from the specific percentages and dollar figures indicated but the massive amounts of capital required and the necessary acceleration of future business capital investment to a level above the growth rate of the recent past are clear. The policy conclusions of the Council of Economic Advisers are particularly significant:

"If ratios of fixed investment to GNP substantially in excess of 10 percent are unattainable, full employment cannot be achieved by 1980 at capital-output ratios and productivity growth rates as high as those projected with the assumption that the environmental and energy goals are to be met. Whether full employment can be achieved at all by 1980 under these conditions depends first, of course, on the reliability of the previous estimates, and then on the ease of input substitution and on the flexibility of relative If the estimated capital requirements factor prices. are not met, the 1980 output level could be lower than projected, owing to lower productivity or lower employment, or both. Alternatively, goals concerning pollution control and energy independence might have to be scaled down. Either of these possibilities seems far less desirable than providing incentives to raise the share of investment in GNP." (Economic Report of the President, January 1976, p. 46.)

This summary statement provides a basic reference point for evaluating our future business capital requirements: If we are to achieve our output and employment goals with more stable prices along with specific environmental and and energy resource development objectives the pace of capital formation must be accelerated. The magnitude of the necessary tilt toward investment is not large in percentage terms but in the multi-trillion dollar economy of the near future the dollar amounts involved will be large.

Several studies attempting to forecast business capital investment requirements have also been prepared by

private companies and university scholars and their basic conclusions are summarized in Table 6. The private-sector forecasts use a different time frame covering the mid-1970's to mid-1980's period, use current dollars to incorporate the anticipated impact of inflation and frequently add residential construction outlays to the business investment total to estimate total private domestic fixed investment. Nevertheless, the general conclusions are consistent with the Bureau of Economic Analysis findings and the interpretation of the Council of Economic Advisers that the achievement of the Nation's basic economic goals will require a shift toward increased capital investment to provide the several trillion dollars of funds needed.

III. Government Policies

Future fiscal and monetary policies will have a major impact on the achievement of the capital formation goals. In farticular, inflation must be better controlled and the government must avoid disrupting the capital markets if the private sector is to acquire the necessary investment funds. A balancing of the Federal budget over time is a necessary prerequisite to achieve the goals discussed above.

Unfortunately, the Federal Government will have reported a deficit in sixteen of the past seventeen years ending with FY 1977, as summarized in Table 7. During the single decade FY 1968 through FY 1977, the cumulative Federal deficits will total \$267.5 billion. Net borrowings for supporting over one hundred "off-budget" Federal programs are expected to total another \$229.2 billion during that single decade. The Federal Government will have usurped a total of \$496.7 billion out of the capital markets during a 10-year period ending with FY 1977. But the most disconcerting point is the upward momentum of Federal outlays which will have risen from \$268 billion in PY 1974 to \$374 billion this fiscal year, a jump of 40 percent in just two fiscal years. Another large increase in Federal outlays will occur in FY 1977 as President Ford has asked for a budget that would limit spending to \$395 billion. Part of this sharp increase in outlays is the result of "automatic stabilizers", such as unemployment compensation benefits, responding to recession problems but most of the added spending has become part of the permanent programs of government and will extend out into the future. Government spending -- both for temporary stimulus and permanent programs -- has increased at a rate that is creating serious resource allocation problems which will not conveniently disappear as the current recovery soon moves into its second year. We must recognize the basic reality that when the combination of public and private

demands for goods and services exceeds the underlying productive capacity of the system the inevitable result is an overheating of the economy followed by inflation and eventually economic recession.

The strong underlying growth trends of the U.S. economy will continue to provide for further economic progress, but we cannot realistically expect to satisfy every new public claim by shifting resources away from the private sector. This simple guideline has been frequently violated as total demand has been stimulated beyond the capacity of the economic system twice within the past decade creating an unfortunate boom and recession sequence with severe inflation and unemployment distortions. The escalation of government spending levels summarized in Table 7 has seriously eroded our fiscal flexibility and the lagged impact of past spending decisions will affect the allocation of resources far into the future. In summary, the achievement of private domestic fixed investment goals will require more realistic and sustainable government policies.

Tax Policies

Federal tax policies affect capital investment decisions by determining the after-tax earnings available for investment and by establishing incentives or disincentives for future investment. Several major tax policies play a major role: (1) the corporate income tax, including the existing approach of levying taxes at the corporate level on earnings and again on the recipients of dividends; (2) the investment tax credit; (3) depreciation guidelines; and (4) other tax incentives designed to encourage investment for specific purposes, such as the President's proposal for accelerated depreciation for the construction of plants and purchase of new equipment in high unemployment areas. The Secretary of the Treasury and other Treasury officials have frequently presented testimony on all of these fundamental tax policy issues. Rather than repeating their views in this general statement about the importance of capital formation, I refer the Committee's attention to the benchmark statements presented by Secretary William E. Simon on July 8 and July 31, 1975 before the House Ways and Means Committee.

IV. Summary

As the United States continues the relatively strong cyclical recovery that began last April it is important that economic policies increasingly focus on longer-term goals. The rapid growth of the U.S. economy to its present size and the relatively low level of inflation until the late 1960's

has resulted from the creativity and productivity of the system. Continued prosperity, however, cannot be taken for granted; it must be earned. We must be willing to allocate more of our resources to current investment rather than to current consumption to prepare for the future. The logic of this recommendation is not based on any arbitrary investment level assumed to be necessary to avoid some "capital shortage" or on statistical comparisons with other nations or earlier time periods. Instead, the required emphasis on investment reflects the Nation's fundamental economic goals of reducing both inflation and unemployment, improving productivity, remaining competitive in international markets and achieving specific environmental, safety and resource-development objectives. With so many unfulfilled current needs this is a difficult concept for some to accept because they would prefer current consumption. However, our potential ability to achieve all of our economic goals will be unnecessarily restricted if we fail to prepare for the future. The simple truism that we cannot consume more than we produce needs to receive greater attention in the dicussion of national priorities.

TABLE 1

Gross Private Domestic Fixed Investment, 1950-1974 (Billions of dollars)

PART A.	Nominal Doll	Ars	
		Nonresidential Structures	Residential
Year	Total	and Producers' Durable Equipment	Structures
1950	\$47.0	27.1	19.9
1951	48.9	31.1	17.7
1952	49.0	31.2	17.8
1953	52.9	34.3	18.6 20.3
1954 1955	54.3 62.4	34.0 38.3	24.1
1956	66.3	43.7	22.6
1957	67.9	46.7	21.2
1958	63.4	41.6	21.8
1959	72.3	45.3	27.0
1960	72.7	47.7	25.0
1961	72.1	47.1	25.0
1962	78.7	51.2	27.4
1963	84.2	53.6	30.6 31.2
1964 1965	90.8 102.5	59.7 71.3	31.2
1966	110.2	81.4	28.7
1967	110.7	82.1	28.6
1968	123.8	89.3	34.5
1969	136.8	98.9	37.9
1970	137.0	100.5	36.6
1971	153.6	104.1	49.6
1972	178.8	116.8	62.0
1973	203.0	136.5	66.5
1974	202.5	147.9 148.7	54.6 48.8
1975p	197.5	140.7	40.0
PART B	Constant 19	72 Dollars	
1950	83.2	50.0	33.2
1951	80.4	52.9	27.5
1952	78.9	52.1	26.8
1953	84.1	56.3	27.8
1954	85.2	55.4	30.2 35.1
1955 1956	96.2 97.1	61.2 65.2	31.9
1957	97.1 95.7	66.0	29.7
1958	89.6	58.9	30.6
1959	101.0	62.9	38.1
1960	101.0	66.0	35.0
1961	100.7	65.6	35.1
1962	109.3	70.9	38.4
1963	116.8	73.5	43.2
1964	124.8	81.0	43.8
1965	138.8	95.6 106.1	43.2 38.5
1966 1967	144.6 140.7	106.1	37.2
1967	150.8	103.5	42.8
1969	157.5	114.3	43.2
1970	150.4	110.0	40.4
1971	160.2	108.0	52.2
1972	178.8	116.8	62.0
1973	191.4	131.3	60.1
1974	172.2	127.5	44.7
1975p	149.0	112.4	36.6

Source: Department of Commerce, Bureau of Economic Analysis

TABLE 2

Average Annual Rate of Change in Real Growth for Number Nations of OECD, $\underline{1960\text{--}70}$

(percent)

Japan	11.1
Greece	7.6
Portugal	6.3
Yugoslavia	6.7
france	5.8
Italy	5.6
Canada	5.2
Pinland	5.2
Australia	5.1
Netherlands	5.1
Norway	5.0
kelgium -	4.9
Denmark	4.9
West Germany	4.8
Austria	4.8
Iceland	4.3
Ireland	4.0
U.S.	4.0
Luxembourg	3.3
United Kingdom	2.8

Source: Organization for Economic Development and Cooperation.

TABLE 3 Output and Investment by Sector 1969-1971 Averages

(Current price percents)

	United	United United					
	States	France	Germany	Kingdom	Canada	Japan	
PARTITION A		Sector	Percentage	of Total	Output:		
Agriculture	3.0	5.9	3.2	2.6	3.9	7.3*	
Mining	1.6	0.8	2.2	1.4	3.4	0.9	
Manufacturing	30.3	45.3	50.4	33.5	26.6	43.0	
Utilities	2.3	1.8	2.3	2.8	2.4	2.0	
General Services	62.8	46.2	41.9	59.7	63.7	46.8	
(Dwellings)	(5.4)	(4.5)	(3.8)	(2.3)	(3.3)	(NA)	
(Government)	(14.7)	(8.8)	(9.4)	(10.1)	(14.0)	(3.1)	
(Other Services) Total	100	(32.9) 100	100	(47.3) 100	100	(NA) 100	
		Sector	Percentage	of Total	Investmen	<u>t</u> :	
Agriculture	3,8	4.6	5.300	2.6	5.5	5.9	
Kining	1.0	. 7	1.3	1.5	7.5	. ,9	
Manufacturing	19.7	27.8	25.2	23.8	16.6	26.8	
Utilities	5.2	3.9	5.0	8.6	9.4	3.9	
General Services	70.3	63.0	63.2	63.5	61.0	62.5	
(Dwellings***)	(19.9)	(26.3)	(22.2)	(15.1)	(21.5)	(17.9)	
(Government)	(20.4)	(12.8)	(9.9)	(15.9)	(17.9)	(24.9)	
(Other Services)	(30.0)	(23.9)	(31.1)	(32.5)	(21.6)	(19.7)	
Potal	100	100	100	100	100	100	
PARTITION R		Sector	Ratios:	Investment	Percentage		
	•	***************************************	rided by Out				
Agriculture	1.3	0.8	1.7	1.0	, 1.4	0.8	
Kining	0.6	0.9	0.6	1.1	2.2	1.0	
Manufacturing	0.7	0.6	0.5	0.7	0.6	0.6	
		2.2	2.2	3.1	3.9	2.0	
Utilities	2.3	4.4					
	1.1	1.4	1.5	1.1	1.0	1.3	
			1.5			1.3 (NA)	
Utilities General Services (Dwellings) (Government)	1.1	1.4		1.1 (6.6) (1.6)	1.0 (6.5) (1.3)	1.3 (NA) (8.0)	

Source: OECD, National Accounts of OECD Countries, 1960-71.

Output averages of Japan are for 1969-70
 Investment averages of Germany are for 1967-68.

^{***} Investment in owner-occupied dwellings. For Canada, France and the United Kingdom the figure is from residential investment, which differs slightly from the former category.

TABLE 4

TARLE 4.—Share of business fixed investment in gross national product: historical data and projected requirement, selected periods, 1965-80

Item	1965-70	1971-74	1975-80	1971-00			
de en meletra processous estrugiorenso austres establicatura in describer en contenta de la mella de la mella d	Billions of 1972 dollars						
Cumulative gross national product (GNP): Actual Projected	5, 999. 3	4, 674. \$	18,254.6	12, 929. 1			
Cumulative business fixed investment: Actual. Projected capital-output (c/o) ratios. Fixed 1970 c/o ratios:	623.4	496.8	1 986.6	1, 473. 4			
Actual law ³			1 844, 5 1 796, 6	1, 331 . 3 1, 283. 4			
	Percent						
Business fixed investment as percent of GNP: Actual		10.4	12.0	11.4			
Fixed 1970 c/o ratios: Actual law* Pre-1970 law*			10. 2 9. 7	10.3 9.9			

Derized from GNP projections in 1958 dollars provided by the Department of Labor, Division of Economic Growth.

* "Actual Law" contains pollution control expensitures pursuant to the 1970 Clean Air Amendments and to the 1972 Federal Water Pollution Act Amendments, while "Pre-1970 Law" does not contain these expenditures.

* Derived by subtracting actual investment in 1971-74 from the estimate of investment required during 1971-80.

Note.—The 1965-74 data in this table have not been revised to the new benchmark data used elsewhere in this Report since the projections were made before the new data were available. However, using the new data, business fixed investment as parcent of GNP would have been the same for 1965-70 as shown in the table (10.4 percent) and slightly lower for 1971-74 (10.2 percent instead of 10.4 percent)

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Division of Economic Growth).

(As published in the Economic Report of the President, January 1976, page 44)

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TABLE 5

TABLE 5 .- Factors affecting the cumulative total business fixed investment required from 1971 through 1980, by major industries

(Billions of 1972 dollars)

Factor	Total	Agricul- ture, forestry, and fisheries	Mining -	Con- struc- tion	Manu- fac- turing	Trans- porta- tion	Com- munics- tion	Electric, gas, wa- ter, and sanitary services 1	Services*	Other!
Fixed 1970 capital- output (c/o) ra- tice, pollution control require- ments limited to pre-1970 law	1, 283. 4	69. \$	48.5	29. 5	292.2	134.7	101.1	209. 5	173.8	225.7
Add for actual Pol- lution Control Laws possed in 1970 and 1972	47.8		.9	.\$	29. 5	.6	.•	14.2	.3	1.8
Add for industries with c/o ratios in- crossing for res- sens other than the achievement of greater energy independence	118.2	10.3	4.2	.0	35, 3	5.3	.4	.4	62.4	.•
Add for industries with decreasing c/o ratios.	-36.0	0	-21.8	0	-13.2	0	0	• -1.0	0	•
Add for additional capital required for greater energy independence	57.9	.0	49.0	.0	.0	.•		L.	.•	.0
Add for increase in pollution control investment induced by additional investment in energy.	2.0	.0	.4	.0	4.2	.•	.0	1.3		.•
Talet business fixed invastment required	1, 473. 4	78. 8	81.2	, 30.0	344.0	140.6	101.4	Z33. 3	236.5	227. \$

Note.-Detail may not add to totals because of rounding.

Source: Department of Commerce, Burgou of Economic Analysis.

(As published in the Economic Report of the President, January 1976, page 45)

¹ Includes production by both public and private enterprises.
2 Consists of hotels and ledging places, personal and report services, business services, automobile report and services, amusements and medical, educational services and nonprofit organizations.
4 Consists of wholesale and retail trade and finance, insurance and real estate.
5 Increase in discard rate in gas whites due to energy considerations would produce this decline unless offset by \$1.0 billion higher investment required for greater energy independence.
6 Although the outputs and capital-estart ratios of petroleum refining and related industries are not assumed to change in the process of achieving greater energy independence, the substitution of lower-grade demestic crude for higher-grade imported crude courses some additional politicism control expanditures in petroleum refining.

ACTUAL AND PROJECTED INVESTMENT AS A PERCENT OF GNP

	Average 1965-1974	NYSE <u>l</u> /	Bosworth Duesenberry Carron2/	Friedman ³ /	G.E.4/	DR12/	Chase Econometrics 6/
Gross private domestic investment	15.1	16.4	15.5	15.8	15.8	15.7	15.9
Non-residential fixed	10.4	12.1	11.3	11.5	11.4	11.0	11.8
Inventory	1.0	0.3	0.8	0.8	0.4	0.8	0.8
Residential	3.8	3.9	3.5	3.5	4.0	3.8	3.3

^{1/} The New York Stock Exchange, The Capital Needs and Savings Potential of the U.S. Economy:
Projections Through 1985, September 1974. Figures shown are based on cumulative projections in current dollars, 1974-1985.

^{2/} Barry Bosworth, James S. Duesenberry, and Andrew S. Carron, <u>Capital Needs in the Seventies</u>,
The Brookings Institution, 1975. Figures shown are based on estimates for 1980 in current
dollars from Table 2-12, p. 39 (note the constant dollar 1980 figures in Table 2-11 project
gross private domestic investment as 15.8 percent of GMP).

^{3/} Benjamin M. Friedman, "Financing the Next Five Years of Fixed Investment" in President's
Authority to Adjust Imports of Petroleum, Public Debt Ceiling Increase; and Emergency Tax
Proposals; Hearings before the Committee on Ways and Means, House of Representatives, January
1975, pp. 710-726. Figures shown are based on 1975-79 averages of current dollar projections.

^{4/} Reginald H. Jones, "Capital Requirements of Business, 1974-85," Testimony submitted to Subcommittee on Economic Growth, Joint Economic Committee, May 8, 1974. Figures shown are based on cumulative projections in current dollars, 1974-1985.

^{5/} Data Resources, Inc., Summer 1975, "Special Study: The Capital Shorteje." Summary table on inside cover. 1985 data only, current dollars, standard forecast.

^{6/} Chas: Econometrics August 1975. "The Next Ten Years: Inflation, Recession and Capital Shortage." 1984 data only, current dollars. Table, page #1 of 14. Mo recession run.

TABLE 7

PEDERAL BUDGETS

CHANGES IN THE UNIFIED BUDGET OUTLAYS

BY FISCAL YEAR, 1961-1977 (dollars in billions)

Piscal Year over Preceding Year	Federal Outlays	Dollar Increase	Percentage Increase	Surplus or Deficit
1961	\$ 97.8	\$ 5.6	6.1	-3.4
1962	106.8	9.0	9.2	-7.1
1963	111.3	4.5	4.2	-4.8
1964	118.6	7.3	6.1	-5.9
1965	118.4	-0.2	~~	-1.6
1966	134.7	16.3	13.8	-3.8
1967	158.3	23.6	17.5	-8.7
1968	178.8	20.5	13.0	-25.2
1969	184.5	5.7	3.2	+3.2
1970	196.6	12.1	6.6	-2.8
1971	211.4	14.8	7.5	-23.0
1972	231.9	20.5	9.7	-23.2
1973	246.5	14.6	6.3	-14.3
1974	268.4	21.9	8.8	-3.5
1975	324.6	56.2	20.9	-43.6
1976(est)	373.5	48.9	15.1	-76.0
1977 (est)	394.2	20.7	5.5	-42.9

Source: Economic Report of the President, January 1976, Table B-63, p.245.

Senator Bentsen. Chairman Greenspan, we are pleased to have you. Would you come forward and take the witness table.

STATEMENT OF ALAN GREENSPAN, CHAIRMAN; AND BURTON G. MALKIEL, MEMBER, COUNCIL OF ECONOMIC ADVISERS

Mr. GREENSPAN. Thank you very much, Mr. Chairman.

I am joined this morning by my colleague, Burton Malkiel, who as you know is a member of the Council of Economic Advisers and I will proceed as you should like, sir.

Senator Bentsen. If you would proceed with your testimony sir.

Mr. Greenspan. We have formal testimony which we should like to submit for the record. It is somewhat long and we would like to usurp from it if I may.

Senator BENTSEN. That would be fine.

Mr. Greenspan. I would submit the total statement for the record. We are pleased to appear today before the subcommittee to discuss capital formation and our analysis of capital needs and requirements in the coming years. This is a topic of considerable interest at the moment and of great importance to the restoration of a stable high-employment prosperity. There have been a number of studies of the capital formation issue and a number of different estimates or projections of possible shortfalls in capital investment in the years ahead. The Council of Economic Advisers with the help of the Bureau of Economic Analysis of the Department of Commerce, has examined a number of these issues in detail during the past year. As you probably know, a summary of this analysis is included in this year's economic report. My remarks this morning are based upon that analysis.

I would like to begin by noting that it is our belief that the adequacy of capital formation in the period immediately ahead is one of the key issues which we face.

There is a very strong possibility that the structure of final demand may remain too consumption-oriented and business fixed investment too weak to permit adequate economic performance during the remainder of the seventies. Capacity bottlenecks were encountered in a number of basic commodities in 1972 and 1973, giving rise to concern that a shortage of capacity may materialize well before we reach an acceptably low level of unemployment. Such a shortage could intensify inflationary pressures in the later stages of recovery, retard long-term economic growth, and make the achievement of environmental and energy goals more difficult.

At first sight the concern with capital shortages appears misdirected. In an economy in which the prices of all inputs and outputs and the composition of final demand are free to adjust, there is no reason to expect a chronic shortage of any type of productive facility. To be sure, temporary bottlenecks may occur in a dynamic economy because future demands cannot be anticipated perfectly and because there are lags in the adjustment process. But in time such bottlenecks would be eliminated, as investment shifted toward the most profitable areas of resource application.

In what sense, then, can there be a valid concern with inadequate capital formation? One way of looking at the capital formation issue is to ask whether the investment spending expected under current

conditions is likely to be adequate for the attainment of certain long-term objectives, such as full employment, greater energy independence, and a cleaner environment.

Even before the 1974-75 recession idled large amounts of productive capacity, investment incentives may have been reduced by a number of factors. Several of these factors are related to inflation and if they recur or persist they may inhibit investment in the present

First, the before-tax rate of return that business requires to undertake new investments has been driven up by several forces, while actual rates of return, at least on past investments, have lagged behind. Risk premiums have risen to reflect the increased amplitude of macroeconomic disturbances. Experiments with wage-price controls have lessened the incentives to invest. Moreover, compliance with changing environmental and safety regulations requires increased investment, creates some uncertainty, and adds to the cost of production. At the same time, despite changes in the corporate tax laws, general price inflation has raised corporate taxes more than in proportion to the economic before-tax return on fixed capital. Inventory profits have boosted the tax base and the real value of historical-cost depreciation allowances has declined.

Second, the increase in debt-equity ratios during recent years has made business more vulnerable to the vicissitudes of the credit markets and to the unanticipated changes in the rates of inflation and profits. The resulting unfavorable structure of business liabilities may have created some structural financing problems, and it may have increased default risks, the costs of financing, and the cutoff or required rate of return on new projects.

Third, fiscal policies may have been biased against private investment. In periods like 1973, when the economy was already approaching its capacity limits, government transfer payments continued to increase rapidly. In periods of slack changes in Federal tax and expenditure, policies have also been oriented more toward consumption than investment. Investment was the last sector to be stimulated by expansionary fiscal policies, and the first to suffer when these policies led to either more inflation or to offsetting monetary restraint. Cyclical recoveries of investment may therefore have been incomplete, with cumulative effects on the size of the capital stock.

Fourth, the long-term savings incentives of persons may have been reduced through government policies favoring consumption. The scope of government transfer programs and the level of social insurance benefits have increased rapidly in recent years. This development may eventually encourage less reliance on personal savings to protect a future standard of living. Moreover, incentives to save may also have been reduced by Federal controls on interest rates on many types of savings. On the other hand, individuals have increased their savings rate in reaction to the diminution of the real value of their financial assets and the greater insecurity about future living standards that the high rates of inflation and unemployment of the past few years have caused.

The actual volume of business fixed investment that is likely to be forthcoming during the remainder of this decade under the existing structure of tax laws and economic incentives is difficult to forecast. If we had a perfect long-term forecast, we could directly assess the adequacy of the expected investment, provided the investment required to meet certain objectives could be estimated with a high degree of reliability. Since this is not possible we have attempted to estimate the capital stock that may be needed to achieve certain goals. The implied investment requirements are than compared with recent levels and trends in the investment share of gross national product. Given the large number of conditions and qualifications that must be attached to any estimate of capital requirements, no such exercise can be conclusive. Nevertheless, after all due qualification, the results suggest that increased rates of capital formation are desirable and that policy changes including the reconsideration of the existing tax laws and incentive structures will probably be required to increase the investment share of GNP.

To throw some light on the question of capital adequacy, which has been widely debated during the past year, the Council of Economic Advisers commissioned the Bureau of Economic Analysis of the Department of Commerce to conduct a study of the capital that would be required to achieve a real output level presumed to be consistent with an unemployment rate below 5 percent by the

end of the decade.

The capital stock necessary to produce the output levels specified for 1980 is assumed to include facilities to meet certain environmental standards currently in effect, and to allow the greater degree of energy independence which has been advocated by the Federal Government. Estimates were prepared of the investment in pollution control facilities necessary to meet the requirements of the Clean Air Amendments of 1970 and the Federal Pollution Act Amendments of 1972. Furthermore, an attempt was made to estimate the additional investment required in the mining of coal, crude petroleum, and natural gas, and in electric utilities using fuels other than oil and gas, to prevent the 1980 share of imported crude and refined petroleum products from exceeding its 1973-74 level of 36 percent of total domestic consumption.

Since so many specifications and data adjustments are necessary to obtain numerical estimates of capital requirements, these estimates, of course, are not and can not be definitive. Their usefulness depends upon the realism of the assumptions employed in deriving them. These include the degree of labor force utilization and the composition of output and final demand in 1980 as well as the links from specified output levels to capital "requirements" and the link from "required" capital to investment. The data on capital stock and discards by industry are weak. Moreover, a number of unspecified economic assumptions have to be made to insure that the implied accumulation process is consistent with a movement toward economic equilibrium and stable real rates of return.

The results are highly sensitive to changes in the output mix—for instance, between manufacturing and other more capital-intensive sectors such as agriculture, mining, transportation, communication, and utilities.

Subject to all these qualifications, certain conclusions can be drawn from the estimates. Business fixed investment will likely have to average 12 percent of GNP from 1975 to 1980 to meet the capital

requirements projected for 1980. Since investment is expected to amount to less than 10 percent of GNP in 1975-76, investment ratios even higher than 12 percent may be necessary in the next 4 years to put enough capital in place by the end of 1980 to meet the goals previously stipulated.

The broad summary estimates underlying this conclusion are shown in Table I in our formal presentation and in the text we referred

If ratios of fixed investment to GNP substantially in excess of 10 percent in the years immediately ahead are unattainable, the achievement of full employment by 1980 will depend on the ease of input substitution and on the flexibility of relative factor prices. If the estimated capital requirements are not met, the achievement of full employment by 1980 will depend on the ease of input substitution and on the flexibility of relative factor prices. If the estimated capital requirements are not met, the 1980 output level could be lower than projected, owing to lower productivity or lower employment, or both. Alternatively, goals concerning pollution control and energy independence might have to be scaled down. Either of these possibilities seems far less desirable than policies which would help raise the share of investment in GNP.

To achieve this goal, increased savings incentives may have to supplement increased investment incentives once the economy's resources are utilized more fully. Whether an increased savings rate may be required, however, depends not only on the potential demands for business investment but also on the demands for residential construction and net foreign investment and whether new policy initiatives are developed that would require extra investments in areas such

as energy, safety, or the environment beyond 1980.

At the present time macroeconomic policies that continue to stimulate the economy to a fuller utilization of its resources will also encourage investment. But, a steady and sustained expansion will provide a far better economic climate for investment than a path of excessive expansion followed by another cycle of inflation and recession. During the initial phases of the recovery a slower rate of increase in Federal outlays and a reduction in the budget deficit would permit a more expansionary monetary policy to be carried out with less risk of inflationary pressures. Such a policy mix would tend to shift the composition of output toward investment. If Government deficits do not decline rapidly enough as the recovery proceeds, the savings necessary to insure a satisfactory rate of private investment may be preempted, and the expansion could stall sometime before employment returns to an acceptable level. The President's program of reducing the growth in Federal outlays in this and in coming years is designed, among its other goals, to avoid such an impasse.

Thank you, Mr. Chairman.

Senator Bentsen. Well, Mr. Chairman, I know it is not an exact science, but this testimony here, although very interesting, is replete

with "mays." Does that mean "probabilities"?

Mr. Greenspan. Basically, the word "may" means probabilities because if one understands the underlying ranges of error in a number of the particular estimates we make, "may" is a more appropriate term than "will."

¹ See p. 55.

Nonetheless, you are asking for our best judgment—

Senator BENTSEN. That is right.

Mr. Greenspan. And our best judgment are these estimates and forecasts and in a certain respect it really doesn't matter whether the numbers themselves are exact. It is fairly clear that if we are to sustain a full employment, high productive labor force, we must increase the proportion of productive facilities type investment as a percent of GNP.

I think that conclusion, one can pull the "may" away from it.

Senator Bentsen. That is basic, it seems to me.

Mr. MALKIEL. If I might add one thing, Alan. I am struck by the similarity in the kinds of estimates made by many different people who have studied the problem.

I think it is very hard to escape the conclusion that some increase in the share of GNP devoted to investment will be required if we are to meet the important goals we have as a nation.

Senator Bentsen. Let me ask you to comment on the Congressional

Budget Office's statement.

Their statement is that under the President's budget proposal GNP would be about 1.6 percent lower at the end of 1977 and the unemployment rate would be about six-tenths of a point higher compared to simple continuation of current spending levels.

In addition, they indicate that the President's proposed spending

cutbacks have very little short-run impact on inflation.

Would you care to comment on those projections?

Mr. GREENSPAN. Certainly.

First of all, the key judgments in that analysis are about the level of Federal, State, and local outlays, and in the aggregative sense, private demand including capital investment.

This can be done by a number of different means, we all use various different types of models with greater or lesser degrees of

accuracy in them.

From what I gather with respect to the Congressional Budget Office estimate, the difference largely is involved in our view of the extent to which private demand in general and investment specifically will be expanding later this year and into calendar year 1977.

The data we have at this point, say, capital appropriations, new orders, and the various commitments to plant and equipment expenditures are still not exhibiting very much strength. Nevertheless, our analysis together with the underlying conditions, of increased cash flow in the business sector, improved liquidity, and higher levels of stock prices all have very significant implications for the course of capital investment in the latter part of the 1970's.

In our view, unless we are able to reduce the budget deficit along the lines that the President has suggested we are likely to confront financial demands in excess of the savings of our system. This would mean significant pressure on the commercial banking system and the

possibility that we would reignite inflationary forces.

Now, the CBO view, at least as I interpret it, would be that private demands will expand more slowly than we expect and the shortfall in private demand which they foresee is the key to their view of the economy in 1977.

Our view is that there is a strong probability that private demand will rise substantially in 1977. Therefore, we believe that a fiscal policy which meets that likelihood is very critical. If we pursue excessively expansionary fiscal policies on the assumption that private demand will be soft—and we are wrong; our capacity to turn that policy around is going to be very, very limited.

Senator BENTSEN. Well, I would agree with that. You say that the major difference in the estimates is the question of what private demand will be, and you are optimistic that demand is going to be

high; the CBO says it will be low.

Don't I remember, Mr. Chairman, in the fall of 1974 you were estimating that capital spending by business in 1975 was going to continue high?

Mr. Greenspan. Yes, sir. As a matter of fact, I——

Senator BENTSEN. Do I recall that conversation with you?

Mr. Greenspan. You are quite correct.

In fact, I don't know when I changed but I will try to give the specific date. As I recall, in the early fall of 1974——

Senator Bentsen. I think I discussed that at the White House with

you in September or so.

Mr. GREENSPAN. That sounds about correct. I think your memory is exceller t.

At the time there were very heavy backlogs of capital appropriations and from what we could see at that point there was no evidence of significant deterioration.

In retrospect, I probably would have forecast precisely the same outcome at the same time and, in a way this suggests that all forecasts

are subject to error.

But, I think you are raising an interesting question. Let's then raise the issue: Suppose we are wrong. I think one of the things we must do is ask ourselves what are the consequences of policy if we are wrong.

And in this particular instance it is certainly possible that, after - taking account of all the information, we are overestimating the expan-

sion of private demand.

As I indicated before—even if there was a 50-50 probability that private demand would expand only sluggishly, a fiscal policy which was insufficiently expansive or inadequate in retrospect is far easier to correct with less damage to the economy than a policy which presumes and acts upon the assumption that private demand will be weak and, provides massive fiscal stimulus.

It is much easier to provide additional stimulus if it is required

than it is to reduce stimulus that is required.

So in that context, Mr. Chairman, the weight of the evidence should be clear and conclusive that recovery will be inadequate before one should even contemplate greater stimulus than we are advocating. I must say to you, Mr. Chairman, the numbers through at least early February do not suggest that the economic recovery is petering out.

Senator BENTSEN. My concern as we discussed it in the early fall of 1974 was the fact that we were in a recession moving deeper into one and my experience in corporate boardrooms is that the first thing business does on their capital spending when they see a recession happening is to put those things on the shelf and wait until things turn around and that's what came to pass.

My concern now is—I am wondering what the attitude is, I might

say, in the boardrooms today.

Mr. Greenspan. Well, from what I can judge, Mr. Chairman, it is still cautious. Less cautious than 2 months ago but nonetheless still cautious.

I think that still substantial uncertainties about governmental policies and a number of other issues are inhibiting the implementation of

very major investment requirements.

I think that governmental policies should address precisely the issue that you are raising. In what manner can we dissipate at least part of the uncertainty and strengthen the incentives for business to move in this direction.

There is just no question that the underlying potential rates of return on new facilities, and the level of future capacity requirements, indicate the need. The cash flow is available; profits have improved significantly, and at this stage I would say that the issue of uncertainty may well be the force most inhibiting the capital goods expansion.

Senator BENTSEN. My concern, too, is for the small businessman who in this kind of situation, it seems to me, from the publicity that has accrued to the banks, and the problem listed banks, that there is a demand by the small businessman for loans but there is a reluctance on the part of the banks to do the kind of financing that they need because they are trying to clean up the quality of their loans and unquestionably small business has a higher percentage of problems credit-wise than do the major businesses.

So, it seems to me that the small businessman is in a difficult

period in trying to expand or to grow.

Mr. Greenspan. Well, Mr. Chairman, small business usually is more

seriously affected during a period of recession.

There is some evidence that it is picking up but I think I agree that the need for financing is pretty general and smaller businesses, largely because they are small, have more difficulty in obtaining some types of credit at the costs that are consistent with substantial expansion.

Senator Bentsen. Mr. Chairman, I certainly agree with you and the other witnesses in saying that we are going to have to continue to raise the standard of living in this country that we are going to have to have capital investment to increase productivity and I commend the administration for putting incentives for capital formation in the President's budget recommendations.

I am disappointed that the administration and Congress have failed to act affirmatively in this area. The lack of investment is something I have been working on since about 1973 in this subcommittee and unfortnuately we have not made the kind of progress other than to air the problem and try to get some support for what we are doing.

Let me ask you about housing. I am concerned about this report that just came out, January housing is down for the fourth month in a row.

I see a very slow dropping of long-term interest rates. What can be done to try to bring the long-term rates down some more?

You know, I look at a mortgage payment on a home, a monthly payment, say on a 30-year mortgage, looking at that interest, and

there is substantial variance in that payment if it is 6 percent or 11 percent interest.

What can we do to get a better correlation for a faster drop in

long-term rates?

Mr. Greenspan. First, Mr. Chairman, let me say that while I, too, was disappointed at the decline in starts in December, building permits rose significantly and permits are usually a better indicator of what is going on in housing than the start levels themselves.

Still, housing starts, obviously, are far below any normal demand, even though the rise in permits does suggest that the start figures

in February and March will be above the January level.

There is still no question that housing starts are well under what would probably be the normal longer term level of, say, 1.8 million to 2 million a year. One reason for this, as you point out, is mortgage interest rates.

A substantial part of the mortgage rate level is clearly what we call inflation premiums. Lenders tend to build, incorporate some aspect or part of their expectation about the decline in the future

purchasing power of the dollar into the level of rates.

Studies have shown reasonably conclusively that it takes a long while for an acceleration of inflation to become imbedded in long-term rates and it takes a long while to unwind these expectations. We are beginning to see some lessening of the so-called inflation premium and if we can keep the inflation rate declining long-term interest rates will also decline.

The most important thing that we can do to get the mortage rate down is to bring the inflation rate down in the longer run. If we don't get the inflation rate down, it is going to be exceptionally difficult to get any interest rate down. I think we are moving in that direction and hopefully we can continue to obtain lower rates.

Mr. MALKIEL. Could I just add that the policy mix that we have proposed in the economic report, primarily to stimulate investment,

could also be of enormous benefit to housing.

We believe very strongly that if we are able to get control of the budget, if we allow the deficit to decline rapidly as the economy picks up, there will be less of a drain on savings and this would permit a more expansionary monetary policy to be undertaken with less inflationary risk. We believe that such an altered policy mix, where we get the budget under control, is likely to lead to lower long-term rates and an investment climate that would stimulate both private investment and the housing industry.

Senator Bentsen. When you have a situation where you are using, say, 70 percent of your productive capacity, when you had a situation where you had 8 million unemployed, and when you had a situation where the inflation was not resulting from too many dollars chasing too few products, but more of hopefully a one-time inflation from commodity price increases such as OPEC quadrupling the price of oil, worldwide droughts which took the price of grain up, why couldn't we have had a more moderate monetary policy that did not push interest rates to the level it did.

I frankly strongly disagree; it seems to me that in those conditions we should have had a more expansionary monetary policy.

Do you care to comment on that?

Mr. Malkiel. Well, I think we actually have had an expansionary monetary policy. If you look at the level of interest rates now, certainly by that criteria, I think it is very difficult to argue that monetary policy has not been highly accommodative of this recovery.

Senator Bentsen. Recently. You know, when I was arguing this

before, it was very much the other way.

Mr. MALKIEL. I think it is useful to go back to Alan Greenspan's statement on interest rates and inflation in 1974. It is very difficult to foresee financial markets equilibrating at low interest rates when we are running double-digit inflation.

I think this is really the key element. I think it is important—— Senator Bentsen. The kind of inflation it was, I don't think, was

being given proper credit.

Mr. Greenspan. I think the markets themselves were adjusting to the fact of inflation. One could persuasively argue that the immediate roots of much of our recent inflation were the substantial rise in oil and grain prices. It was nonetheless accommodated by our monetary system. Even while it may well be true that certain sort of exogenous forces like that are the initial cause of the rate of inflation, it tends to be self-perpetuating. I think that the financial system, the money markets and the people who act within them tend to make judgments in the broader—in a much broader sense. It was their judgment, perhaps incorrect, that there was more to the inflation than strictly the one-shot effect of oil and grain prices.

In my view I think that there is probably a great deal to be said for that. I think there is a large number of financial factors which are very important contributors to the rate of inflation. Unless the financial system accommodates price increases in oil and elsewhere,

that you won't get a real inflation.

What you will get instead is a rise in prices of oil and food, for example, which would force prices of other commodities down without significantly altering the average aggregate price level.

This type of thing is quite complex and I wish we understood

it a great deal better than we do.

Senator Bentsen. Let me ask another question. Two of the witnesses who appeared before this committee yesterday spoke of the decline in investment in research by American business and that has led to a dropoff in productivity. I agree with them on that but my concern is how do you encourage that investment?

I can't help but remember that back during the fifties it was very much in vogue to do a lot of research. Some of it was pure research, but business and management moved away from that pretty fast as

they didn't see immediate payoffs.

They didn't go to the bottom line. The presidents of corporations were interested in what happened in the next 5 years and what happened to the stockholders.

So, what we have seen now is a use of a lot of technology that is on the shelf with minor modifications to it.

How do we get the kind of basic research done in this country that was being done?

Mr. Greenspan. Well, Mr. Chairman, I think that that phenomenon is one aspect of the increased uncertainty that business has with respect to the moderate to distant future. One of the things that

we often fail to keep in mind is that in facilities planning you are considering a plant or a process where useful life probably extends

out some 20 to 30 years.

If the general view is that the economy in which it will be dealing is knowable and the legal and institutional rules of the game are knowable, deicisionmakers are more willing to bear obvious unforeseen risks which lie in the future. They are more willing to make longer term investments.

Now, basic R&D is essentially a very long-term investment and its payoff is really dependent upon the degree of risk one sees out

quite a good deal in the future.

The extent to which people are willing to commit resources to use in the distant future is one of the measures that one could perhaps appropriately use to gauge the extent of confidence in the solidity

or the knowability of the future.

Senator BENTSEN. You know, I think it is something more than that. I think that is part of it, I would say that is part of it, but I think also it is the personal ambitions of management looking to the short term and their future often, and that basic research is really a long-term payoff and that often they are looking at trying to be certain that they have an increase in earnings per share during their tenure.

Maybe they are retiring in 5 years.

How do you get around that?

Mr. Greenspan. Well, as I see it that phenomenon has probably not changed much since the 1950's, so, I am not sure we can use that as an explanation.

Mr. MALKIEL. I would say one thing that certainly has changed is that, by most reasonable measures, corporate profitability has in the recent past declined rather sharply.

The corporate profits——

Senator Bentsen. That may be one of the reasons.

Mr. MALKIEL. I suspect that this is one of the reasons and profiability declined particularly during the period of the late 1960's and early 1970's when we were going into an inflationary period.

Senator Bentsen. I think that is an excellent explanation.

Mr. MALKIEL. The inflation increased effective tax rates on corporations and did in fact hurt profitability.

Senator Bentsen. A fellow cuts out everything he can to try to keep up his earnings per share.

Mr. MALKIEL. Exactly.

Perhaps one of the encouraging things we see is that as the inflation subsides—and the recovery proceeds—a fundamental restoration of

profitability is now taking place.

We think this will become increasingly apparent to businessmen as the year proceeds. Moreover, the so-called quality of the profits are better as well; that is, less of them are fictitious inventory profits; less of them come from underreporting of depreciation allowances. All this, of course, is a result of the somewhat lower inflation rates that we have been able to achieve.

I think the fundamental solution to the R&D problem must be in the corporate profit picture. I think this really underscores the need for an understanding of the role of profits in business investment both in facilities and in research. Mr. Greenspan. I would agree with that.

Senator Bentsen. Well, gentlemen, we thank you for your time. We are appreciative of your time. We will see your full testimony in the record.

I think you said you had something to amplify above what you presented.

Mr. Greenspan. Yes.

Senator Bentsen. We appreciate that very much.

Mr. Greenspan. Thank you, Mr. Chairman.

Mr. Malkiel. Thank you, Mr. Chairman.

Senator BENTSEN. Thank you, gentlemen.

[The prepared statement of Mr. Greenspan follows:]

STATEMENT OF ALAN GREENSPAN, CHAIRMAN, AND BURTON G. MALKIFL, MEMBER, COUNCIL OF ECONOMIC ADVISERS

We are pleased to appear today before this Subcommittee to discuss capital formation and our analysis of capital needs and requirements in the coming years. This is a topic of considerable interest at the moment and of great importance to the restoration of a stable high-employment prosperity. There have been a number of studies of the capital formation issue and a number of different estimates or projections of possible shortfalls in capital investment in the years ahead. The Council of Economic Advisers with the help of the Bureau of Economic Analysis of the Department of Commerce, has examined a number of these issues in detail during the past year, and a summary of this analysis is included in this year's Economic Report. My remarks this morning are based upon that analysis.

I would like to begin by noting that it is our belief that the adequacy of capital formation in the period immediately ahead is one of the key issues which we face.

There is a very strong possibility that the structure of final demand may remain too consumption-oriented and business fixed investment too weak to permit adequate economic performance during the remainder of the seventies. Capacity bottlenecks were encountered in a number of basic commodities in 1972 and 1973, giving rise to concern that a shortage of capacity may materialize well before we reach an acceptably low level of unemployment. Such a shortage could intensify inflationary pressures in the later stages of recovery, retard long-term economic growth, and make the achievement of environmental and energy goals more difficult.

At first sight the concern with capital shortages appears misdirected. In an economy in which the prices of all inputs and outputs and the composition of final demand are free to adjust, there is no reason to expect a chronic shortage of any type of productive facility. To be sure, temporary bottlenecks may occur in a dynamic economy because future demands cannot be anticipated perfectly and because there are lags in the adjustment process. But in time such bottlenecks would be eliminated, as investment shifted toward the most profitable areas of resource application.

In what sense, then, can there be a valid concern with inadequate capital formation? One way of looking at the capital formation issue is to ask whether the investment spending expected under current conditions is likely to be adequate for the attainment of certain long-term objectives, such as full employment, greater energy independence, and a cleaner environment.

Even before the 1974-75 recession idled large amounts of productive capacity, investment incentives may have been reduced by a number of factors. Several of these factors are related to inflation and if they recur or persist they may inhibit investment

in the present recovery.

First, the before-tax rate of return that business requires to undertake new investments has been driven up by several forces while actual rates of return, at least on past investments, have lagged behind. Risk premiums have risen to reflect the increased amplitude of macroeconomic disturbances. Experiments with wage-price controls have lessened the incentives to invest. Moreover, compliance with changing environmental and safety regulations requires increased investment, creates some uncertainty, and adds to the cost of production. At the same time, despite changes in the corporate tax laws, general price inflation has raised corporate taxes more than in proportion to the economic before-tax return on fixed capital. Inventory profits have boosted the tax base and the real value of historical-cost depreciation allowances has declined.

Second, the increase in debt-equity ratios during recent years has made business more vulnerable to the vicissitudes of the credit market and to unanticipated changes in the rates of inflation and profits. The resulting unfavorable structure of business liabilities may have created some structural financing problems, and it may have increased default risks, the costs of financing, and the cutoff or

required rate of return on new projects.

Third, fiscal policies may have been biased against private investment. In periods like 1973, when the economy was already approaching its capacity limits, government transfer payments continued to increase rapidly. In periods of slack changes in Federal tax and expenditure policies have also been oriented more towards consumption than investment. Investment was the last sector to be stimulated by expansionary fiscal policies, and the first to suffer when these policies led to either more inflation or to offsetting monetary restraint. Cyclical recoveries of investment may therefore have been incomplete, with cumulative effects on the size of the capital stock.

Fourth, the long-term savings incentives of persons may have been reduced through government policies favoring consumption. The scope of government transfer programs and the level of social insurance benefits have increased rapidly in recent year. This development may eventually encourage less reliance on personal savings to protect a future standard of living. Moreover, incentives to save may also have been reduced by Federal controls on interest rates on many types of savings. On the other hand, individuals have increased their savings rate in reaction to the diminution of the real value of their financial assets and the greater insecurity about future living standards that the high rates of inflation

and unemployment of the past few years have caused.

The actual volume of business fixed investment that is likely to be forthcoming during the remainder of this decade under the existing structure of tax laws and economic incentives is difficult to forecast If we had a perfect long-term forecast, we could directly assess the adequacy of the expected investment, provided the investment required to meet certain objectives could be estimated with a high degree of reliability. Since this is not possible we have attempted to estimate the capital stock that may be needed to achieve certain goals. The implied investment requirements are then compared with recent levels and trends in the investment share of Gross National Product (GNP). Given the large number of conditions and qualifications that must be attached to any estimate of capital requirements, no such exercise can be conclusive. Nevertheless, after all due qualification, the results suggest that increased rates of capital formation are desirable and that policy changes including the reconsideration of the existing tax laws and incentive structures will probably be required to increase the investment share of GNP.

To throw some light on the question of capital adequacy, which has been widely debated during the past year, the Council of Economic Advisers commissioned the Bureau of Economic Analysis of the Department of Commerce to conduct a study of the capital that would be required to achieve a real output level presumed to be consistent with an unemployment rate below 5 percent by the end of the decade. The level of real GNP selected for that year was \$1,575 billion in 1972 dollars (\$1,078 billion in 1958 dollars). The GNP target implies an average annual growth rate of about 6 percent in real GNP and 4 percent on output per employee in the private sector from 1975 to 1980. Figures for industry outputs compatible with the specified level of GNP were generally at the 80 industry level of input output the Department of Labor. They were generally at the 80-industry level of input-output aggregation.

The capital stock necessary to produce the output levels specified for 1980 is assumed to include facilities to meet certain environmental standards currently in effect, and to allow the greater degree of energy independence which has been advocated by the Federal Government. Estimates were prepared of the investment in pollution control facilities necessary to meet the requirements of the Clean Air Amendments of 1970 and the Federal Pollution Act Amendments of 1972. Furthermore, an attempt was made to estimate the additional investment required in the mining of coal, crude petroleum, and natural gas, and in electric utilities using fuels other than oil and gas, to prevent the 1980 share of imported crude and refined petroleum products from exceeding its 1973-74 level of 36 percent of total domestic consumption.

¹The full study is available from the Bureau of Economic Analysis. The basic estimates were developed in the summer and fall of 1975 and do not reflect the benchmark revisions of the national income accounts and the economic assumptions and projections published in the 1977 budget. The differences, however, are relatively small.

Many assumptions must be made before gross investment requirements can be derived from the specified level of output. Capital services are not normally used in fixed proportions with other factors of production. Factors are substituted for one another over time because of a variety of developments including changes in relative conditions of supply and changes in technology within particular industries. To narrow the range of possible estimates for 1980, links between industry outputs and capital stocks were established by assuming either that the adjusted capital-output ratios remain constant at their 1970 levels or that observed trend rates of growth or decline in such ratios persist. The extrapolations are based on annual capital-output ratios available for 1963 and for each year from 1967 through 1970, adjusted to normal operating conditions. If the adjusted capital-output ratios showed a consistent trend, the trend was generally continued from 1970 to 1980.

Finally, it was necessary to specify a discard pattern (i.e., a pattern of retirements and other deletions from the capital stock) to estimate the amount of gross investment that would be required to produce the net additions to the capital stock obtained

in the previous step.

Since so many specifications and data adjustments are necessary to obtain numerical estimates of capital requirements, these estimates of course are not and cannot be definitive. Their usefulness depends upon the realism of the assumptions employed in deriving them. These include the degree of labor force utilization and the composition of output and final demand in 1980 as well as the links from specified output levels to capital "requirements" and the link from "required" capital to investment. The data on capital stock and discards by industry are weak. Moreover a number of unspecified economic assumptions have to be made to ensure that the implied accumulation process is consistent with a movement toward economic equilibrium and stable real rates of return.

The results are highly sensitive to changes in the output mix—for instance, between manufacturing and other more capital-intensive sectors such as agriculture, mining, transportation, communication, and utilities. The direct and indirect capital requirement per dollar of output from petroleum and natural gas mining, for example, is about four times as high as the corresponding coefficient for manufacturing. Estimates of capital requirements are less sensitive to shifts between broad end-use categories like consumption and business fixed investment than to shifts between particular sectors. Nevertheless, the composition of final demand is important because the capital required per dollar of final demand is 22 percent greater for personal consumption than for private fixed investment.

Subject to all these qualifications, certain conclusions can be drawn from the estimates. Business fixed investment will likely have to average 12 percent of GNP from 1975 to 1980 to meet the capital requirements projected for 1980. Since investment is expected to amount to less than 10 percent of GNP in 1975-76, investment ratios even higher than 12 percent may be necessary in the next 4 years to put enough

capital in place by the end of 1980 to meet the goals previously stipulated.

The broad summary estimates underlying this conclusion are shown in Table 1. The table shows for example that a share of business fixed investment in GNP as low as 9.9 percent in 1971-80 is estimated to be compatible with the output level specified for 1980, if capital-output ratios remain at their 1970 level and the energy and pollution abatement goals previously specified are left out of account. Hence, without the additional requirements attributable to changing technology and to government policies, the share of business fixed investment in GNP could actually be lower than the 10.4 percent that prevailed during the period from 1965 through 1970. This result is obtained in spite of a slight acceleration in the actual and projected annual rates of discards (from around 4.6 percent of the capital stock in 1965-70 to 4.8 percent in 1972-74 and 4.9 percent in 1980), because it is estimated that the changing industrial composition of GNP reduces the cumulative investment required.

However, if the legal, technological, and energy-related factors that raise investment requirements in the current decade are to be allowed for, the ratio of required investment to GNP would increase to 11.4 percent in 1971-80, and cumulative investment would have to rise 15 percent more than previously estimated. Together these additional requirements add \$190 billion in 1972 dollars to the cumulative investment total for

the decade 1971-80.

TABLE 1.—Share of business fixed investment in gross national product: historical data and projected requirement, selected periods, 1965-80

Item	1965-70	1971-74	1975-80	1971-80
		Billions of 19	772 dollars	
Cumulative gross national product (GNP): Actual	5,999.3	4,674.5		
Projected			18,254.6	12,929.1
Cumulative business fixed investment: Actual		486.8		
Projected capital-output (c/o) ratios			³ 986.6	1,473.4
Fixed 1970 c/o ratios: Actual law * Pre-1970 law *	,		* 844.5 * 796.6	1,331.3 1,283.4
-		Perce	ent	
Business fixed investment as percent of GNP				
Actual	10.4	10.4		
Projected c/o ratios Fixed 1970 c/o ratios:	• • •		12.0	11.4
Actual law *	_		10.2	10.3
Pre-1970 ;aw *			9.7	9.9

¹ Derived from GNP projections in 1958 dollars provided by the Department of Labor, Division of Economic Growth.

³ "Actual Law" contains pollution control expenditures pursuant to the 1970 Clean Air Amendments and to the 1972 Federal Water Pollution Act Amendments, while "Pre-1970 Law" does not contain these expenditures.

³ Derived by subtracting actual investment in 1971-74 from the estimate of investment required during 1971-80.

Note. —The 1965-74 data in this table have not been revised to the new benchmark data used elsewhere in this Report since the projections were made before the new data were available. However, using the new data, business fixed investment as percent of GNP would have been the same for 1965-70 as shown in the table (10.4 percent) and slightly lower for 1971-74 (10.2 percent instead of 10.4 percent).

Sources: Department of Commerce (Bureau of Economic Analysis) and Department of Labor (Division of Economic Growth).

There are three major reasons for the need to devote an increased share of GNP to fixed investment:

1. Investment in pollution abatement equipment as a consequence of legislation relating to "clean air" and "clean water" is estimated to add about \$48 billion (1972 dollars) to the base level 1971-80 investment total. This base level, which is estimated on the assumption of fixed capital-output ratios in all industries, is identified as "pre-1970 law" in Table 1. Less than half of this additional requirement is believed to have been met by 1975.

2. Changing technology in selected industries, such as agriculture, ferrous mining and nonferrous metals manufacturing communication equipment manufacturing, transportation, business services, and auto repair, in all of which capital-output ratios have been increasing, is estimated to add about \$118 billion to the cumulative investment required from 1971 to 1980, while industries with declining capital-output ratios subtract about \$36 billion.

3. To meet the goal of greater energy independence, increased investment in petroleum mining, electric utilities, and other energy-related industries is required. This is estimated to add about \$60 billion to the 1971-80 investment total. If the decline in the capital-output ratio of petroleum mining continues, the cumulative investment could be \$21.8 billion less. Any further decline in capital-output ratios in petroleum mining, however, would be inconsistent with the assumption of increased domestic energy output.

If ratios of fixed investment to GNP substantially in excess of 10 percent in the years immediately ahead are unattainable, the achievement of full employment by 1980 will depend on the ease of input substitution and on the flexibility of relative factor prices. If the estimated capital requirements are not met, the 1980 output level could be lower than projected, owing to lower productivity or lower employment, or both. Alternatively, goals concerning pollution control and energy independence might have to be scaled down. Either of these possibilities seems far less desirable than policies which would help raise the share of investment in GNP.

To achieve this goal, increased savings incentives may have to supplement increased investment incentives once the economy's resources are utilized more fully. Whether an increased saving rate may be required, however, depends not only on the potential demands for business investment but also on the demands for residential construction and net foreign investment and whether new policy initiatives are developed that would require extra investments in areas such as energy, safety, or the environment beyond 1980.

At the present time macroeconomic policies that continue to stimulate the economy to a fuller utilization of its resources will also encourage investment. But, a steady and sustained expansion will provide a far better economic climate for investment than a path of excessive expansion followed by another cycle of inflation and recession. During the initial phases of the recovery a slower rate of increase in Federal outlays and a reduction in the budget deficit would permit a more expansionary monetary policy to be carried out with less risk of inflationary pressures. Such a policy mix would tend to shift the composition of output toward investment. If Government deficits do not decline rapidly enough as the recovery proceeds, the savings necessary to ensure a satisfactory rate of private investment may be preempted, and the expansion could stall some time before employment returns to an acceptable level. The President's program of reducing the growth in Federal outlays in this and in coming years is designed, among its other goals, to avoid such an impasse.

Senator Bentsen. Our next witness is Mr. Alex Sheshunoff.

STATEMENT OF ALEX SHESHUNOFF, PRESIDENT, SHESHUNOFF & COMPANY, INC., AUSTIN, TEX.

Senator Bentsen. Welcome to the committee, Mr. Sheshunoff.

If you would proceed with your testimony.

Mr. Sheshunoff. I would like to thank Senator Bentsen and the subcommittee for the opportunity to appear. I would also like to commend you for all the work that you have been doing in this area of solving what is clearly a fundamental economic problem that we have in capital formation.

I will try to be very brief and summarize my proposal and later

present a full written statement to the committee.

Our little firm in Austin, Tex., specializes just in analyzing banks for other banks and for corporations.

In effect, we work with about 4,000 banks and most of the major U.S. corporations, and hence we see very close up the problems of loan losses, depositors, concern over loan losses and the banker concern as to what is going to be happening in their loan portfolios.

Yet, despite all the recent publicity over problem loans over bank capital, we think the long-term problem is not the banks making a few bad loans but the banker reluctance to be making the loans

that they need to be making to encourage competition.

In light of this we come up with what we think is a very simple proposal, that I realize may have a lot of opposition to it, because of its messing around with the tax structure and using tax incentives in a way that people might not feel appropriate.

Basically, it is as follows: First, as you have outlined, small and medium-size businesses simply do not have access to the capital markets. Their only sources of capital tends to be either profits or bank

In fact, they can't go to the public debt market in most cases.

Banks have found that there are greater risks in lending to small businesses and the banks' have become highly risk conscious due to problem loans, the attendant publicity and the banks' own thin capital.

Hence, there is a general reluctance to make new loans to small businesses.

Normally, the banks are able to compensate for greater risk by charging higher rates and yet this further burdens the small company with additional costs that are not incurred by his larger competitor.

We have even found some bankers who are just reluctant to ask a small business to pay a higher rate than they have been used to paying because they just flat don't want to ask the corporation to pay it in the smaller bank.

The net effect has been further concentration of capital in the larger corporations and at a lower cost thus continuing to reduce

competition.

Our proposal would be fairly simple, that the interest income on new loans—that is new loans to small- and medium-sized businesses—would be tax exempt up to a certain portion of the banks'

total loan portfolio.

This percentage of the loan portfolio would be determined by Congress. For instance, up to 10 percent of the banks' current outstanding loan portfolio, an additional 10 percent could be made—lent out in the form of tax-exempt loans to small business.

The interest rate charged would be at the prime rate; no more, no less, and that speculative loans on either real estate or securities

would not qualify.

What we would be trying to reach for is small business that wants to buy a little or expand their plant; it would be that type of loan

that we would be trying to encourage on the part of the bank.

In addition, in that bank capital tends to serve as a cushion for depositors, the additional after-tax income generated by these loans would become part of the bank's capital and would not be available to pay dividends.

We feel the advantages of this are as follows:

First, the banks would be encouraged to lend to credit-worthy small and medium-sized corporations where there is currently loan demand thus strengthening competition.

Congress would retain control over the monetary supply because banks would, from the soundings we made, would also want to have the maximum percentage of total loans in the tax-exempt status as would be permitted.

I personally think this is one of the fallacies about working with

the monetary supply.

You can push all the money in the world out to the banker but if he doesn't want to lend it or if he is scared to lend it that money will not find its way into the economy.

Furthermore, there would be no government guarantee of any credits because the after-tax interest rate would compensate for the risk and we feel that the administrative costs would be fairly negligible.

As I have outlined in my presentation, for instance, if a bank had \$5 million out in current loans and say they were permitted to make an additional \$500,000 of tax-exempt loans to small businesses, maximum, I think we would be looking at maybe 20 loans in \$25,000 increments.

For the banks who have been busy gathering deposits in their local trade area and merely turning around and selling into the market

as Federal funds and the Federal funds buyers tend to be primarily your larger banks, these banks would in turn be encouraged to lend that money in the local community, the community locally that provided the savings, and thus you would have the bank in effect fulfilling what we feel is a large part of banking's public responsibility, which is to recycle the community's savings back into the economy.

We have found that in some States there are usury law problems and hopefully these would be skirted by having the interest rate as

tax exempt.

In short, loans to small businesses need to be made competitive, first with the safety of the loans normally made to larger corporations, and with the higher interest rates on mainly these consumption-oriented loans.

From what I have been hearing today it looks as though there is a need to perhaps try to move some of the banking resources over into the investment side and away from the consumption side.

That very briefly, Mr. Chairman, is what we are looking for.

Senator Bentsen. Well, I must say that is an innovative proposal but is probably too simple to be accepted.

Mr. Sheshunoff. That is whay I was worried about.

Senator Bentsen. Small businesses are having very difficult times obtaining financing. There is an attitude on the part of small town bankers, they are not as flexible on rates as to what is happening to rates around the country normally.

They charge higher rates in times of low interest rates and relatively

low interest rates in times of high interest rates.

They stay pretty steady and they are embarrassed to ask the fellow they see every day for higher interest rates when they do so they sell, they go into the federal fund market.

Mr. Sheshunoff. The prime rate in Littlefield, Tex., is 8 percent

no matter what it is in New York, higher or lower.

Senator Bentsen. That is the way they work.

Let me think about this.

Mr. Sheshunoff. I would like to thank you for the opportunity.

Senator Bentsen. You don't have any idea what this would cost the Treasury?

Mr. Sheshunoff. I have no idea at all except that assuming you have, say, roughly \$500 million out in loans, if you had an incremental 5 percent of the money being lent, you are talking about a lot of money being readily pumped into the small business sector of the economy.

We have not worked out the numbers on what the cost would be. I guess you would look at the bank making an additional half million dollars' worth of loans, say they were getting 7 percent interest,

even the tax effect on that would be relatively nominal.

I think it would be more than picked up in a relatively short time by having the money out there working in the local community.

Also, as you say, it may be too simple to be——

Senator Bentsen. Having been interested in small banks over the years, I have some understanding of how they work.

Mr. Sheshunoff. We have not done the analysis on where the pockets of liquidity are around the country in terms of the banks that might be very anxious to get more of their money out.

It would tend to move economic development back into those smaller communities where the savings are being generated because the bank would tend to want to make loans, you know, within its own trade area.

So, you would have some dispersion of the economic development around those pockets of liquidity.

Senator Bentsen. Let's discuss that situation.

Every time things get tough and interest rates go up the little banks start going into the Federal funds just at the time they should be helping the local community.

Mr. Sheshunoff. That is right. Schator Bentsen. All right.

Thank you very much for your proposal.

Mr. Sheshunoff. Thank you.

[The prepared statement of Mr. Sheshunoff follows:]

STATEMENT OF ALEX SHESHUNOFF

- 1. Small and medium sized business do not have access to the Nation's capital markets.
- 2. The major outside sources of investment capital for financing the growth of these businesses are bank loans.
- 3. Greater risk exists in lending to small business. The banks have become highly risk conscious due to problem loans, publicity, and their own thin capital. Hence, there is a general reluctance to make new loans to small business.
- 4. Normally banks compensate for greater risk by charging higher rates. However, this further burdens the small company with additional costs not incurred by his larger competitors who can borrow at prime.
- 5. Actual loan growth is down yet loan demand reflecting legitimate credit needs of small and medium sized business is up.
- 6. The net effect has been further concentration of capital in large corporations and at a lower cost thus continuing to reduce competition.

PROPOSAL

We would propose the following:

Interest income on new loans to small and medium sized business would be tax exempt up to a certain percent of the bank total loan portfolio. This percent would be determined by Congress, e.g. up to 10 percent of the bank's loan portfolio. The interest rate charged would have to be prime rate—no more, no less. Speculative loans on either real estate or securities would not qualify.

The additional after tax income generated by these loans would become part of the bank's capital and would not be available to pay dividends. Thus the bank's capital would be increased providing more protection for the depositors and in the long run a stronger capital base for making similar additional loans.

We believe the advantages are as follows:

1. Banks would be encouraged to lend to credit worthy small and medium sized

corporations thus strengthening competition.

2. Congress would obtain some direct control over the monetary supply because banks would want to always have the maximum percent of total loans in the tax exempt status permitted.

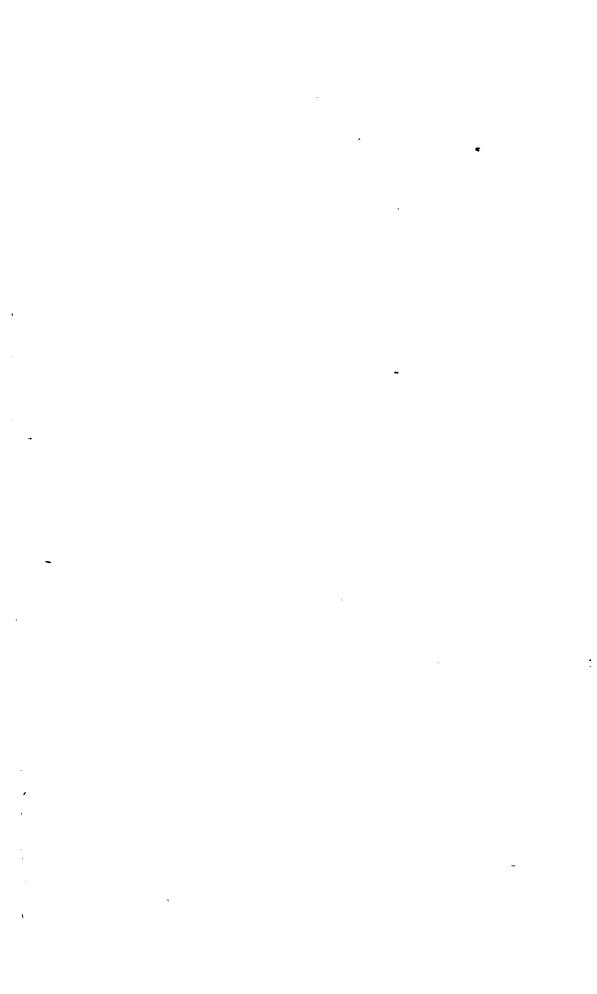
3. No government guarantee of any credits would be required because the after

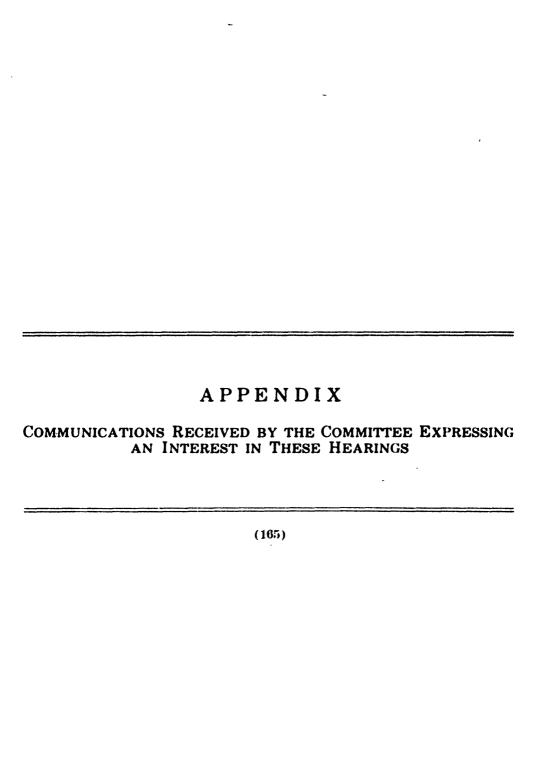
tax interest rate would compensate for the risk.

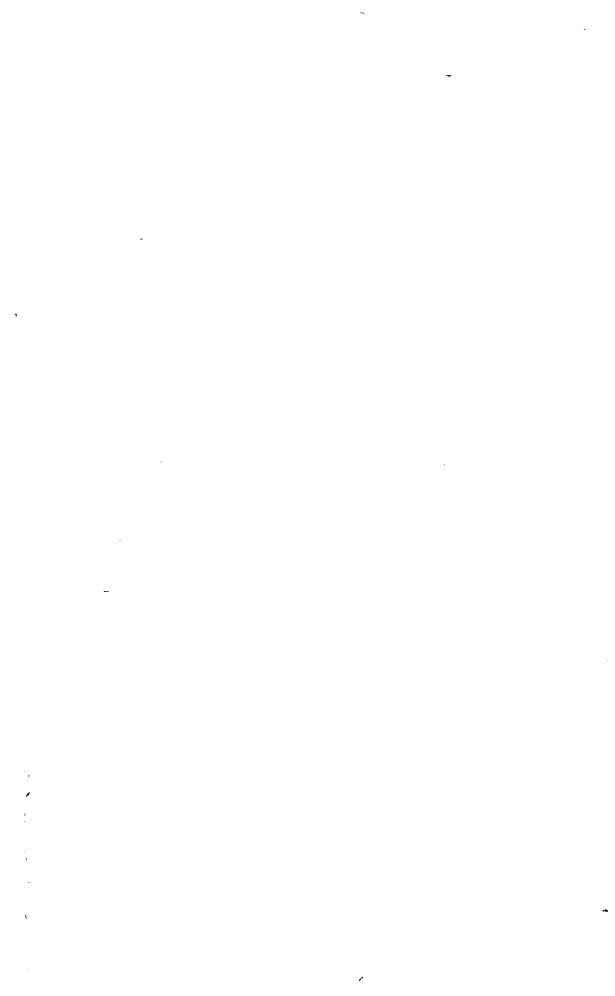
4. The administrative costs would be relatively negligible. For example, a bank with \$10,000,000 in deposits and \$5,000,000 in current loans and the ability to increase its loan portfolio an additional 10 percent on tax exempt basis, would be able to lend an additional \$500,000. And even if lent in \$25,000 increments would mean only 20 additional loans. Whether monitored by the IRS or the bank regulatory agencies, it would be relatively simple task to segregate these loans.

5. Banks have been gathering deposits from the local trade area and merely selling these funds to major banks who in turn service primarily the large national corporations. These banks would be encouraged to make tax exempt loans to small and medium sized business, probably most often in their region. This would tend to create a broader

geographical base for the Nation's economic growth.







STATEMENT OF SENATOR JAMES A. MCCLURE (R-IDAHO)

In October of last year I introduced a bill—S. 2465. That bill was designed to accelerate capital formation and with it, job creation and productivity in the private sector. At that time the official unemployment rate exceeded eight percent and prospects for a rapid recovery were less bright than they are today. Despite this recent improvement there is more not less need for tax changes which will increase

the pool of savings available for capital formation.

During the next five years the challenge which the private sector must face is a considerable one. Its perimeters may be stated in both human and financial terms. Between now and 1980 we must create at least 12 million jobs for those who are currently unemployed and for several million new entrants to the labor force. In order to accomplish this monumental task and provide for the future security of these same jobholders, American industry must invest over this current decade close to one trillion five hundred billion dollars (\$1,500,000,000,000) as measured in 1972 constant dollars. Stated another way, between 1975 and 1980 fixed capital investment must equal 12 percent of our projected Gross National Product. This required annual rate of investment in fixed capital is substantially higher than the 10.4% rate which characterized the period 1965–1970.

The consequences of our failure to save and invest at this 12 percent rate will be both predictable and painful. The growth in our labor force will not be matched with a growth in job opportunities, new entrants will be discouraged, job habits and skills will not be learned, income maintenance programs, entitlements and other welfare spending will increase; Federal deficits will rise rather than fall, productivity will decline and inflation will become not eposidic but endemic as deficits are created and monetized.

At the Federal level the impact of unemployment is staggering. Each one percent increase in the unemployment rate, above four percent, results in revenue losses and expenditure increases totaling \$16 billion. For as long as unemployment rates remain at high levels budgetary balance cannot be achieved and efforts to hold inflation in check become increasingly less successful as the rate of money creation exceeds the annual rate of production of goods and services.

The Federal Government can do little to alter the size of the labor force or its growth. However, efforts can be made to insure that sufficient capital investment is available to create the jobs which a growing labor force demands. That is the

purpose of the Jobs Creation Act and the tax changes which the Act requires.

Let me turn briefly to the subject of capital needs. We have all seen the results of several studies of capital needs. Among them one stands our as complete in the sense that it relates capital investment to a series of established national goals such as full employment, rising GNP, energy conservation, capital replacement, and a cleaner environment. In that same context, it examines aggregate investment needs and relates them in dollar terms to the realization of each of our many goals in a disaggregated form. The study to which I am referring was requested by the Council of Economic Advisors and was performed by the Bureau of Economic Analysis. The results of that research were made generally available in December of 1975.

The approach followed by the Bureau was as follows:

1. GNP and its major components were projected through 1980.

2. The aggregate GNP projections were disaggregated by industry group.

3. Input-output analysis then related final industry sales to domestic investment requirements by industry.

4. Historic capital input requirements were then adjusted by industry to reflect the demands of environmental regulations which currently exist.

5. Finally, investment needs were related to energy conservation and increasing energy independence.

The figures which resulted represent a clear challenge to this society for they indicate that the price of a brighter future is a less profligate present. We cannot perpetuate an approach to our Federal tax law and Federal budget which rewards consumption

Full employment at 95% of labor force.

and penalizes savings and investment. Over 200 years ago Adam Smith in reflecting on the causes of the wealth of nations concluded that wealth lies not in our hoards of precious metals but in the productive interaction of land, labor and capital. Our malerial success is related not to the fact that we work harder or longer today than we did 200 years ago but rather that we work more productively with an ever-expanding

As a nation we stand at a crossroads. One road, that traveled by Great Britain, has the immediate appeal associated with redistributing existing wealth, but it also holds in store the ultimate pain of sharing not the wealth but the resultant poverty. The other, less frequently traveled road, promises continued progress and gradual enrichment for all members of society. The provisions of the Jobs Creation Act are clear directions to pursue the path which we have so successfully traversed in the past. Their rapid implementation will reduce revenues at the Federal level only slightly and for a short period. Various estimates of the revenue and employment effects of S. 2465 are available and I submit one of them for the record. It was undertaken by Dr. Norman Turre and Associates. I invite the Committee to study this submission and contact the organization responsible for it. Finally, I would remind the Committee that while we are told that the power to tax is the power to destroy we must also realize that the power to tax can become the power to create. It is to this creative power that the Johs Creation Act is addressed.

ECONOMIC AND FEDERAL REVENUE EFFECTS OF THE JOBS CREATION ACT OF 1975

INTRODUCTION

The Jobs Creation Act of 1975, H.R. 10015, introduced by Representative Jack Kemp (R. N.Y.), contains more than a dozen provisions to reduce the bias against private saving and capital formation in the existing Federal income tax. The bill, if enacted, would drastically reduce that bias. It would dramatically shift the emphasis of tax policy toward meeting the present and prospective requirement of the U.S. economy for a far higher rate of saving and capital formation than has been realized, on the average, over the three decades since the end of World War II.

The effects of the bill's provisions of private saving and capital formation, on employment, and on GNP would, similarly, be dramatic. Full implementation of the proposed provisions would sharply accelerate the increase in capital outlays, employment, and GNP over a three-year transition period during which individual and business savers would adjust their saving and investing plans and behavior to the more nearly neutral tax environment. In the third full year after enactment, GNP originating in the private sector of the economy (measured in 1974 dollars) would be \$248.9 billion greater than if present (i.e., 1974) tax provisions are continued. Capital outlays would be \$81.1 billion greater than otherwise. Full-time equivalent employment would rise by 10.9 million jobs above levels otherwise attained. Additional significant gains in output, employment, and capital outlays above postwar trend would occur following this transition period, although these clearly would be of smaller magnitude.

Enactment of the Jobs Creation Act would increase rather than reduce tax revenues. Associated with the sharp increases in GNP, employment, and capital outlays in the transition period would be a substantial increase in the bases of the major Federal taxes. The revenue estimates in the summary table take into account these so-called "feedback" effects; the amounts shown for each provision in each year are estimates of the revenue increases generated by the enlargement of the total tax base resulting from the expansion of economic activity, offset in part by the initial reduction in effective

tax rates or in particular elements of the tax base.

In the last transition year, there would be a net increase of \$25.2 billion in Federal tax revenues. Even in the first year after enactment Federal tax revenues would increase—by an estimated \$5.2 billion—over amounts that would otherwise be realized.

The principal provisions of the bill and the estimated economic effects of each provision are presented in the following table.

ECONOMIC EFFECTS OF THE JOBS CREATION ACT OF 1975 [Money amounts in billions of 1974 dollars]

			Increases in				
Proposal	Years after enactment	Private GNP	Employ- ment (thousands)	Cupital outlays	Federal revenue		
1. Savings tax credit of 10%, up to \$1,000	1	31.0	1,780	22.3	1.9		
(\$2,000 for joint returns), not exceeding	2	40.2	2,100	23.3	4.8		
tax due.	3	50.1	2,430	24.3	7.9		
2. Exclusion of domestic corporate divi-	1	20.9	1,200	15.5	0.6		
dends from adjusted gross income.	2	28.7	1.510	16.3	3.1		
• •	3	35.7	1,740	17.0	5.3		
3. Exclusion of \$1,000 of capital gain per	1 .	9.0	520	6.8	1.6		
year.	2	12.7	920	7.1	2.8		
	3	15.6	760	7.4	3.7		
4. Reduction of normal corporate tax rate	1	11.0	630	7.7	1.1		
from 22 to 20% (with no change in	2	13.7	710	8.1	2.0		
surtax).	3	17.7	860	8.4	3.2		
5. Reduction of surtax rate from 26 to 22%	1	20.0	1,150	14.1	2.0		
(no change in normal tax rate or surta	2	25.0	1,300	14.8	3.7		
exemption).	3	32.3	1,570	15.3	5.8		
6. Increase in surtax exemption from	1	11.0	630	7.7	1.1		
\$25,000 to \$100,000 (with present	2	13.7	710	8.1	2.0		
normal and surtax rates).	3	17.7	860	8.4	3.2		
7. Increase in investment credit from 7%	1	23.9	1.370	17.4	4.3		
with limitations to 15% for all Sec.	2	31.7	1,660	18.2	6.8		
1245 property.	3	39,9	1,940	18.9	9.4		
8. Increase in Asset Depreciation Range	1	12.9	760	7.0	2.3		
(ADR) from 20% to 40%.	2	22.2	1,250	7.4	1.8		
	3	28.2	1,520	7.7	1.6		
9. Optional capital recovery allowance	1	55.6	3,400	16.7	8.7		
•	2	70.3	4,070	17.4	11.5		
	3	82.4	4,550	18.0	14.2		
10. Combined effect	1	151.4	7,180	74.6	5.2		
	2	200.5	9,020	779	14.6		
	3	248.9	10,910	81.1	25.2		

NOTE: The estimates with respect to any combination of these proposals are not necessarily equal to the sum of the individual estimates. An estimate will be forthcoming for provisions of the bill which are not included above if adequate data become available.

Estimates for certain of these proposals may differ from previous estimates for similar or identical proposals because of revisions in government data and underlying assumptions. Assumptions used in this table are consistent among alternatives.

Where exact quantification of variables was impossible, conservative assumptions about the values of those variables were employed. A full documentation of the estimating procedure is available upon request.

Estimates are based on changes with respect to the law in 1974 rather than the temporary provisions enacted in 1975. Effects for Year 1 are for 1975 and assume that the proposal would have been operative since January 1, 1975. Effect for Year 2 and 3 refer to 1976 and 1977 levels of GNP, employment, etc., relative to their assumed trend values had the 1974 law remained unchanged. Note that employment effects are not cumulative; the 49% ADR for instance, would lead to an increase of 1,520,000 full-time equivalent employees in year 3 over the number of such employees in the absence of this tax change, not 760+1,250+1,520=3,530,000.

SUMMARY OF PROCEDURE FOR ESTIMATING THE ECONOMIC AND REVENUE EFFECTS

The analysis of the effects of the bill's several provisions of GNP, employment, capital formation, and Federal tax revenues begins with a determination of the impact of the proposed tax changes on the cost of private saving, hence the cost of capital in the private sector. The change in the cost of saving is treated as the percentage decrease in the pretax return per dollar of saving and investment required to make that dollar of saving and investment "worthwhile". For this purpose, an investment equation of the familiar discounted cash flow form is used; an investment is considered

to be "worthwhile" if the present value of its expected after-tax cash flow over the life of the investment is at least equal to the present value of the outlays made to acquire the asset(s). Since changes in tax provisions obviously affect the absolute amount and/or the present value of the after-tax cash flow, they change the amount of the pretax return on the investment required for it to be "worthwhile".

The second step in the analysis delineates and measures the private saving and investment response to the change in the cost of capital determined in the first step. The lower the cost of capital, other things being equal, the greater will be the amount of capital people will want to own. An explicit relationship between this change in the amount of desired capital and the change in the cost of capital is specified. This relationship then is used to estimate the increase in the desired stock of capital resulting from the reduction in the cost of capital provided by the tax proposal under examination.

A second relationship is specified to estimate changes in pretax returns resulting from changes in the stock of capital. These two relationships are then combined to estimate the increase in the amount of capital which equates the new required pretax return and the pretax return which that amount of capital will actually provide. Through step two, then, the model estimates the effect of various tax proposals on the cost of

capital and consequently on the stock of capital.

The third step in the analysis is to estimate the changes in GNP and in employment resulting from the increase in the stock of capital. Achieving the desired increase in the stock of capital obviously requires increasing capital outlays above the amounts that otherwise would be spent. In the period in which the adjustment to the tax changes occurs (assumed to be three years), these additional capital outlays sharply increase GNP and employment. In addition, as the increases in the stock of capital come on stream, they expand production capacity and output. Associated with the enlarged amount of capital are additional demands for labor services, resulting in an increase in employment, in wages, or in both above the increases that would otherwise occur.

The final step is the analysis is to estimate the effects of the tax changes on Federal tax revenues. Each of the provisions in the bill would reduce one or more income tax rates or initially reduce the amount of income to which the tax rates apply. Estimates of these initial effects on Federal tax revenues clearly are unsatisfactory and unrealistic, since they do not take into accout taxpayers' responses to the changes in the tax provisions. In addition to these initial impact revenue effects, therefore, it is necessary to estimate the so-called "feedback" effects. These feedback effects are the increases in Federal tax revenues generated by the expansion of the individual and corporation income tax and the payroll tax bases which result from the increases in GNP, employment, labor compensation, and returns on capital, as estimated in step three. If initial revenue effects exceed feedback effects, there is a net reduction in Federal tax revenues; if feedback effects exceed initial effects, there is an increase in Federal tax revenue. The analysis in step four shows that each of the provisions in the bill for which estimates were made would on balance increase rather than reduce Federal tax revenues.

TECHNICAL REPORT -- ECONOMIC AND FEDERAL REVENUE EFFECTS OF THE JOBS CREATION ACT OF 1975

PREFACE

The Jobs Creation Act of 1975, H.R. 10015, contains more than a dozen measures to reduce the bias against saving in the existing Federal income tax and to stimulate output, investment, and employment. Norman B. Ture, Inc. was asked to provide estimates of the effects on private sector GNP, capital outlays, and employment, and on Federal revenues, from nine of the bill's most significant provisions taken separately and as a group.

The estimates were derived from a reduced-form private saving and investment behavior model, described in detail in this report. A model of this character is particularly suited to analysis of the effects of tax changes by virtue of the fact that its specifications focus on the effects of such changes on the cost of saving and of capital, the principal impact of the tax changes proposed in the Job Creations Act of 1975. It minimizes the estimation hazards inherent in more elaborate, multi-sector, multi-equation econometric models, in which errors of concept, specifications or quantifications in one or more of the very large number of equations ordinarily used may have an untoward effect on the estimated results. Moreover, it avoids the conceptual ambiguities and pitfalls in the specifications of multipliers and accelerators which are important features of many of the multi-equation models. In the reduced-form model presented in this report, savings and investment behavior is specified as depending on the relative

cost of consumption vs. claims to future income, given levels of income; changes in income levels are taken into account by estimation of their trend values and the changes therein resulting from changes in total production capacity in response to the proposed tax changes. In most of the multi-equation econometric models treat saving and investing as functions of disposable income, ascribing insufficient weight or influence to changes in the relative cost of saving and investment.

The model presented in this report is a general equilibrium model in that the basic investment equation on which it relies imposes the constraint of equal returns at the margin on private saving in all forms. Thus, a tax provision which alters the return on saving allocated to a particular outlet results in both a shift in the allocation of total saving among alternative outlets and a change in the aggregate amount of saving.

The quantitative estimates in the report should be viewed as measuring direction and order of magnitude of the effects of the specified tax proposals. While these estimates are sensitive to alternative assumptions about the values of the parameters and variables in the model, we are confident that, as presented, they reasonably represent the results which may be expected from implementation of the tax proposals.

PROCEDURE FOR ESTIMATING EFFECTS OF THE JOBS CREATION ACT OF 1975

A. Overview

The Jobs Creation Act of 1975 contains more than a dozen measures to reduce the bias against saving in the existing Federal income tax and to stimulate output, investment, and employment. Norman B. Ture, Inc. was asked to provide estimates of the effects on private sector GNP, capital outlays, and employment, and on Federal revenues, from 9 of the bill's most significant provisions taken separately and as a group.¹

The details of the estimation procedure are described below for each alternative; a sketch of the process should clarify the discussion. First, capital stocks, national income, gross product, and employment in the private sector are projected through 1977 under present law using their postwar trend rates of growth. Next, the effect of each proposal on the cost of capital and the increase in the desired stock of capital in response to the lowered cost of capital are calculated. This increase in the stock of capital allows estimation of the increase in capital outlays resulting from a proposal. Associated with the increase in the stock of capital is an increase in employment, hence in national income. The additional investment and higher national income together provide an estimate of the increase in private GNP. The added GNP also increases Federal revenues by raising the tax base; this increase is partially offset by an initial impact revenue loss, calculated by applying the reduction in the tax rates or tax base to the present law levels of income. The net effect on Federal revenues equals the difference between these two revenue estimates.

B. Data

It was assumed that full response to each proposal would take 3 years. This reflects the time required by taxpayers to assess the effects of a provision on the cost of capital, to adjust their saving and investment decisions, and to plan for, order, and install new equipment and structures.

Estimates were prepared for each of the first three years after enactment. It was assumed that the provisions were in effect from January 1, 1975. Thus, year 1 refers to 1975, year 2 to 1976, and year 3 to 1977. Present-law assumptions were based on projections of 1973 values at their 1947–73 trend rates of growth, using the 1974 tax law. (Changes resulting from the Tax Reduction Act of 1975 were not considered.) No attempt was made to forecast the rate of inflation; all money amounts are expressed in billions of 1974 dollars.

The estimates with respect to any combination of these proposals are not necessarily equal to the sum of the individual estimates, since some proposals overlap (8 and 9) or interact (4 and 8). Certain combinations (4 and 5, for instance) are additive, however.

Two approaches are available for estimating the stock of capital in the private sector. The more straightforward and reliable method is to add up the financial claims held by the household sector, pertaining to assets in the private sector. Since governments do not own a share of privately held assets in the United States, and since the aggregate of corporate asset holdings have a counterpart in one or another set

^{&#}x27;Estimates for the effect of increasing the ceiling for contributions to Individual Retirement Accounts from \$1,500 to \$2,000 per year and of an alternative amortization period for pollution control facilities will be forthcoming if adequate data become available. Economic effects of two other provisions of the bill, relating to extension of time for payment of estate tax and interests in family farming operations, were considered to be of too small magnitude to warrant estimation.

of financial claims in the household sector, this approach should provide a complete and unduplicated accounting. According to the Federal Reserve Board, household sector private financial assets totaled \$2,302.3 billion at the end of 1973.

The alternative is to count up the value of physical stocks of equipment, structures, and inventories. There are severe difficulties involved in achieving a complete count and in valuing on a current basis assets of widely varying ages and degrees of obsolescence and deterioration. Nevertheless, estimates by the Commerce Department's Bureau of Economic Analysis for 1973 amount to \$2,286.1 billion, remarkably close to the Federal Reserve estimate of \$2,302.3 billion.

The latter figure was converted to 1974 dollars by multiplying by the ratio of 1974 to 1973 deflators for gross private domestic investment. Values were computed through 1977 by compounding the stock at an annual rate of 3.8%, the postwar trend rate of growth for capital.

Private sector national income and gross product for 1973 were converted to 1974

dollars using the ratio of 1974 to 1973 deflators for gross private product, then extrapo-

lated at their postwar trend rates of growth.

The number of private sector full-time equivalent employees was projected to grow at its 1947-73 trend rate of 1.2% per year. It was assumed that the trend rate of increase in wages would not be affected by any of the proposals and that all resulting increases in labor income above the trend value would be atributable to increases in the number of full-time equivalent employees.

C. Estimation procedure

1. Cost of capital change.—The analysis begins with a determination of the decrease in the cost of capital resulting from a tax proposal. This can be represented as the pretax income needed to make a given investment worthwhile under the proposal. less the pretax income needed under present law. An investment may be considered "worthwhile" if the present value from the expected after-tax cash flow over the life of the investment equals or exceeds the initial outlay. It is assumed that the volume of investment when adjustment to the tax change is completed is such that the present value of the net cash flow just equals initial outlay.

For an individual, four types of investment can be distinguished: depreciable and

nondepreciable, corporate and noncorporate. An investment equation may be written

for each:

1. Investment in depreciable corporate assets

$$I_1 = (1 - t_p) \text{ div } (1 - t_c) \sum_{i=1}^{n} y(1 + r)^{-i} + t_c \sum_{i=1}^{m} (1 + r)^{-i} D_i + c(1.12)^{-1} \text{ TC} + (1 - t_g) (1.12)^{-g} \text{ CG}$$

2. Investment in depreciable noncorporate assets

$$I_2 = (1 - t_p) \sum_{i=1}^{n} (1 + r)^{-i} y + t_p \sum_{i=1}^{n} (1 + r)^{-i} D_i + c(1.12)^{-1} \text{ ITC} + (1 - t_p) (1.12)^{-n} \text{CG}$$

3. Investment in nondepreciable corporate assets

$$I_1 = (1 - t_p) \text{ div } (1 - t_c) \sum_{i=1}^{n} (1 + r)^{-i} y + (1 - t_p) (1.12)^{-n} \text{ CG}$$

4. Investment in nondepreciable noncorporate assets

$$I_4 = (1 - t_p) \sum_{1}^{n} (1 + r)^{-1} y + (1 - t_q) (1.12)^{-n} CG$$

where

/ = amount initially invested:

y =pretax earnings required for each of n years to repay investment of l:

 D_i = depreciation in year i on asset I, given depreciable life m: ITC = investment credit earned in first year;

CG = capital gain realized after n years:

div = dividends received by individuals as a fraction of corporate cash flow: c = fraction of depreciable assets that are eligible for investment credit:

r=rate at which future income is discounted to present value.

I_h= marginal tax rate on personal capital income: I_c = marginal tax rate on corporate income:

 t_a = marginal tax rate on personal capital gains.

These four equations may be weighted on the basis of corporate and noncorporate

ownership of depreciable and nondepreciable assets to yield a single aggregate equation. Weights used were: $l_1 = .45$, $l_2 = .25$, $l_3 = .2$, $l_4 = .1$.

Typical asset life was assumed to be 12 years, the average for equipment eligible for the investment credit, according to unpublished Treasury Department data. This is only one component of total asset holdings but is intermediate in life between inventories and structures, the other major components. Data for these components are incomplete or unreliable and no estimate of their average life was attempted. are incomplete or unreliable and no estimate of their average life was attempted.

It was assumed that a depreciable asset with a 12-year life which is eligible for the 20% Asset Depreciation Range (ADR) would be depreciated over 9.5 years at double declining balance rates with optimum switchover to straight line depreciation. Installation at midyear was assumed. Under present law, an effective investment tax credit rate of 5%, rather than the nominal 7%, was assumed, reflecting Treasury estimates of the effects of limitations of set was assumed. mates of the effects of limitations of net income, useful life, and the reduced credit rate for public utility property.

The amount of capital gains accrued per year were assumed to equal the ratio of undistributed corporate profits to pretax corporate cash flow, an average of .220y for the years 1947-74. Capital gains were assumed realized after the useful life of 12 years, so that realized gains equaled 12×.22y=2.64y per dollar of investment.

Dividends reported on individual income returns have consistently averaged 17% of corporate after the cash flow. This freetan was used for div. A previousless 70%

of corporate after-tax cash flow. This fraction was used for div. Approximately 70%

of depreciable assets are eligible for the investment credit, so this percentage was used for c. A discount rate of 12% was chosen for r.

From Internal Revenue Service Statistics of Income data, marginal tax rates were calculated: for personal capital income, .33; for corporate income, .463 (a weighted average of the .22 rate on the 6.4% of income that appears on returns reporting less than \$25,000 of taxable income, and the .48 rate for all other corporate returns); for personal capital gains, .21 (one-half the marginal rate for a weighted average of individual taxable returns reporting capital gains).

Thus under present law, the combined investment equation

$$I = (1 - t_p) \sum_{t=1}^{12} (1 + r) \text{ty} \{ \text{div } (1 - t_t) (.45 + .2) + (.25 + .1) \} + (.45t_t + .25t_p) \sum_{t=1}^{12} (1 + r) {}^{-1}D_t$$

$$+ (1 + r) {}^{-1} (.45 + .25)c \text{ FTC} + (1 - t_p) (1 + r) {}^{-1} \text{ CG} = .67(6.195)\text{y} [.17(.537) (.65) + .35]$$

$$+ [.45(.463) + .25(.33)] (.620)I + .893(.7) (.7) (.05)I + (.79) (.257) (2.64)\text{y}.$$

This equation is solved for y under present law. For each alternative, the equation is reformulated and solved again for a new y. Then the decrease in cost of capital equals the difference between new and present-law y as a percent of present-law y. The reformulations are described below under the discussion for each proposal.

2. Capital stock change.—As the quantity of capital increases, the marginal product (i.e., the pretax return) of capital decreases. The percent increase in quantity of capital associated with a given percent reduction in its marginal product is the elasticity of demand for capital, e_d . It is widely assumed to equal -1. The percent increase in total saving, or equivalently in desired total capital, dK/K, which occurs in response to a given percent reduction in the cost of capital, dy/y, which occurs in response to a given percent reduction in the cost of capital, dy/y, depends as well on the elasticity of supply savings, e_s , that is on the percent increase in assets that savers wish to hold for a given percent change in the return that they will receive. For this study e_s is very conservatively assumed to equal $\frac{1}{2}$, implying that a $\frac{1}{2}$ increase in the return on savings would elicit an increase in the aggregate amount of saving of only 0.5%. (A less conservative estimate would raise all of the estimated effects.) The exact relationship among these variables is:

$$\frac{dK}{K} = \frac{e_{a}dy/y}{1 - e_{a}de_{a}} = \frac{1}{3} \frac{dy}{y}$$

That is, a given percent reduction in the cost of capital will raise the equilibrium (post-transition) capital stock above its trend value by one-third as great a percentage. For instance, a 6.9% reduction in the cost of capital (as in the case of the saving tax credit) will lead to a 2.3% rise in the stock of assets. It is assumed that it takes 3 years to achieve this increase in stock, so that by the end of 1977 the stock is 2.3% or \$66.9 billion larger than the trend value of \$2,910 billion which it would attain in the absence of the proposal. It is further assumed that this increase will occur in 3 equal increments. Hence capital outlays would rise above present levels by \$22.3 billion per year beginning in 1975, if the provision were in effect from January 1, 1975. Starting in 1976, there would be an additional increase in outlays to cover replacement of the depreciable portion of the augmented net stock. In recent years, replacement investment for depreciable assets has averaged 4.4% of the previous year's total net stock. Thus, additional replacement investment in 1976 would total about .044×22.3=\$1.0 billion, in addition to the \$22.3 billion increase in the net stock, for a total of \$23.3 billion in incremental outlays in 1976.

3. GNP and employment change.— Increases in net stock raise the nation's productive capacity and hence its output. Associated with these increases in capacity and output are additional demands for labor services, which result in a rise in the average wage

rate, in the number of employees, or in both.

This study makes two assumptions regarding labor: (1) the shares of GNP going respectively to labor and capital will remain constant (an assumption which has been valid over the postwar period), and (2) the increase in the labor share will be attributable to increases in employment rather than to increases in the general wage rate. These conditions may be expressed notationally as follows:

(1)
$$rK/wL = c$$

(2) $d(wL)/wL = dL/L$,

where r= price of capital services:

A = stock of capital:

w = wage rate: L = number of full time equivalent employees:

c = a constant.

If Q = private GNP, then Q may be expressed as the sum of labor and capital income:

$$Q = rK + wl. = (wl. + wl. = (1 + c)wl.$$

The percent change in private GNP, dQ/Q, is given by

$$dQ/Q = d(1+c)wL/(1+c)wL = dL/L$$

Private GNP will increase by the same percentage over trend as the increase in capital and labor inputs over their respective trends. In addition, during the three-year transition, in which capital outlays increase in order to raise capital stock to its new growth path, GNP is further increased by the amount of the additional capital outlays and by the additional capital consumption allowances. Employment increases proportionately during this transition period."

4. Revenue change.

The increase in total Federal revenues was estimated as the sum of additional tax receipts from three sources: income taxes on income from capital (corporate profits, interest, rents, and proprietor's income; income and payroll taxes on labor income (wages and salaries); and indirect business taxes (mainly Federal excise taxes)). To determine the appropriate marginal tax rates to be applied to each source, it was necessary to divide national income and Federal revenues into the three categories. National income is readily divisible, but since personal income tax and nontax receipts in the National Income Accounts apply to income earned from capital as well as labor, use of a single average tax rate would understate the rate paid by those receiving income from capital who are in higher tax brackets than the population as a whole. Partial segregation of these capital-income recipients is provided by the 1966 and 1969 editions of Statistics of Income—Individual Income Tax Returns, which classifies taxpayers by major source of income. In each of those years, the average tax rate (tax after credits as a percent of adjusted gross income) for those whose major source of income was capital (business or professional net profit, partnership net profit, dividends included in adjusted gross income, or net gain from sale of capital assets) was approximately 1.67 times as high for those whose major source of income was salaries and wages. This ratio was used to find the average tax rates on capital and labor income, t_R and t_L in the equation

 $T = t_A + t_I l_I$, where

T = the sum of personal tax and nontax plus contributions for social insurance.

K = the sum of proprietors' income, rental income of persons, and net interest included in national

L = compensation of employees.

"Personal capital-income" tax revenues, IRK, were added to Federal corporate profits tax accruals. The sum was divided by the sum of personal capital income (K) and tax accruals. The sum was divided by the sum of personal capital income (K) and corporate profits to yield an overall capital tax rate. These calculations were made for 1971-74. In that period, the capital tax rate varied from .323 to .331 averaging .33. In that same period, the labor tax rate climbed from .166 to .199 (reflecting the rise in social security rates and the effect of inflation in pushing individuals into higher income tax brackets). By plotting the logarithm of the labor tax rate against labor income, the labor tax rate was found in rise, on average, 5.7 percent for every \$100 billion increase in employee compensation. The marginal rate, that is, the rate on the increment of labor income, associated with these changes in average rate was found to be .33. Finally, an indirect business tax rate of .019 (the rate in both 1973 and 1974) was applied.

The total Federal tax rate equalled the sum of these three components, or approxi-

The total Federal tax rate equalled the sum of these three components, or approximately .35, i.e., .33 on both the labor and capital shares, and .019 on the total. This rate was multiplied by the increase in GNP found above. From the resulting

amount, an initial impact estimate was subtracted to yield a net revenue figure.

D. Estimation procedure for specific proposals

1. Savings tax credit of 10%, up to \$1,000 (\$2,000 for joint returns), not exceeding

The credit would apply to net additions to taxpayer holdings of savings account deposits, federal government debt, investment company shares and other corporate securities, and life insurance reserves. Holdings of these assets amounted to \$1,694 billion in 1973. To find out how much the credit would reduce the cost of capital and lead to an increase in asset holding, it was necessary to distribute these assets by income bracket using the Internal Revenue Service's Statistics of Income—1973 Preliminary Individual Income Tax Returns. This was accomplished by assuming that the distribution of eligible assets is the same as the distribution of interest reported on taxable returns. A preliminary estimate of the amount of additional saving induced by the credit was necessary in order to find the actual decrease in the cost of capital. Initially it was assumed that a 10% credit would lead households to increase their stock of eligible assets by 1%, or \$16.9 billion. This was added to the actual increase in assets of \$88.7 billion reported in 1973. Then eligible savings for each adjusted gross income (AGI) class were estimated by multiplying reported interest income in each class by the ratio of total eligible savings to total interest income. These totals per AGI class were divided by the number of returns in each class to derive average saving per return in each class (joint and nonjoint returns were handled separately.) Average tax per return was also computed for each AGI class. Then for each class, the average amount of credit per return was calculated and multiplied by the number of taxable returns to yield the overall initial impact revenue loss and increase in eligible savings. The actual decrease in cost of savings implied by this latter total proved to be 6.9%, rather than 10% as first indicated. This 6.9% decrease in cost of capital translates to an increase of 2.3% in all types of assets.

2. Exclusion of domestic corporate dividends from adjusted gross income.

This tax change was incorporated in the overall investment equation of part C by dropping the term $(1-t_p)$ from in front of the dividend term in equations 1 and 3. The resulting reduction in cost of capital equaled 4.8%, implying a 1.6% growth

in the 1977 capital stock relative to its present-law trend value.

The implied revenue gain was offset by an initial impact loss computed by multiplying the amount of dividend income in each AGI class by the marginal rate associated with that class and summing all classes. This loss was reduced by 10% to remove dividends from foreign corporations, which would remain taxable, and to allow for the likelihood that for taxpayers with large amounts of dividend income, some of

The separation of income sources was nearly but not entirely complete. For those reporting salaries and wages as a major source, other sources supplied approximately 3 percent of adjusted gross income; for those with one category of capital income as a major source, other sources accounted for 17-19 percent of adjusted gross income.

that income would fall in lower brackets and be taxed at lower than the marginal rate. Dividends were distributed among AGI classes according to Statistics of Income—1973 Preliminary Individual Income Tax Returns; tax rates per AGI class were derived from the 1972 volume.

3. Exclusion of \$1,000 of capital gain per year.

This proposal was handled by changing the final term of the investment equation from $(1-t_g)(1+r)^{-\alpha}CG$ to $(1-.67t_g)(1+r)^{-\alpha}CG$, reflecting the fact that average capital gain per return is about \$3,000, so that approximately two-thirds of all gain would remain taxable. The exclusion would reduce the cost of capital by 2.1%, raising 1977 stock by 0.7%.

Implied revenue gain was reduced by an initial impact loss equal to \$1,000 per return times the number of returns reporting capital gains in each AGI class times

the marginal tax rate associated with each class.

4. Reduction of normal corporate tax rate from 22% to 20% (with no change in surtax).

This proposal would lower the tax rate for all corporations by 2% from a weighted average of 46.3% to 44.3%. Incorporating this change in the investment equation led to a 1.2% reduction in the overall cost of capital, and a 0.4% increase in the 1977 stock.

In calculating the resulting revenue gain, the marginal tax rate on capital income was lowered to reflect the lower rate on corporations. Further, an initial impact loss of 2% of taxable corporate income offset part of the gain.

5. Reduction of surtax rate from 26% to 22% (no change in normal tax rate or

surtax exemption).

This provision would lower from 48 to 44% the marginal tax rate on the 93.6% of taxable income going to corporations with taxable income exceeding \$25,000. Thus the weighted average corporate rate would fall from 46.3% to 42.6%, indicating via the investment equation a reduction in the overall cost of capital of 2.2% and an increase in 1977 stock of 0.7%.

Calculation of the net revenue effect involved considerations akin to those mentioned above under proposal 4.

6. Increase in surtax exemption from \$25,000 to \$100,000 (with present normal

and surtax rates).

This change would lower the marginal tax rate from 48% to 22% on the 7.4%of net income between \$25,000 and \$100,000 reported on corporate returns with taxable income greater than \$25,000. This is equivalent to a 1.9% drop in the weighted average corporate rate. When included in the investment equation, this yielded a 1.2% reduction in the cost of capital, the same as for proposal 4.

7. Increase in investment tax credit from 7% with limitations to 15% for all Sec.

1245 property.

Currently, taxpayers may claim a 7% credit on Sec. 1245 property (equipment and certain husiness structures), subject to limitations on net income, useful life, and public utility property. The Treasury estimates that these restrictions lower the effective rate to approximately 5%. The bill would remove these restrictions, and raise the rate to 15% for all taxpayers. This would be equivalent to a 5.5% across-the-board reduction in the cost of capital, and would raise 1977 stocks by 1.8%.

The implied revenue gain would be reduced by a 10% increase in the credit applied to eligible investment which would have occurred in the absence of the change in

law. The Treasury estimates this loss at about \$4 billion per year.

8. Increase in Asset Depreciation Range (ADR) from 20% to 40%.

This provision would permit faster write-off of depreciable assets. The tax life for the asset used in the investment equation would be shortened from 9.5 to 7 years, with a concomitant increase in the annual depreciation deductions. The cost of capital would fall by 2.2%, and 1977 stock would rise by 0.7%, compared to present law

projections.

Private GNP would be boosted by higher capital consumption allowances as well as by the higher capital outlays and national income effects found with previous alternatives. For example, first-year depreciation deductions for the typical asset used in the investment equation would equal 14.3% of investment cost, rather than 10.5%. For the portion of investment which would have occurred even under present law, there would be an initial impact loss equal to the marginal capital tax rate (.33) times the increase in depreciation deductions.

9. Optional capital recovery allowance.

This proposal would speed up write-offs to 5 years for equipment and 10 years for structures. Moreover, a full year's capital recovery allowance could be claimed in the first year, instead of the current half year's allowance. This would lower the

cost of capital by 5.2%, and raise the 1977 stock by 1.7%, relative to present law projections. Procedures for estimating effects on GNP and revenue would be the same as those of provision 8.

10. Combined effect.

Combining all of these provisions would remove domestic dividends and up to \$1,000 of capital gain per year per return from AGI, lower the weighted average corporate tax rate from 46.3% to 39.0%, raise the investment credit from an effective rate of 5% to 15%, and lead to adoption of 5- and 10-year write-offs for depreciable assets. It was assumed that all taxpayers would adoption according to the increased ADR; the latter therefore, is not included in the following according. following equation. The resulting investment equation would be:

$$I = \sum_{i=1}^{17} (1+r)^{-i}y[\operatorname{div}(1-t_i)(.45+.2) + (1-t_p)(.25+.1)] + (.45t_r + .25t_p) \sum_{i=1}^{5} (1+r)^{-i}D_i$$

$$+ (1+r)^{-i}(.45+.25)c \ \text{TTC} + (1-.67t_p)(1+r)^{-12} \ \text{CG} = 6.195y[.17(.61)(.65) + .67(.35)]$$

$$+ \{.45(.39) + .25(.33)\}(.797)I + .893(.7)(.7)(.15)I + \{1-.67(.21)\}(.257)(2.64)y \}$$

This results in a 16.2% reduction in the cost of capital, and a 5.4% increase in the 1977 stock.

It should be noted that the combined effects are less than the sum of the nine separate estimates. The principal reason is that certain combinations, such as lower corporate tax rates and more rapid write-off of depreciable assets, are partially offsetting.

STATEMENT OF MALCOLM R. LOVELL, JR., PRESIDENT, RUBBER MANUFACTURERS ASSOCIATION ON CAPITAL FORMATION AND FOREIGN SOURCE INCOME

Summary of Principal Points

Capital Formation

- 1. Tire manufacturing companies are in many ways representative of the entire rubber manufacturing industry and of all U.S. manufacturing companies generally.
- 2. In the past 10 years there has been an enormous increase in the corporate debt of tire manufacturing companies. Specific figures are given.
- 3. This increase has occurred because a large volume of capital investment was necessary to respond to certain major technological changes and the investment could not be financed out of internal funds generated through depreciation allowances and additions to retained earnings.
- An upper practical limit on corporate debt has now been reached by many tire manufacturing companies.
- 5. Unless major relief in corporate tax laws is forthcoming there are serious social and economic consequences ahead for the United States through the future investment-depressing effects of existing tax rules. Specific consequences regarding the tire manufacturing industry, as an illustrative industry, are discussed.
- 6. Tax legislation reform urgently recommended includes: adopting realistic depreciation rules, phasing out double taxation of corporate dividends, and establishing special investment incentives.

Foreign Source Income

- 1. Proposed changes in existing tax rules as applied to
 - a. DISC
 - b. So-called tax deferral on the income of overseas subsidiaries, and
 - c. LDC corporations
- are discussed individually and the existing rules strongly defended.
- 2. An RMA statistical study of major trade, employment and investment facts related to the operation of multimational tire manufacturing companies is summarized, and a copy of the 1972 study, plus 1973 supplement, is supplied.
- 3. The study establishes that U.S. national self-interest has been strongly served by the positive effects on U.S. employment, U.S. balance of payments, and U.S. investment decisions of the multinational tire manufacturing companies.

Mr. Chairman:

I appreciate the opportunity to appear today to discuss two tax subjects of great concern to RMA members. One is capital formation, which vitally affects all 180 RMA companies large and small. The second is treatment of foreign source income. These subjects are inter-related. I will devote most of my brief time, however, to discussing capital formation.

Capital Formation

You have heard excellent presentations from Secretary Simon, the NAM, the Chamber of Commerce, and others on the imperative need for a major revision in U.S. tax treatment of corporate income, capital gains, and the rewards of saving and investing if we are to redress some alarming developments and trends in our economy. Among these is the serious capital shortage facing U.S. companies. This shortage has arrived at a time when it has become evident that the formerly commanding position of U.S. industry internationally in technology and output per worker has suffered serious erosion because of a prolonged, inferior level of capital investment. Yet increases in investment levels are urgent also to help reduce our disturbingly high level of unemployment, and to cope with unpostponable demands placed on U.S. companies by the energy crisis, the environment crisis, and desirable but costly improvements in health and safety.

I will not try to restate the general arguments ably presented to you by others analyzing the underlying causes of the capital shortage facing U.S. industry, but I would like to bring the general case down to the specifics of our own industry. Specific cases make general principles easier to understand. For this reason I would like to discuss some of the recent, and foreseeable, effects on our industry of inadequate capital recovery rates, a decline in real corporate profits, and a sharply mounting corporate debt burden.

If time allowed, I could present information on all major segments of the rubber manufacturing industry but the tire manufacturing sector can serve as a convenient sample. It is a sector broadly representative in fact of all U.S. manufacturing companies. It does not enjoy any special tax advantages, it is not an industry whose profits are regulated by a government agency, its firms are in strong competition with each other.

In 1964, ten years ago, the dozen tire manufacturing companies that are presently members of RMA had an aggregate ratio of debt-to-equity of 33%. In that year their corporate debt totaled \$860,000,000, while stockholders equity as reported to shareholders in the 1964 annual reports totaled \$2,632,000,000. By five years later the debt-to-equity ratio had changed profoundly. From the 33% level in 1964, it had mushroomed to 56% by 1969. By 1974, another five years later, the debt-to-equity ratio had mounted to 64%. Over the 10 years, total corporate debt expanded 400%, reaching \$3,313,000,000 in 1974, while stockholders equity in the period grew only 200%, to \$5,181,000,000. In recent years, were it not for heavy reliance on off balance sheet financing of important debt items, such as unconsolidated joint ventures and captive finance

companies, plus an unprecedented use of lease arrangements, last year's 64% ratio of debt-to-equity would have been strikingly higher.

The basic reasons for this change are (1) a high level of capital improvements has been required of all tire manufacturing companies in the past 10 years to stay abreast of major technological changes implemented by U.S. or by foreign competitors, and (2) the investments necessary could not be financed adequately out of internal cash funds generated by retained earnings and allowable depreciation. The most prominent technological changes I refer to were, first, the advent in the late 1960s of bias-belted tires, which represented a significant improvement in safety and durability over earlier bias-ply tires, and, second, the advent of radial tires, which significantly out-perform tires of earlier construction in safety, durability, and gasoline economy. Both shifts in production emphasis have transpired over a period of years but nevertheless have been characterized by the need to accomplish necessary investment activity in a relatively short period of time to respond to market demand and to stay abreast of competitors. The Census of Manufactures reports that in the 5 year period 1965-1969 the tire and inner tube industry spent \$1.1 billion for new plant and equipment. In the 5 year period 1964-1969 the increase in total corporate debt I mentioned a moment ago was \$1.8 billion. It is obvious how most of the debt was used.

Once a major technological change occurs and is reflected in the market's demand for an industry's products a manufacturer's existing plant and equipment can become obsolete very quickly. Like it or not, in most cases new investment must be made promptly by small as well as large manufacturers for the alternatives are either to go out of business

or henceforth serve a secondary market. One major tire company long in the field recently decided the cost of shifting to radial tire production could not be justified in terms of the foreseeable return on the amount of investment required and decided to join the now very extensive list of former tire manufacturers. The single greatest cause for the wave of corporate mergers and acquisitions that has taken place in recent years throughout the United States is not to be found in some Machiavellian theory of corporate empire-building but in the basic rule that if the shareholder's rate of return on investment is not adequate a transformation of some kind will eventually take place.

The shift to emphasis on radial tire production is still in progress. It is not a technological change easily managed. Altogether new and expensive tire-building machines are necessary, more materials are required per tire, the labor input is 20 to 40% higher per tire, the amount of floor space required is four times greater per machine, and the machine itself turns out fewer tires per day. Radial tires compared with earlier tires are both more capital and more labor intensive. And this technological change has been launched at a time when the costs of both labor and capital in the United States have been at or near historic highs. Our tire manufacturing companies have not been able to finance either this transition or the earlier transition to bias-belted tires out of self-generated funds, or new equity funds. They have financed these transitions by going heavily into debt.

Let me give you a set of illustrative figures. One of our companies, the one with the lowest current ratio of debt-to-equity, which means that in past years it has been among those most able or determined to finance capital investments out of self-generated funds or new equity

issues, in 1964 undertook \$72,000,000 of capital improvements. In that year because it had \$48,000,000 of additions to retained earnings and generated \$54,000,000 in depreciation reserves it could finance the 1964 improvements internally. In 1974 the same company spent \$320,000,000 for capital improvements, but the combined total of its additions to retained earnings (\$96,000,000) and to the depreciation account (\$136,000,000) totaled only \$232,000,000, or some \$88,000,000 short of its needs. For this company 1974 has not been an unusual year. Over the 1964-1974 period this company's total debt burden has increased by as large a percentage as the industry average (400%), while its increase in stockholders equity has followed the industry average (200%). In short, there are no companies in the industry which have escaped the need to finance technological change through heavy increases in corporate debt.

The most important question for this Committee of course is not where tire manufacturers are today, but where they are going from here. Can tire manufacturers continue to finance necessary investment through further increases in debt? Are there harmful consequences ahead for the industry and for the consumers of its products unless corporate tax reform legislation occurs?

Our answer is that many companies have already hit the practical ceiling on corporate debt, and the others will soon, and that present and foreseeable investment demands on our industry of a heavy nature simply cannot be financed by further debt increases. Among the practical consequences are that completion of the industry's shift to radial tires, particularly radial truck tires, is being delayed, any new technological change were it to occur will leave the industry vulnerable to major inroads in the U.S. market by foreign competitors, the

industry's possible contributions to increased employment in the United States are substantially less than they might be, and non-productive but socially important investments, to reduce U.S. energy dependency on foreign oil, or undertake environmental or worker safety improvements, etc., may be unmanageable if investments of magnitude are required.

Capital investments to produce radial tires have been concentrated to date in the production of radial passenger tires. Not only is necessary investment incomplete to cope with the strong demand for radial passenger tires, but major investments by U.S. companies have not yet occurred to achieve substantial production of radial truck tires. The market demand for truck radials is strong, and is presently being served largely by foreign manufacturers. It is expected that the new productive capacity of U.S. manufacturers in passenger radial tires will substantially reduce the 8-year old U.S. deficit trade balance in tires, which in 1973 reached \$410 million in unmounted passenger and truck tires. For U.S. companies to complete the transition to radials and enter the truck radial tire field to an equally large extent heavy additional investments will be necessary. Present corporate debt burdens if a long period of strong market expansion was clearly ahead might not act as a restraint on some of our companies to incurring the necessary amount of additional debt. But we are presently in a period of sharp industry recession, and the size of corporate debt is clearly difficult for many of our companies to manage. Despite lower sales, debt service payment obligations have of course continued and have put severe pressure on corporate profits. All industries whose capital demands have for a substantial period exceeded their ability to generate internal investment funds must eventually encounter the practical ceiling on corporate debt. Once the

ceiling is reached there are critical economic consequences that follow.

These become apparent whenever a recession occurs or whenever the next major technological change occurs, for there is then no way the more seriously affected companies can survive.

As if the purely economic circumstances were not bad enough, substantial non-productive investment demands are also confronting tire manufacturing companies at this time. I refer to the expensive task of converting oil-fueled powerplants to coal -- which will cost our companies several hundred millions of dollars -- to attaining air and water environmental objectives, and reducing industrial noise levels thru plant engineering to 90 dBA. By official government estimates the latter goal, in the process of being mandated by OSHA, will cost the rubber manufacturing industry \$500 million over a three-year period. We are also faced with important investment demands to comply with the product regulation standards of an increasing number and variety of agency rules. Looking upon the tire manufacturing industry as a reasonably typical U.S. manufacturing industry, the day is not too distant when we will no longer be able to respond affirmatively to the accumulated investment demands being placed on us. Congress must take timely action now to reverse the investment depressing financial trends its laws have set in motion or there will be grave economic and social consequences for the entire country.

In regard to specific recommendations for legislation, there are many constructive proposals that have been put forward by others. I would like to comment generally on the urgent need for major tax reform in three areas in particular: our inadequate allowances for depreciation, double taxation of dividends, and the necessity for special investment incentives for sometime to come.

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The "useful life" concept of depreciation allowances is a disasterous burden for American business and for the U.S. economy. This is because: (1) the concept fails to take inflation into account, and as a result provides a level of reserves grossly inadequate for replacing even worn-out machinery, let alone providing new capacity; (2) the concept likewise fails to take adequate account of the presence of rapid technological change, which often obsolesces plant and machinery far more quickly than industrial use; and (3) the system fails to take account of the accelerated depreciation allowances of our principal competitor nations, placing American business in an impossible position from which to maintain the kind of lead in technology and productivity necessary in international commerce to shoulder the higher cost of labor in the United States. This Committee has before it a proposal to establish a standard 5-year depreciation period for machinery, and 10-year period for plants, sponsored by Congressman Waggonner and other Committee members in H.R. 7543. Regrettably this proposal would still leave U.S. companies at a disadvantage vis-a-vis our major foreign competitors. Although the proposed reform is too modest, we endorse it as an important step in the right direction. We would urge as a sensible amendment an optional one-year write off period for pollution control, and other government-mandated investments generally.

Among the many harmful consequences of prolonged double taxation of corporate dividends at high tax rates have been, one, a drying up of new equity investment funds, two, an intensification of the pressure on corporations to pursue mergers and acquisitions as aids to profitability and, three, a constant drift into higher levels of corporate debt to finance capital improvement programs. Our double taxation system is

clearly punitive toward stockholder investment capital, and through forcing debt financing of investments has produced an increasingly dangerous degree of financial instability among U.S. corporations. To correct these evils, and because American companies cannot continue financing capital improvements through debt, we strongly endorse a prompt phasing out of the double taxation of dividends.

It would be comforting if Congress could institute basic reforms restoring health and sanity to the financing of our further economic growth and allow these reforms to operate gradually. Unfortunately, there is too much that needs undoing to pursue a leisurely course. A high level of investment activity in new plant and equipment is necessary to exit from the present recession, to increase industrial employment levels, prevent inroads by foreign companies in the established markets of U.S. manufacturers, restore the U.S. technological lead in numerous industrial areas, and carry out a national program for surmounting the energy crisis and realizing accumulated social objectives of great importance. For some time, a stimulus to investment activity above and beyond merely rational tax laws will be necessary. For this reason, we strongly endorse proposals to establish a permanent 12% investment tax credit, on an expenditure basis, without limitations on tax liability.

Foreign Source Income

The other subject of great importance to RMA members before the Committee at this time is the future tax treatment of foreign source income. Some of the radical proponents of change in this area would impose double taxation on the foreign earnings of U.S. multinational corporations by repealing the foreign tax credit. Proposals receiving a more

serious audience are less drastic but would be equally objectionable in their consequences. Among suggested changes which we find particularly objectionable are:

- elimination of the right to defer payment of income taxes on 50% of DISC profits from export sales,
- 2) elimination or reduction of so-called tax deferral on the income of overseas subsidiaries of U. S. corporations, and
- 3) a requirement for grossing up dividends from LDC corporations to determine U.S. income and foreign tax credits.

I mentioned earlier that the capital formation and foreign source income subject-matters are inter-related. This is true because existing foreign source income tax rules, including DISC rules of the last three years, though adopted for altogether different and very sound reasons, have been utilized to provide U.S. corporations with critically needed cash funds for domestic purposes which would otherwise have been unavailable because of the low rate of capital recovery under U.S. corporate tax laws. The domestic purposes I refer to have been to sustain corporate liquidity and carry out investment programs.

The figures reported by the Treasury Department make out a strong case for concluding that the tax rules for DISC corporations have clearly fulfilled their principal 1971 Congressional objective: to stimulate U.S. exports and related investment. Since the 50% deferral right is available only on conditions that involve use of 95% or more of the deferred income on export-related inventories, equipment, etc., it is highly likely that DISC corporations have achieved a greater increase in export volume than other U.S. businesses because of existing

DISC rules. There is no reason whatsoever to abandon this successful program and particularly so long as foreign countries have far greater export incentives. Moreover, until major relief is given to U.S. corporations in the rate of capital recovery, the DISC deferral right should be maintained for the independent reason that it is one of relatively few corporate tax rules helping to alleviate the serious corporate short-fall of funds caused by our basic capital recovery laws.

The carefully constructed U.S. tax rules generally governing the income of foreign subsidiaries of U.S. companies have been a target of misguided reformers for several years inspired by fallacious notions of how these rules work and their consequences for U.S. trade and employment. In December 1972 RMA published a statistical study on this subject for the years 1964-1971, entitled "The Role of Multinational Corporations in the Tire Manufacturing Industry." I attach a copy of the 1972 study, plus a statistical supplement prepared in 1973. The conclusions of that study are as valid now as they were initially. We will supply the Committee shortly with a statistical supplement for 1973 and 1974.

Among the conclusions of the RMA study were:

1) Foreign subsidiaries of U.S. tire manufacturers do not produce any significant volume for the U.S. market. In 1971 for example, a typical year, imports from foreign subsidiaries constituted 6/10ths of 1% of the U.S. replacement tire market. Only 1.3% of the total production of all U.S.-owned tire manufacturing plants abroad was shipped to the United States in that year. Foreign tire manufacturing subsidiaries have been established to serve overseas markets, not to displace U.S. production.

- 2) The result of serving overseas markets through overseas tire manufacturing subsidiaries has not been a reduction in U.S. exports, but an increase in U.S. exports, consistent with the general link in many fields between U.S. exports and the presence abroad of U.S.-owned subsidiaries. Moreover, the growth of U.S.-owned overseas tire manufacturing plants has not been financed by a heavy outflow of U.S. capital. On the contrary, remittances to the U.S. of dividends, royalties and other income from abroad have vastly exceeded net capital outflows in each year. The U.S. balance of payments has benefitted handsomely from the establishment of overseas tire manufacturing facilities by U.S. companies and through the general operation of U.S. multinational tire companies. Our study concluded that in the reasonably typical year of 1971, for example, a positive contribution to the U.S. balance of payments of \$347.7 million was made by the five U.S. multinational tire manufacturing companies.
- 3) New investment by the multinational companies has not been tilted towards their overseas facilities but towards domestic facilities. Throughout the eight year period studied, domestic investment was 70% of total manufacturing investment, and employment in U.S. plants grew by nearly 20,000 jobs. It is important to note that the net earnings from overseas operations helped to finance new U.S. investment and the creation of new jobs in the United States, not the other way around.

Many of the proposals before this Committee to change U.S. tax rules on foreign source income, in particular to require payment of U.S.

taxes on the current income of overseas subsidiaries without regard to whether such income has been remitted to the U.S. parent, are punitive proposals that simply make no sense from any rational standpoint. The existing rules are not only sound in principle but have made positive contributions to the overall interests of the United States in our balance of trade, our balance of payments, and U.S. employment. Elimination of deferral would unwisely increase the tax burden on U.S. corporations and drain this amount of corporate investment funds from U.S. investment projects.

We would also like to state our strong objection to a proposal to increase taxes on corporate income from Less Developed Country corporations by requiring grossing up of dividends and changing tax credit calculations. The present rules serve as a mild encouragement to investment in developing countries, in furtherance of national foreign policy and humanitarian objectives. The changes proposed would not only eliminate a mild incentive but, in combination with the higher risks present in LDC projects, would establish a disincentive to invest in countries with a great need for foreign capital to improve living standards. We believe these proposed changes are clearly objectionable. They would strike at corporations that have invested in LDCs in good faith and at friendly countries which will continue for many years to need foreign seed capital for their economic progress. American business can, and has, provided this seed capital on terms of mutual benefit to the United States and host countries. A continuation should be encouraged, not discouraged.

In short, we strongly recommend against ill-considered changes in existing tax rules governing foreign source income.

Statement of

THEODORE F. BROPHY
President, General Telephone & Electronics Corporation

on behalf of the

UNITED STATES INDEPENDENT TELEPHONE ASSOCIATION*/

Three Changes in the Tax Laws Are Necessary To Enable Telephone and
Electric Utilities To Finance Growing Construction Requirements
and To Strengthen Their Capital Structures Which Have Become
Dangerously Overburdened with Debt

I Introduction

The ability of the telephone and electric utilities to provide adequate services to the U.S. public is being undermined by serious long-term financial problems, while at the same time, the demand for services continues to require extremely large capital expenditures.

The United States Independent Telephone Association (USITA) represents the Independent (non-Bell) segment of the telephone industry in the United States. The Independent telephone industry consists of 1,641 telephone operating companies servicing over 25 million telephones through 11,048 exchanges in over one-half of the served geographic areas of the nation. A map showing Independent-served areas of the United States and a state by state tabulation of Independent company statistics are attached as Exhibits A and B. These companies, together with the operating companies of the Bell System, provide exchange and interexchange telecommunications service through the integrated facilities of the telephone network.

Specifically, the telephone and electric utilities have been financially weakened by a combination of factors, including record inflation, high interest rates, seriously strained debt capacity, and basic inequities in the Federal tax laws. The recent economic recovery serves only temporarily to mask the long-term problems utilities face in adequately funding construction programs required to meet future demands for communication and power services.

In considering tax legislation, Congress should not focus solely on the electric utility half of the utility financing problem.

Telephone and electric utilities look to a common financial market for their large external requirements. To strengthen only electric utilities through tax relief would disadvantage telephone utilities as the other major competitor for funds in the utility financing market, thereby driving up telephone utilities' cost of capital and ultimately prices to consumers. Solving the financial problems of all utilities will encourage employment, and it should be noted that telephone utilities employ nearly twice as many employees as the electric utilities.

Telephone and electric utilities have unique financial characteristics and long-term financing problems requiring solutions beyond those addressed to capital formation generally. Prompt solutions are needed because of the large amounts of capital these utilities must raise, because their regulated prices have not been permitted to keep pace with inflation, and because of the essential nature of the public service they provide.

The first step toward alleviating the plight of utilities should be the prompt and permanent removal of basic inequities in the tax laws which bear particularly hard on the ability of telephone and electric utilities to attract capital.

Congress should:

- Permanently increase the investment tax credit (ITC) to 12% for all businesses, equalizing the utility and non-utility ITC rates, and remove the 50% limitation;
- Defer taxation of automatically reinvested dividends of utilities, treating them as stock dividends; and
- Allow a corporate tax deduction by utilities for dividends paid on designated new issues of preferred stock.

These measures are directed to:

- (a) Removing inequities in the tax laws which encourage consumption over investment and which favor debt over equity;
- (b) Restoring the financial integrity of utilities and thereby helping to stabilize the financial markets generally; and
- (c) Encouraging construction and employment, reducing the cost of capital and holding down the cost of services to the consumer.

II Telephone and Electric Utilities Have Common Financial Problems

(A) Large Capital Outlays Are Needed To Meet Demands for Service

Long-term demands for service require large, growing, and continuous capital outlays by the utility industry. Annual

expenditures were approximately \$22 billion in 1970, increased to \$32 billion in 1975, and are estimated to reach \$54 billion by 1980 (Chart 1). The utility industry is concerned about the availability and price of funds to support these necessary expenditures. This concern will intensify as the economy recovers and the competition for and cost of funds increase.

(B) Increasing Reliance on Borrowing Is No Longer Practical

Largely because of the bias in the tax laws favoring the issuance of debt rather than equity, the utility industry utilized a disproportionate amount of debt to fund its rapidly growing construction expenditures from 1965 through 1975. Key indicators of financial strength now show that telephone and electric utilities are virtually precluded from financing their future construction requirements by further increasing the proportion of debt in their capital structures. The level of debt of independent telephone utilities at year end 1975 was 56% of total capitalization, slightly greater than that of electric utilities (Chart 2). The important fact is that both telephone and electric utilities have about reached the practical limit of their ability to increase leverage because of indenture restrictions, the need to protect bond ratings, or the reasonableness of risk that security holders can be expected to assume. Because of the acute nature of the overall debt problem, many utilities, both telephone and electric, have been forced to sell large amounts of new common stock below book value.

The adverse consequences of the extensive use of debt have been magnified by the rapid increase in interest rates during

the period 1960 through 1975. Interest rates on "A" rated utility bonds increased from 4.8% in 1960 to 10.1% in 1975. Although there has been a modest cyclical decline in interest rates recently, the secular trend of long-term interest rates remains upward (Chart 3). Because of anticipated future inflation, long-term interest rates are expected to remain far above historical norms. As a result, the utilities will have to refinance the debt sold prior to the mid-sixties at two-to-three times the original interest rates, significantly raising the imbedded cost of capital.

Extensive use of debt and the escalation of interest rates has caused a dramatic erosion in the interest coverage of utilities. Average pre-tax interest coverage for both independent telephone and electric utilities fell to approximately three times in 1974-75, as compared to four to six times a decade ago (Chart 4). This decline in the coverage has reduced the credit worthiness of most utilities and increased the risk to investors. During the period 1971 through 1975, Standard & Poor's downgraded the bond ratings of 104 public utilities while upgrading only 37. As a direct result, utilities have found it more difficult and more expensive to raise needed capital. In addition, most utilities are prohibited by indenture limitations from issuing additional long-term debt when pre-tax interest coverage falls below two times.

The overall financial deterioration of telephone and electric utilities, as evidenced by extensive use of debt, sales of common stock below book value, need to finance at

high interest rates, erosion in interest coverage, and downgradings of securities, ultimately leads to higher prices to consumers.

(C) Capital Intensity

The financial problems of utilities are further magnified by their capital intensive nature. Independent telephone and power utilities invest nearly 5 times as much as the average manufacturer for each dollar of annual sales (Chart 5). Therefore, utilities must rely far more heavily on external financings than industrials.

(D) Competition for External Capital

Telephone and electric utilities, which account for a large share of the private external capital financing in the U.S., compete directly with each other, and with all others, including the Federal government, for the limited amount of available capital. Because of large capital needs, strained debt/equity ratios, and reduced credit worthiness, utilities find themselves disadvantaged competitors in the intensely competitive financial markets.

(E) Utility Employment

In addition to being capital intensive, the utility industry is one of the largest employers in the United States. Within this industry, telephone utilities employ approximately twice as many people as electric utilities and account for approximately 55% of the total employment in the industry (Chart 6).

(F) Solutions Required

The complex financial problems facing all utilities require prompt action by Congress. Permanent removal of basic inequities in the tax laws will promote restoration of the financial health of utilities and help attract funds necessary for required construction, employment and service to the customer.

Tax Credit and Facilitate the Raising of Common and Preferred Equity for Telephone and Electric Utilities

To alleviate the financial problems facing telephone and electric utilities, to remove basic inequities in existing tax laws, and to stimulate the economy and employment, Congress should promptly adopt the following three tax proposals:

- Permanently increase the investment tax credit (ITC) to 12 percent for all businesses, equalizing the utility and non-utility ITC rates, and remove the 50 percent limitation on the credit;
- Defer taxation of automatically reinvested dividends of utilities, treating them as stock dividends (IRC § 305); and
- Allow a corporate tax deduction by utilities for dividends paid on designated new issues of preferred stock (IRC 8 247).
- (A) The Investment Tax Credit (ITC) Should Be Made Permanent at 12 Percent for All Businesses

There is little question that the ITC has proved to be an effective tool for fighting recession, unemployment, and inflation. A permanent 12% ITC for all businesses, including telephone and electric utilities, will immediately provide needed cash flow to strengthen capital structures and to improve interest coverage. Private and governmental studies indicate that the long-term effect of ITC on tax revenues is favorable, because an increased, permanent ITC will directly and indirectly stimulate tax revenues by providing jobs and improved earnings.

Increasing the ITC clearly provides a strong stimulus to investment. Historically, there is a strong correlation between changes in new fixed investment and changes in total employment (Chart 7).

The recent increase in the ITC for all industries to 10 percent from the prior 7 percent for industrial companies and from a discriminatory 4 percent for public utilities was a step in the right direction, but it was limited to two years. The increased ITC must not be allowed to expire as scheduled at year end 1976 and utilities returned to the discriminatory 4 percent level. Furthermore, the long-term benefit of the ITC is greatly reduced by an on-again, off-again policy, particularly in the case of utilities, which require long lead times in construction planning.

Similarly, the relaxation of the 50 percent limitation on the credit in Section 46 of the Internal Revenue Code should be continued. Otherwise, the benefits of the increased rate will be denied to those less profitable businesses with the highest capital needs.

The legislation should continue to require normalization for utility rate-making purposes.

(B) Stockholder Reinvestment of Utility Dividends Should Be Taxed in the Same Way as Stock Dividends

Stock issued under automatic dividend reinvestment plans of utilities should be treated for tax purposes under Section 305 of the Internal Revenue Code just as though it had been received as a stock dividend. Under this proposal, utility stockholders would be permitted to reinvest their dividends in newly issued stock of the dividend-paying corporation without being penalized by having to pay a tax on dividends they never actually receive.

Investors in utility stocks traditionally seek a high dividend yield. As a result, the dividend payout of most utilities ranges between 60% and 70% of net income, a much higher rate than traditionally paid by industrial firms (Chart 8). Because of the nature of their investors, utilities do not have the same degree of flexibility in dividend payouts as do most industrial firms. The importance of dividends to utility investors can be illustrated best by the experience of Consolidated Edison when it cut its dividend payment*/ and General Public Utilities when it unsuccessfully attempted to switch from cash to stock dividends.**/ Since cash dividends are taxed to the recipient at ordinary income tax rates, the tax laws in effect discriminate against high dividend-paying

Dividend declared on July 23, 1974.

^{**/ &}quot;A Case For Dropping Dividends," Fortune, June 15, 1968, page 181.

companies (e.g., utilities) while favoring companies which retain more of their earnings for internal growth. This discrimination against investors in high dividend-paying utility stocks results in a higher cost of capital, a cost that is ultimately reflected in higher rates to consumers.

The adverse effects of this discrimination would be reduced and the ability of utilities to obtain equity capital would be materially enhanced if investors had the option of reinvesting dividends under automatic dividend reinvestment plans without a tax penalty. Stock acquired through reinvestment should be treated for tax purposes as though it had been received as a stock dividend.

Another advantage of this proposal is that dividend reinvestment plans have proven to be popular particularly among utility investors. Consequently, many utility companies have already established these plans. As an illustration of the success of these programs, participation in GTE's Dividend Reinvestment Plan has increased from 11% of registered holders in 1972 to nearly 20% in 1976. The amount of money invested annually by participants has increased about threefold, from \$5 million in 1972 to an estimated annual rate of more than \$15 million in 1976 (Chart 9).

These plans are particularly well suited to the needs of the small investor, because they provide a convenient, systematic and inexpensive means of investing. For example, participants in GTE's Dividend Reinvestment Plan purchase new shares without paying brokerage commissions or service charges. The popularity among small investors is illustrated in the case of GTE's plan wherein 74% of the participants own 100 shares or less.

Conversely, participation among investors with large shareholdings is modest (Chart 10). The increased and broad-based participation provides an important source of new equity capital to the company.

The adoption of this tax proposal would significantly increase participation in existing dividend reinvestment programs and induce other utilities to establish similar programs for their shareholders. It would enhance the attractiveness of high dividend-paying utility stocks for prospective investors interested in capital appreciation, while retaining investment appeal for shareholders seeking cash dividends. The increased equity investment would help strengthen the capital structure of the utility industry and help provide funds required to increase capital expenditures and employment.

The net revenue loss of this proposal to the Treasury would be small compared to the large benefits to be derived from the expanded economic base including jobs created both directly and indirectly.

(C) <u>Utilities Should Have the Option of Offering Designated</u>

New Issues of Preferred Stock with Dividends Tax Deductible to the Issuer

The ability of the utilities to at least maintain their debt/equity ratios by selling equity is severely hampered by discrimination in the tax laws which allows the deduction of interest on debt but does not allow the deduction of dividends on equity. The difference in tax treatment is particularly indefensible with respect to preferred stock which has most of the characteristics of debt, and which is a commonly used

vehicle for utility financing. The discrimination should be removed by making dividends on designated new issues of preferred stock deductible by the utilities.

Enactment of this proposal would make an important and substantial contribution to the ability of utilities to raise needed equity capital and to improve or at least maintain their debt-to-equity ratios. The market for preferred stock would be immediately broadened because the issuer could economically pay a higher dividend rate than is currently available on most fixed income securities of similar quality. Utilities not electing this new alternative could continue to sell, more advantageously, the traditional preferred stock to institutional investors who would continue to utilize the 85% dividend received deduction (IRC § 243). Indeed, some utilities might offer both types of preferred stock.

This proposal would cause a minimal loss of tax revenue, since the new preferred would not have the 85% dividend preference of the old preferred and could be used extensively as a substitute for debt, interest on which is already deductible. Therefore the resulting tax revenue loss would be less than the difference between the interest rate and the preferred dividend rate since both interest and dividends would be fully taxable income to the recipients. Utilities with adequate debt capacity would not find this proposal economically advantageous to use, thus further minimizing the potential tax loss to the Treasury.

Conclusion

The long-term demand for utility services requires large capital expenditures. In the past, utilities have depended heavily upon the

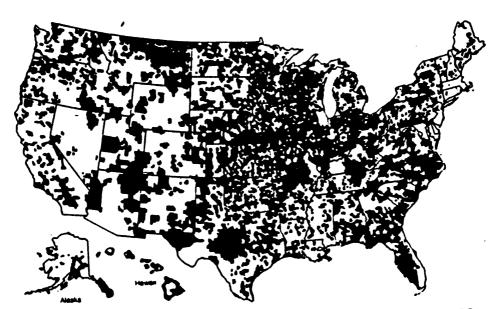
issuance of debt securities to finance capital requirements. They can no longer depend as heavily upon this source of capital in the future because they have virtually reached the practical limit of debt capacity. The overall deterioration of the financial strength of utilities is reflected in the erosion of interest coverage, sales of stock below book value and the numerous downgradings of utility securities. These factors must ultimately be reflected in higher costs to the consumer.

Because of the importance of telephone and electric utilities to the health and growth of the economy, their financial deterioration calls for prompt action by Congress. Three changes in the tax laws are recommended which would help remedy the financing problems of utilities and also remove basic inequities in the tax laws:

- Permanently increase the investment tax credit to 12% for all businesses;
- Defer taxation of automatically reinvested dividends of utilities, treating them as stock dividends; and
- Allow a tax deduction by utilities for dividends paid
 on designated new issues of preferred stock

Because all utilities face similar financing problems and compete directly with one another in the capital markets, and because the telephone industry employs over one-half the workers of the entire utility industry, it is imperative that tax legislation should apply equally to all utilities.

The enactment of these provisions will help telephone and electric utilities to attract needed capital at lower net cost thereby allowing them to provide required plant and equipment, stimulate employment, and operate more efficiently for the benefit of the public.

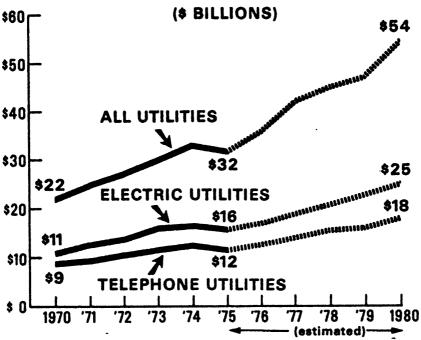


INDEPENDENT TELEPHONE COMPANIES -SERVE 51% OF THE LAND AREA OF THE UNITED STATES

INDEPENDENTS BY STATE Year End

STATE	COMPANIES	TELEPHONES	STATE CO	MPANIES	TELEPHONES
	1974	1974		1974	1974
ALABAMA	34	317,000	MONTANA	18	76,000
ALASKA	23	167,000	NEBRASKA	55	446,000
ARIZONA	•	47,000	NEVADA	4	319,000
ARKANSAS	35	122,000	NEW HAMPSHIRE	12	28,000
CALIFORNIA	26	3,338,000	NEW JERSEY	5	112,000
COLORADO	28	28,000	NEW MEXICO	•	81,000
COMMECTICUT	2	15,000	NEW YORK	60	1,155,000
FLORIDA	· 17	2,006,000	NORTH CAROLINA	32	1,401,000
GEORGIA	41	460,000	NORTH DAKOTA	21	118,000
HAWAII	1	545,000	OHIO	46	1,723,000
IDAHO	12	000,000	OKLAHOMA	42	223,000
ILLINOIS	61	1,447,000	OREGON	30	372,000
INDIANA	98	1,219,000	PENNSYLVANIA	63	1,533,000
IOWA	167	981,000	SOUTH CAROLINA	28	425,000
KANSAS	47	261,000	SOUTH DAKOTA	36	77,000
KENTUCKY	21	514,000	TENNESSEE	25	405,000
LOUISIANA	22	123,000	TEXAS	90	1,302,000
MAINE	20	00,000	HATU	11	26,000
MARYLAND	2	4,000	VERMONT	8	30,000
MASSACHUSET	TS 3	3,000	VIRGINIA	26	676,000
MICHIGAN	62	754,000	WASHINGTON	36	572,000
MINNESOTA	96	623,000	WEST VIRGINIA	14	118,000
MISSISSIPPI	23	\$7,000	WISCONSIN	116	826,000
MISSOURI	50	611,000	WYOMING		16,000
			TOTAL:	1,641	25,826,000

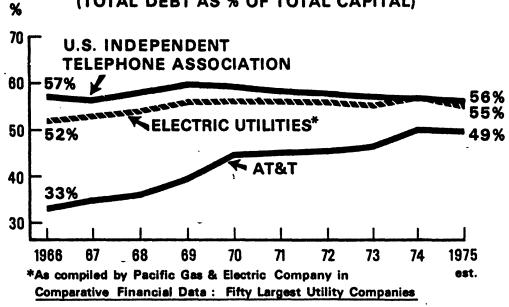
UTILITY INDUSTRY Expenditures for New Plant & Equipment



SOURCES: U.S. DEPT. OF COMMERCE DATA RESOURCES, INC. KIDDER PEABODY U.S.I.T.A. AND AT&T

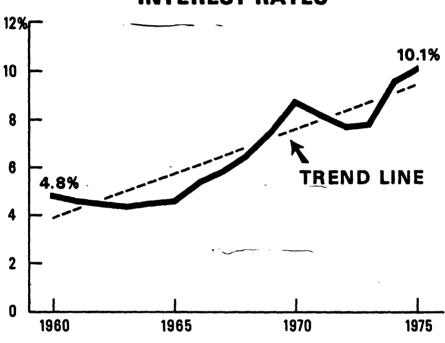
COMPARISON OF LEVERAGE Telephone and Electric Utilities

(TOTAL DEBT AS % OF TOTAL CAPITAL)



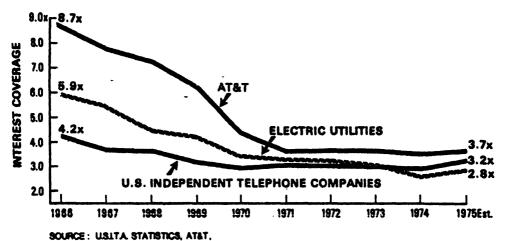
SOURCE: AS ABOVE: AT&T STATISTICAL REPORT, AND U.S.I.T.A. STATISTICS

LONG TERM "A" UTILITY INTEREST RATES



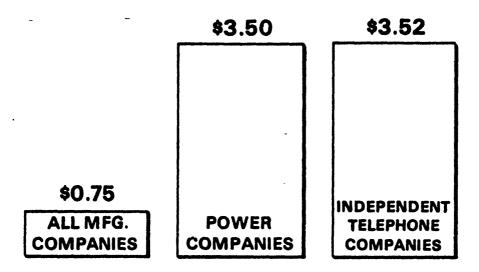
SOURCE: MOODY'S INVESTORS SERVICE

COMPARISON OF PRE-TAX INTEREST COVERAGE Telephone and Electric Utilities



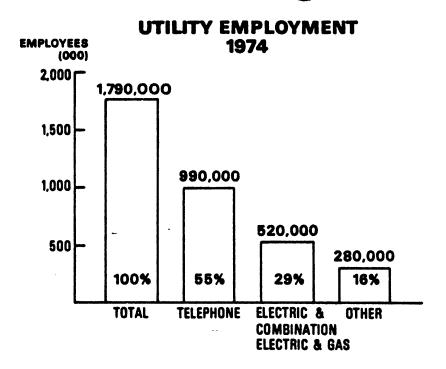
PACIFIC GAS & ELECTRIC'S 29 LARGEST STRAIGHT ELECTRICS IN COMPARATIVE FINANCIAL DATA: FIFTY LARGEST UTILITY COMPANIES

ASSETS REQUIRED TO GENERATE ONE DOLLAR OF SALES REVENUE



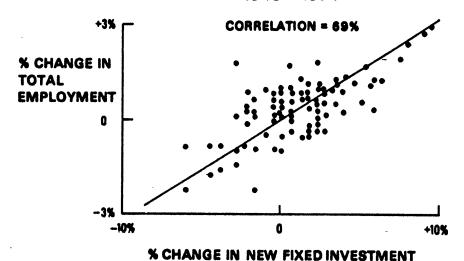
- SOURCES: FORTUNE 500 -- MAY 1975
FORTUNE 50 -- JULY 1975
U.S. INDEPENDENT TELEPHONE ASSOCIATION

CHART 6



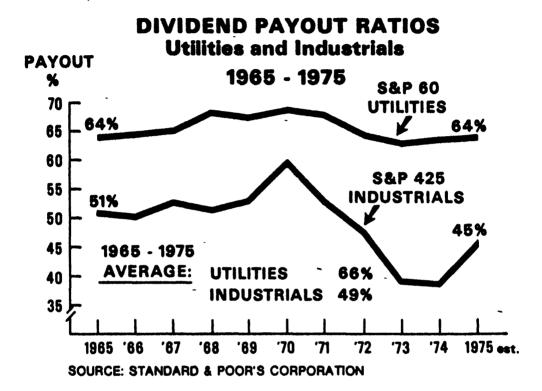
SOURCE: U.S. DEPARTMENT OF LABOR

CORRELATION BETWEEN CHANGES IN INVESTMENT AND EMPLOYMENT * 1948 - 1974



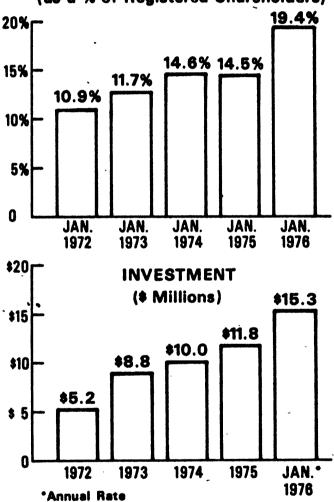
* resonably adjusted total U.S. non-agricultural private employment and U.S.

SOURCE: U.S. DEPARTMENT OF COMMERCE



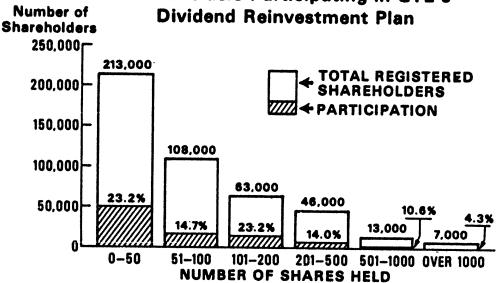
GTE DIVIDEND REINVESTMENT PLAN

PARTICIPATION (as a % of Registered Shareholders)



GTE SHAREHOLDERS

Total Registered Shareholders Compared to Shareholders Participating in GTE's



NOTE: Participation as a percent of total registered shareholders = 19.4%

74% of participants own 100 shares or less

STATEMENT OF THE NATIONAL ASSOCIATION OF MANUFACTURERS, SUBMITTED BY CLIFF MASSA, III, DIRECTOR OF TAXATION

SUMMARY

The National Association of Manufacturers encourages the Congress to take affirmative action to begin to correct the long-standing tax bias against the capital formation sector. We believe that positive steps to reduce tax obstacales to capital formation are essential to meet the capital shortage, create productive new jobs, and thereby help to solve, not AGGRAVATE, the problem of large federal budget deficits.

We recomment the following tax objectives:

1. To help small business cope with its severe problems of capital generation, a permanent extension of the corporate surtax exemption level at \$50,000 in 1976 and phasing up to \$100,000 by 1981;

2. To help productive investment generally, a permanent extension of the investment credit at no less than 10 percent for all taxpayers with no basis adjustment, a liberaliza-

tion of the 50 percent income tax limitation and an end to the 3-5-7 rule;

3. To better enable industry to meet governmentally-mandated environmental quality standards with minimum disruptions of productive investment programs, allow a full deduction for capital expenditures on qualified pollution-control facilities in the year the costs are incurred;

4. Modernize our cost recovery system to more fully reflect obsolescence as well as replacement cost and make it fully competitive with treatment offered overseas,

through a capital recovery allowance system such as proposed in H.R. 7543;

5. To infuse the whole corporate sector with needed cash flow and to help correct the long-standing tax inequity of double taxation of corporate level for dividends paid, eventually phasing up to a 100 percent deduction; and

6. An across-the-board reduction in corporate and individual tax rates.

CONTENTS

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- I. Need for a Better Climate for Capital Formation Financial Constraints on Private Sector Investment Capital Needs and Savings Potential
- II. Specific Tax Policy Recommendations
 1. Rate Structure

- 2. Investment Credit
- 3. Full Deduction for Pollution-Control Facilities

4. Capital Recovery Allowances

5. Tax Treatment of Dividends

APPENDIX A: Economic Impact of a Permanent 10% Investment Tax Credit

for all Taxpayers
APPENDIX B: Economic Impact of a Capital Recovery Allowance System, H.R. 7543

APPENDIX C: Initial Impact and Net Federal Revenue Estimates for Proposed Tax Revisions

The National Association of Manufacturers appreciates this opportunity to present its views on the most critical issue of tax policy and job creation. The Association represents 13,000 members primarily engaged in manufacturing operations and employing a majority of the industrial labor in the United States.

Our statement is divided into two parts: (I) discussion of capital formation and future capital "shortage" and (II) some specific tax policy recommendations to deal

with the situation as we see it.

The invitation for this statement requests an estimate of the impact of any longterm capital shortage on jobs, gross national product, and government revenues. Specific forecasts of economic sector impacts of a potential capital short-fall are, of course, very speculative. However, it is possible, and much more feasible, to assess the magnitude of the potential shortage itself and estimate the approximate economic effects of some specific tax proposals to deal with it. We have attempted to do this in part II of the statement.

I. NEED FOR A BETTER CLIMATE FOR CAPITAL FORMATION

During the last two years, capital formation in our economy again has become a critical concern. There has been an increased awareness within the business community, the Administration and Congress, and within the labor movement of the importance of capital formation as the seed corn for a productive economy.

This concern transcends most of the arguments over economic growth, the limits of natural resources and the environment. It recognizes that for the foreseeable future we are going to have to fuel the production process with increased amounts of net new investment just to stay even in terms of REAL PER CAPITA LIVING STANDARDS

and to improve upon current unemployment rates.

Forecasting private capital investment demands and available savings supply over, say, a ten-year period, is not a simple matter. Perhaps too much has been made of some attempts to aggregate investment "needs" by sector. But the basic point remains that all known forecasts agree that there will be very substantial capital requirements in the coming decade—not only to keep up some semblance of productivity growth, but to account for mandated environmental and personal safety standards and at least get a start on energy self-sufficiency. We can take as given that growth in investment demands over the next decade will be AT LEAST as large as the average annual increase in the 1965–1970 period. To our knowledge, no authoritative source has come to any different conclusion.

FINANCIAL CONSTRAINTS ON PRIVATE SECTOR INVESTMENT

Unfortunately, in the past twenty years there has been a dramatic deterioration in the financial structure of business that raises serious doubts about the ability of major portions of the corporate sector to finance their future capital requirements. This is a "known" fact, not a statistical exercise as to the future.

While there has been considerable documentation offered by others, the point bears

re-emphasis in some detail.

The change in private sector financial structure can be summarized by three phenomena: a sharp reduction in business liquidity, a substantial rise in the cost of

borrowing, and a growing difficulty in equity financing.

Non-financial corporate business has sharply increased the proportion of external funds in its financing operations. The ratio of external funds to internally-generated funds had increased steadily from 29 percent in 1950 to 85 percent in 1974. A similar trend is also seen in the declining ratio of internal funds to investment expenditures. In 1960 the ratio was 88.9 percent and in 1974, it was 64.7 percent.

INTERNAL FUNDS AS A PERCENT OF INVESTMENT EXPENDITURES — NONFINANCIAL CORPORATIONS (billions of current dollars)

-	Internal funds	Investment expenditures	Percent
1960	\$34.4	\$38.7	88.9
1961	35.6	36.3	98.1
19 62	41.8	43.6	95.9
1963	43.9	45.2	97.1
1964	50.5	51.6	97.9
1965	56.6	62.3	90.0
1966	61.2	76.5	80.0
1967	61.5	71.4	86.1
1968	61.7	75.0	82.3
1969	60.7	83.7	72.5
1970	59.4	84.0	70.7
1971	68.0	87.2	78.0
1972	78.7	102.5	76.8
1973	84.6	121.5	69.6
1974	81.5	125.9	64.7

As shown in the table above, the first half of the 1960's internal funds had financed on the average 94.6 percent of capital expenditures. (It was also during this period that plant and equipment expenditures had grown most rapidly.) Since then, the percentage of investment expenditures financed by borrowing for the period 1970–1974 had increased more than six times over that for the period 1960–1965.

In raising external capital, there has been increasing reliance upon debt. Debt-equity ratios for manufacturing companies have risen sharply since 1964. For example, for all manufacturing corporations in 1964, debt-equity ratios averaged 25.4 percent and only four industry groups of the twenty groups had ratios over 40 percent. By 1973,

the average had increased to 44 percent and sixteen of the twenty industry groups had ratios over 40 percent. An increase in corporate illiquidity is also seen in the ratio of total liabilities to net worth for nonfinancial corporations. In 1955, this ratio was .91. By 1974, the ratio had risen to 1.89. Furthermore, the proportion of liquid assets—that is, cash plus selected security holdings—to all corporate assets dropped from 15 percent to 9 percent between 1955 and 1974.

The cost of borrowing also has risen substantially with the increasing need for external

funds. In the 1947-1966 period, corporate borrowing rates on average remained under 5 percent and the after-tax return on invested capital was about 12 percent on average. Thus, a substantial additional return was offered for investing in risk situations. Now interest rates have risen to 10 percent and the return of capital remaines at about 12 percent. If the opportunity cost of capital expenditures is a 10 percent return with virtually no risk, why spend money to increase plant and equipment to earn an uncertain 2 percent additional return?

The increase in interest rates without a corresponding gain in the rate of return has resulted in the evaporation of the market for new equity issues. As interest rates rise, investors become more attracted to debt instruments, which guarantee fixed interest payments, than equity shares which offer no such certain return. Consequently, an increase in interest rates relative to the rate of return on equity constrains a firm's

ability to sell new equity issues.

During the five years from 1968-1972, new equity issues ranged from a low of 778 to a record high in 1969 of 1,792. Even in 1972, 1,400 issues were brought to market. For all of 1974, there were only 154 new issues. Moreover, for the last six months of 1974, there were only ten new issues which raised over \$1 million, and only six of these were for over \$3 million. The total amount of new equity funds raised for the year was \$3.1 billion compared with over \$13 billion in 1972.

A study by the New York Stock Exchange reports that, at current price-earnings ratios, a corporation must earn approximately 14 percent of new capital in order to maintain the earnings of existing shareholders. Chase Econometrics also predicts that the total return on equities would have to be in excess of 15 percent if new issues are to be competitive with other forms of financial instruments. Such high returns may not be attainable. Thus, many companies cannot issue new stock without

diluting the earnings of existing shareholders.

The increase in corporate illiquidity and rising capital costs has resulted in a sluggish performance in business investment (in real terms) since the mid-sixties. As shown in the table below, the period of 1960-1965 marked a high point in such investment but the ensuing five years, real growth fell sharply and in the early seventies nearly evaporated. If the estimated spending to meet environmental and safety standards is removed, real growth in 1970-1975 was negative.

PRIVATE FIXED NONRESIDENTIAL INVESTMENT

-	Billions of 1973 dollars	Average of annual changes (Percent)
1955	61.2	
1956	65.2	,
1957	66.0	1.6 (1955-60)
1958	58.9	
1959	62.9	
1960	66.0	
1961	65.6	
1962	70.9	•
1963	73.5	7.8 (1960-65)
1964	_ 81.0	
1965	95.6	
1966	106.1	
1967	103.5	
1968	108.0	3.0 (1965-70)
1969	114.3	
1970	110.0	
1971	108.3	
1972	116.8	
1973	131.3	0.8 (1970-75)
1974	127.5	
1975 (prel.)	112.4	

Note.—To minimize distortions due to last two periods ending in recission—1970 and 1975 comparison is based on average of annual change within the five-year periods. Source: The Economic Report of the President, February 1976. Table C-2, p. 172.

With the national goal of energy self-sufficiency and clean environment, investment requirements in the future will be enormous by any measure. Unfortunately, with internal liquidity at such a low level, with bond yields at an historically high level, and with equity financing virtually nonexistent, there is a real question whether business has the means and the incentive to meet the capital requirements of the future.

CAPITAL NEEDS AND SAVINGS POTENTIAL

The New York Stock Exchange has estimated that capital requirements in the private sector for the period 1974–1985 will amount to \$4.5 trillion and that, in the absence of any major new stimulus to saving, a capital gap of \$500 billion will be inevitable over the next decade. Several other organizations have launched similar investigations and have come up with the same conclusion as the NYSE. According to a General Electric study, the capital requirements of nonfinancial corporations will average \$312 billion a year during the years 1977 through 1980, compared with \$183 billion in 1974. If there is no change in the present tax law governing the rate of capital cost recovery and other aspects of federal tax policy, the GE economists predict a capital gap of \$50 billion a year, unless industry is to go even deeper into debt.

a capital gap of \$50 billion a year, unless industry is to go even deeper into debt.

Chase Econometrics has estimated that it would require a total of \$4.6 trillion investment over the next decade to return the rate of increase in productivity to the levels which were obtained in the 1947-1966 period. Chase also estimated that, given the present tax structure and policy, the total amount of savings will be around \$4.2 trillion. This results in a gap of \$400 billion, which coincidentally is the size of the additional revenues accruing to the government sector under a higher growth of GNP. Thus, if the federal government is willing to return this extra \$400 billion in revenues to the corporations, the economy will be able to generate enough investment to regain a level of growth in productivity of 3 percent per year.

As noted before, the estimates of gross private domestic investment needed over the next decade have generated lively debate and skepticism about the validity of the forecasts. In order to assess whether these numbers are realistic, we take simple trend extrapolations of constant-dollar investment using an annual growth of 3.5 percent for real investment and a rate of inflation of 5 percent per year, and obtain-\$3.9 trillion. When we assume higher rates of real growth (4 percent) and inflation (6 percent), the total amount of investment reaches \$4.5 trillion. Based on these extrapolations, it is not unreasonable to state that the capital requirements over the next decade will be about \$4-4.5 trillion. Similar to the studies cited above, most estimates fall in this range.

Of the more than \$4 trillion of estimated investment requirements, the broad energy sector (petroleum, gas, coal, electric utilities, synthetic fuels, and nuclear) will require the largest bulk outside of the housing and agricultural sector. The energy sector's cumulative investment requirements amount to \$824 billion, or 18.3 percent of the total according to the NYSE study. A detailed breakdown of total investment requirements by each industry group is shown in the table following. The importance of the energy sector can be found not only in terms of absolute dollar amounts but also in the annual rate of growth of its investment needs. Capital spending in the energy industry is expected to increase 13 percent per annum, while the overall average for all other industries will be 10 percent. In view of the nation's desire for energy self-sufficiency through increased supply of fossil fuels and the development of alternative sources, a vigorous investment demand by the energy industry is both expected and necessary. In fact, taking into consideration these large energy capital needs as well as the capital required to meet environmental goals, capital requirements for the future may be well above the simple trend extrapolation estimates cited above.

PROJECTIONS OF CAPITAL SPENDING BY SECTOR 1974-85

	(Billions of current dollars)	Percent of total
Plant and equipment spending	. \$2,568	57.0
Petroleum, gas, coal, synthetic fuels, and nuclear Electric utilities		9.4 8.9
Basic materials (iron and steel, nonferrous metals, stone, clay, glass, rubber, paper, and chemicals) Transportation and transportation equipment	. 328	7.3 5.0
Communications and service Other	772	17.1 9.3
Residential construction Agriculture and change in inventories	. 1,085	24.1 18.9
Total private domestic investment	4,503	100.0

Source: The New York Stock Exchange, The Capital Needs and Savings Potential of the U.S. Economy, September 1974.

While agreeing on the importance of capital formation, some economists contend that the economy will not be faced with a capital shortage. They acknowledge that our capital requirements will indeed be large, but argue that the amounts are not out of line with past saving and investment ratios in periods of high employment. Data Resources, Inc. has estimated the rates of interest that will be required to finance a \$4.4 trillion investment for the period 1975-1985. They predict the cost of financing

a \$4.4 trillion investment for the period 1975-1985. They predict the cost of financing will be high in 1980 to 1985, but conclude that the projected capital expenditures can be met without a shortage crisis. Several highly optimistic assumptions are critical to their conclusion: a moderate speed of recovery to generate large flows of saving, stable monetary policy, a reduction in the government deficits, and no severe inflation.

Similarly, according to a recent study by the Brookings Institution, capital formation needs through 1980 could be met if the federal government reversed its persistent budget deficits and shifted to a surplus position as the economy regained strength. The amount of the surplus needed was estimated to be about 1 percent of GNP if unemployment were reduced to 5 percent. They argue that, since this surplus is within the capabilities of our present fiscal system, special efforts to revise the present tax system would not be necessary to induce more savings in a high-employment tax system would not be necessary to induce more savings in a high-employment

economy.

This argument ignores how much business has been financially weakened by the events of the past decade and how this predicatment hampers future business growth. Even if it could be shown that the future investment requirements are in accordance with the past rates of investment, these numbers themselves say nothing of possible difficulties in meeting these investment requirements.

II. SPECIFIC TAX POLICY RECOMMENDATIONS

Tax policy certainly is not the only factor affecting the adequacy of capital formation in the private sector, but it can be critical at the margin and may well determine the success or failure of regaining a better productivity performance and achieving more satisfactory increases in REAL income for workers.

Congress obviously faces difficult choices right now when it comes to reducing tax obstacles to capital formation in the context of multi-billion dollar federal budget

deficits and still very worrisome inflationary potentials in the economy.

We believe the justification for reducing any taxes in periods of such substantial budget deficits to be simply the fact that estimated DIRECT revenue impacts as related to these tax proposals are not realistic figures—particularly in periods of remaining economic slack such as the present. When real investment is made and people are put back to work, or new jobs created, as a result of the tax changes recommended, the Federal income tax base will grow.

Where possible, therefore, we have obtained estimates of the feedback effect of proposed tax changes in terms of investment, employment, and the federal tax base

itself.

I) RATE STRUCTURE

It could be concluded that the best of all worlds in terms of a capital-conscious tax policy might be simply to reduce the basic corporate and individual tax rates. Indeed, there is much to say for such a program as the simplest and most desirable means of encouraging productive investment from an overall economic viewpoint.

However, we believe the economic and political realities preclude an across-the-board reduction in these rates now sufficient to accommodate the necessary investment encouragement for basic industries and industrial productivity. You can get more stimulus, per dollar of direct revenue cost, for investment in productive facilities through liberalized depreciation or investment credits or both than you can with general rate reduction. This is just the way the arithmetic works out.

Further, there are serious flaws in the tax structure—the penalty on equity investment and under-depreciation of physical assets—that would remain even with a substantial cut in corporate rates. We believe these problems need to be redressed in any case.

There is, however, one specific recommendation we would like to make for the corporate rate structure right now. We recommend that the corporate surtax exemption be increased from its present temporary \$50,000 level to \$100,000 permanently. This would be more responsive to the special problems of capital generation faced by small business that Congress recognized in part in the Tax Reduction Act of 1975.

We believe the case to be compelling to build on the recent action with a permanent \$100,000 exemption. To soften the direct revenue impact, the \$50,000 exemption could be extended for the rest of 1976 (and the additional \$50,000 phased in over a five-year period as under H.R. 2288 (Archer, R-Tex.). The full year initial revenue impact of a \$50,000 exemption (over \$25,000) in 1976 would be \$1.6 billion impact of a \$50,000 exemption (over \$25,000) in 1976 would be \$1.6 billion.

2) INVESTMENT CREDIT

Extending the temporary 10 percent investment credit on a permanent basis is an obvious, and easily-accomplished, step to help the capital investment situation. For maximum effectiveness of a 10 percent credit, there should be no basis adjustment and it should be made applicable to expenditures as they are actually incurred. A phased-in procedure for the latter was initiated by the Tax Reduction Act of 1975 for certain types of assets, but consideration should be given to accelerating or eliminating this phase-in and also allowing to all industry the liberalized limitations allowed the public utility sector under the 1975 act.

Depending on action on the limitations and timing of the qualification of expenditures incurred, the above recommendations would have relatively little initial revenue impact, but it is important for planning purposes and a stable investment climate to have a commitment to a permanent credit made now rather than at the end of 1976

when the present 10 percent credit is scheduled to revert to 7 percent.

In 1975, the NAM released the TAX IMPACT PROJECT REPORT which attempted to measure the overall economic consequences of various tax proposals by tying member survey results to an econometric model, in this case, the Data Resources, Inc. model. This project indicates that extension of the 10 percent credit on a permanent basis (even without the other recommended liberalizations) could result in an additional \$24 billion in real fixed investment over the next five years and an additional 340,000 jobs. (See Appendix A.) Furthermore, the NET revenue impact—that is, the result of additional investment and jobs on the tax base netted against the direct revenue loss—would turn positive within this period. There would be an absolute gain to the Treasury even using very conservative economic assumptions as to the "feedback" effect.

These figures are based on simple extension of the 10 percent credit. If it were made permanent at a higher level, an even more positive and forceful impact would result.

3) FULL DEDUCTION FOR POLLUTION-CONTROL FACILITIES

Governmentally-mandated standards for pollution control may serve worthwhile purposes, but they result in relatively nonproductive expenditures of capital by American industry. Funds which otherwise could be spent to expand and modernize plant capacity and employment are diverted to pollution control uses. If these funds are not readily available, the result may be the closing of plants altogether because the required standards cannot be met.

To ease the impact of such expenses on the level of productive investment, all costs for governmentally-mandated pollution control facilities should be fully deductible in the year incurred. The existing five-year amortization provisions, without the invest-

ment tax credit, are wholly inadequate measures in this area.

The revenue impact of full deduction in the first year (without an investment tax credit) would be approximately \$1.9 billion in 1976, \$1.6 billion in 1977 and \$1.5

billion in 1978.

4) CAPITAL RECOVERY ALLOWANCES

Current methods of depreciation are based on the "useful life" concept rather than full recovery of invested costs. The problem with the useful life concept is that its theoretical recovery of invested capital does not work in the real world of today's inflationary pressures and technological change. The longer the depreciable life assigned to an asset class, the more devastating the effect of inflation. This is particularly true with regard to manufacturing industries because the bulk of their assets have minimum depreciable lives of at least nine years. The principal result is insufficient internal capital formation.

The Revenue Act of 1971 introduced the Class Life System and ADR, and these reforms have increased somewhat the speed of cost recovery for companies which can handle the complexities of the ADR system. However, they are still tied to the useful life concept and their purpose can be frustrated by the inability of many businesses—particularly small businesses—to adopt them.

Eroded as they are by the effects of inflation, depreciation allowances are still critically important for meeting our capital needs. In fact, at \$84 billion in 1975, corporate capital consumption allowances accounted for well over half of total business saving available for investment. Therefore any changes in this area can make very

substantial differences in our capital formation picture.

The NAM recommends a complete change in the cost recovery system in the Code through enactment of a capital recovery allowance system which would be an optional alternative to the existing depreciation methods, such as in H.R. 7543. In outline form, it would include the following features:

Section 1245 property (machinery and equipment) would be subject to an accelerated five-year write-off;

Certified pollution control facilities, whether equipment or structures, also would

he subject to an accelerated five-year write-off;

Part of section 1250 property—that is, industrial buildings used in the process of manufacturing, extraction, transportation, communication, etc.—would be subject to an accelerated ten-year write-off;

No salvage values would be used;

Taxpayers would elect deductions of 0 percent to the maximum allowed for any year and unused deducations would be carried forward indefinitely;

The system would be applicable as costs are incurred; A full year convention could be applied for all costs;

The system would be an optional alternative to conventional depreciation or

amortization.

Detailed estimates of the estimated direct revenue impact and feedback effect of increased investment and employment under this bill have been made by Norman B. Ture, a Washington-based economic consultant. They show that the program could be self-sustaining even in the first year—that is, the revenue generated by increased economic activity immediately could offset the direct revenue loss. (See Appendix B.) However, the program could be implemented in stages to minimize the direct revenue impact if necessary. The total employment effect from implementing the system at once could amount to 3.4 million additional jobs in the first year rising to 5.2 million new jobs in the third year.

5) TAX TREATMENT OF DIVIDENDS

The economy has endured a long time with double taxation of dividends—first at the corporate level through the corporate income tax on earnings and then at the shareholder level through the individual income tax or earnings paid as dividends. Because of this, some claim it just doesn't matter. In fact, most efforts to enact relief from such double taxation have fallen largely on deaf ears. Even the very limited 4 percent credit for dividends received by individuals was repealed as part of the 1964 general tax reduction legislation.

We believe it does matter—that the apparent indifferent has been a case of learning to walk with a limp. Perhaps this limp didn't become really noticeable until the equity and new issues markets collapsed in the 1970's, and the vital public utility sector ran into its financial crunch. Nevertheless, the problem has been with us right along.

In our view, the simplest and most equitable means of security relief from the present penalty situation would be a deduction at the corporate level for dividends paid. This method would assure directly a much needed increase in cash flow for productive investment for virtually the entire corporate sector. It would breathe new life into the equity markets, and correct the long-standing inequity as to tax treatment of equity versus debt financing. It would avoid the problems of horizontal inequities which could result from providing credits or exclusions to shareholders with dividend income while taxpayers with equivalent earned income would remain fully taxable.

To phase out double taxation, the NAM recommends a 25 percent corporate deduction for dividends paid, to be increased to 100 percent thereafter. Based on Treasury figures for 1977 and beyond, a 25 percent deduction would have an initial revenue impact of about \$4.25 billion.

Appendix A. - Economic impact of a permanent 10 percent investment tax credit for all taxpayers 1

	Year I	Year 2	Year 3	Year 4	Year 5	Annual average (percent)	5 year cum- ulative total
Real fixed investment:							
Percent	+3.06	+3.89	+ 3.85	+3.88	+ 4.05	+ 3.73	
1958 dollars in billions	+ 3.44	+4.77	+ 5.04	+ 5.36	+5.17		+24.48
Manuf. employment:							
Percent	+.90	+ 1.00	+ .92	+ .98	+1.01	+ .96	
Thousands of jobs	+ 180	+210	+ 190	+ 210	+ 220		
Total employment:							
Percent	+.10	+ .24	+.28	+.33	+.37	+.27	
Thousands of jobs			+ 250				
Real GNP:							
Percent	+.41	+.51	+.55	+.62	+.67	+.56	
1958 dollars in billions	+ 3.82	+4.99	+5.63	+6.59	+7.38		+ 28.41
Federal tax receipts:							
Percent	46	37	30	14	+.05	24	
Current dollars in				•••			
billions	- 1.83	-1.61	-1.42	72	+ .28		- 5.30

¹ Compared to a 7 percent credit for non-utility taxpayers and 4 percent for public utilities,

This table has been excerpted from the NAM's Tax Impact Project Report, dated August 1975. The figures are estimated changes in investment, employment, GNP, and net federal tax receipts for 1977-81 from what otherwise would occur. This assumes roughly an eighteen month period for the 10 percent credit to be fully effective.

These results were generated by inputting survey responses from over 300 industrial and utility companies into the Data Resources, Inc. macroeconomic model. The figures are intended to show the order of magnitude of the impact of a 10 percent credit and not intended to represent accounts.

and not intended to represent precise economic forecasts.

APPENDIX B. - Economic impact of a capital recovery allowance system H.R. 7543

	Year I	Year 2	Year 3
Private capital investment: Dollars in billions	+ 19.0	. + 23.9	+ 24.0
Total employment: In thousands		+ 4.550	+ 5.220
Private GNP: Dollars in billions		+ 79.8	+ 93.9
Initial impact Federal revenue estimates: Dollars in billions	- 14.8	-25.6	-31.7
Net Federal revenue impact: Dollars in billions		+ 7.4	+ 7.9

This table has been developed from an economic analysis by Norman B. Ture, Inc., Economic Consultants, Washington, D.C., as revised in January 1976. It assumes a capital recovery allowance system as described in H.R. 7543, effective January 1, 1975. It should also be noted that these estimates were originally based on continuation of a 7 percent investment tax credit.

Again, the figures are intended to show the direction and order of magnitude of the economic impact of the proposal, not precise forecasts.

APPENDIX C. — Initial impact and net Federal revenue estimates for proposed tax revisions [Millions of dollars]

	1975	1976	1977	1978	1979
\$50,000 surtax exemption: Initial impact Permanent 10 percent investment credit:		-1,649	- 1,810		
Initial impact			-3.255	-3.395	-3.566
Net impact			-1.830	-1.610	
Pollution control expensing: Initial impact		-1,900	- 1,600	-1,578	
Capital recovery allowances (starting in 1975):					
Initial impact	-14,800	-25,600	-31,700		
Net impact	+8.300	+7,400	+7.900		
Dividend deduction: Initial impact			-4.250		

It should be noted that, while the Ture study (Appendix B) and the Tax Impact Project Report (Appendix A) both worked to generate overall economic impact data including net revenue estimates, the two studies used somewhat different methodologies and basic economic assumptions. The difference is most striking in terms of potential feedback effects on the federal revenue base and net federal revenues—the capital recovery allowance proposal indicating possible immediate net revenue gains owing to its stimulative effect on the economy. While the extension of the 10 percent investment credit is projected to have a considerably less direct, it should be noted that, under the Tax Impact Project methodology, repeal of the 7 percent investment credit would have the following estimated effects which, in order of magnitude, are more in line with the results of the capital recovery allowance analysis (although, of course, in the opposite direction).

	Year I	Year 2	Year 3	Year 4	Year 5	Annual average (percent)	5 year cumulative total
Real fixed investment:							
Percent	-4.17	- 5.31	- 5.25	- 5.30	- 5.54	-5.11	
1958 dollars in billions	- 4.68	-6.52	-6.88	-7.32	-8.03		-33.43
Maaufacturing employment:							
Percent	-1.25	-1.32	-1.25	-1.37	1.45	- 1.33	. . .
Thousands of jobs	-250	-270	- 260	- 290	-310		
Total employment:							
Percent	15	34	38	44	51	36	
Thousands of jobs	-120	- 290	-330	- 190			
Real GNP:							• • • • • • • • • • • • • • • • • • • •
Percent	58	70	74	85	95	81	
1958 dollars in billions	- 5.40	-6.85	-7.58	-9.04	- 10.46		- 39.33
Federal tax receipts:		3.00		3.0.		•••••••	22.33
Percent	+.62	+.52	+.43	+.22	03	+35	
Current dollars in billions	+ 2.46	+ 2.27	+2.04	+1.13			+7.73

Note: This table assumes the existence of a 7 percent investment tax credit (4 percent for utilities). Similar but greater results could be expected to occur if the credit (now 10 percent under P.L. 94-12) were to be repealed.

Complete details on the methodology and basic economic assumptions underlying both the cost recovery program and Tax Impact Project analysis are available.

UNITED STATES LEAGUE OF SAVINGS ASSOCIATIONS Washington, D.C. February 20, 1976.

Hon. LLOYD BENTSEN, Hon. BILL BROCK, Committee on Finance, U.S. Senate Washington, D.C.

DEAR SENATORS BENTSEN AND BROCK: Thank you for your letter of February 17. We are pleased to respond to your request for a statement on the importance of enacting tax legislation that will help to meet the growing capital needs of our country in order to create more jobs and to promote stable and noninflationary economic expansion. We are happy to respond, particularly with respect to the thrift and housing industries.

It is the judgment of the leaders in these industries that the American economy faces a capital shortage in terms of meeting capital needs for both the private and public sectors of the economy. Particularly in the housing areas, it will be necessary to develop a substantially larger supply of capital if funds are to be available at interest rates that will encourage business expansion on the one hand and home owner-

ship on the other.

The extended argument as to the degree of capital shortage can only be resolved with respect to the levels of interest rates that are expected to prevail. It is unlikely that a shortage of capital would exist at long term interest rates of 15 or 20 percent, but it is extremely likely that a shortage of capital will exist if we are thinking in terms of long term interest rates in the 6 to 7 percent range. To get lower interest rates high levels of saving are needed to create a large enough supply of capital to bring interest rates to reasonable levels—levels which would encourage borrowing by business firms and thus lead to economic expansion. To accomplish these purposes, special incentives to encourage higher savings levels appear to be needed. Last year the American people saved at higher rates than they have since shortly after World War II. This has been most encouraging and has been one of the factors leading to a reduction in inflationary pressures.

To assure the continuation of high rates of personal saving, a special tax incentive is believed to be necessary. (See attached memo on "Tax Code Bias Against Savings"). Such an incentive could take a variety of forms. We have from time to time recommended that a basic amount of income be excluded from personal tax, perhaps up to \$600 for individual savers. We have also recommended, in lieu of such an exclusion, a tax credit in the \$150 to \$200 range. Because of our recent experience with the widespread interest in individual retirement accounts as voted by Congress in 1974, (in part at least because of the tax deferral feature involved) we would be interested in the development of a similar plan of tax deferral for long term savings accounts which would have as their objective the achievement of home ownership or the educa-

tion of children.

We are thankful for the opportunity to submit our comments. We encourage your subcommittee to make every effort to develop programs which will assure that we will not face capital shortages and exhorbitant interest rates in the years ahead.

Sincerely.

ARTHUR M. WEIMER.

THE TAX CODE BIAS AGAINST SAVINGS

As now structured, the Federal income tax tends to discourage savings relative to current consumption. This bias can be demonstrated. Assume that a family wants the option of: 1) having \$1,000 available for immediate spending; or, 2) accumulating \$1,050 by the end of a year by saving its available funds in an account earning 5 percent per annum. In a tax-free environment, the family obviously needs only \$1,000 in income at the outset to have \$1,000 available for current consumption or to accumulate \$1,050 at the end of the year by using a savings account. Now, consider what happens if a tax of 50 percent is imposed on income, including savings interest. To have \$1,000 available for current consumption, the family income at the outset must be \$2,000. If the family then chooses to save the \$1,000 available, \$50 in interest will be earned by year's end, but half will go to the tax collector, leaving only \$1,025 accumulated. To accumulate \$1,050 through saving, the family must start out not with \$2,000—but with twice that amount, or \$4,000.

As the paragraph above demonstrates, the imposition of the 50 percent tax doubles

As the paragraph above demonstrates, the imposition of the 50 percent tax doubles the amount needed to maintain the purchasing power for immediate consumption—but quadruples the amount needed to maintain the same benefit when the individual chooses

instead to defer consumption and realize savings.

The Internal Revenue Code, as presently structured, accentuates this bias by allowing deductions for interest charged on borrowings while taxing interest earned on savings. This is particularly true in an inflationary economy. Consumers are discouraged from saving for future purchases when their deposit earnings are taxed; conversely, they are encouraged to "but now, pay later," utilizing installment credit plans, when they know that the interest will be deductible and that the debt will be repaid in cheapened dollars.

These relationships illustrate the bias of the Tax Code against savings. To redress this imbalance, a tax incentive—rather than a tax deterrent—seems clearly justified.

Statement of G. Shelby Friedrichs, Chairman and Chief Executive Officer
HOWARD, WEIL, LABOUISSE, FRIEDRICHS INCORPORATED
New Orleans, Louisiana

CAPITAL FORMATION

I believe it goes without saying that Capital Formation is the lifeblood of the Free Enterprise System. A continuous flow of capital to industry is necessary to provide the machinery and working capital which, in turn, provide jobs for our people. This, in turn, provides Spendoble Income which in turn provides more jobs, a higher standard of living, etc.

In order to encourage this flow of capital to industry, we need to make it attractive to investors to place their funds in the securities (particularly equity securities) of our corporations. Since this always involves a degree of risk, there must be a corresponding opportunity for gain.

It is our smaller, growing companies that are most in need of equity capital, but it is their equity securities that involve the highest degree of risk.

One of the ways that has been advanced as a means of providing some compensation to investors in order to encourage them to take this risk is Senator Bentsen's proposal to exempt the first \$1,000 in Capital Gains realized in any calendar year from taxation. However, it is my opinion that this is not a sufficiently large amount. While this will undoubtedly provide an incentive for a large number of small investors to accept the risk of investing in the smaller emerging companies, it is my opinion, that more than this needs to be done. Larger investors must also be provided with this incentive, and I would think that the number should, therefore, be \$5,000 and not \$1,000.

The greatest thing, however, that Congress could do to channel funds into these smaller emerging companies would be to free up funds that are now "locked in" in very substantial amounts which are owned by investors who will not pay the Capital Gains Tax for the privilege of moving funds from one investment to another.

There are billions of dollars of securities of companies that have had spectacular growth over the last twenty-five years. Relatively small investments in companies like IBM, Eastman Kodak, Xerox and even our New Orleans-based, Louisiana Land and Exploration Company that are owned by investors whose costs represent a very small percentage, like 3-5%, of the current value of their investment. For example, an investor owning Lauisiana Land worth \$52,500, with a cost of \$2,500 would have to pay a tax of \$12,500 of 23.8% of the value of his investment. If, in addition, he owned IBM worth \$103,000 which cost him \$3,000 would have to pay a tax of \$35,000 or 34% of the value of his investment.

Even though he purchased these stocks when they were small emerging companies twenty or thirty years ago and would like to move these funds out of these companies now that they are mature, relatively, stable investments, into the stocks of other smaller emerging companies whose securities are available at bargain prices in today's market, he cannot and will not pay the Government such a high percentage of his principal to make a switch. This dis-incentive to make the move is, of course, further enhanced by the knowledge that these taxes may be entirely avoided at his death, since our present laws call for no taxation of Capital Gains at death.

I testified before the House Ways and Means Committee in 1973, at which

time, I advocated the following:

(1) A sliding scale of Capital Gains Tax based on length of time held,

Length of Time Held	Proposed Tax Rates on Capital Gains
6 months - 1 year	30.0%
1 year - 2 years	27.6%
2 years - 3 years	25.2%
3 years - 4 years	22.8%
4 years - 5 years	20.4%
5 years - 6 years	18.0%
6 years - 7 years	15.6%
7 years - 8 years	13.2%
8 years - 9 years	10.8%
9 years - 10 years	10.0%
10 years - 20 years	7.5%
Over 20 years	5.0%

(2) The taxation of Capital Gains at death on the same basis, with the amount of such taxes due being deducted from any Estate Tax due with the Estate Tax being figured as called for in the Code.

Since I am completely convinced that Congress made a terrible and almost wholly unproductive mistake in raising the tax on Capital Gains to 35% on gains in excess of \$50,000 realized in any one year, I believe the scale could begin at 30%. It is the large investor with the largest gains who can best afford to accept the risks incident to making an investment in the smaller emerging companies. He should be encouraged and not discouraged from so doing.

Having given the matter further thought since my testimony in 1973, I would now advocate that any Capital Gains Tax imposed be limited to 10% of the money involved. For example, a stock is purchased for \$1,000 and is sold eleven months later for \$1,500. The tax would be \$150 (30% of the \$500 gain). However, if a stock was

purchased for \$1,000 and sold within a year for \$10,000, the tax would be \$1,000 (10% of the money involved) and not \$3,000 (30% of the gain).

In addition to the freeing up of billions of dollars to provide equity capital for the smaller emerging companies, the adoption of this plan would also have the effect of depressing the prices of the larger growth companies' stocks which tend to be overpriced in the market place and creating demand for and raising the prices of the stocks of the smaller emerging companies who most need the equity capital.

I would like to also offer for your consideration, a plan recently advanced to the House Ways and Means Committee. That is the removal of the double taxation of corporate dividends. Whether this should be done by providing corporations with an exemption from the income tax of that part of their earnings which were distributed to their stockholders in dividends, or whether it should be accomplished by simply exempting from income taxes dividends received by investors from corporations which were paid out of earnings already taxed at the corporate level, I will leave to the good judgement of your Committee. The former would generate internal Capital Formation by reducing the tax burden on the corporations, leaving them with additional funds to invest in machinery and equipment which would create more jobs. This would also tend to make the stocks of these corporations more attractive to investors since it would increase net earnings per share. The latter would not only leave investors with more funds to invest in corporate equities but would also make them considerably more attractive to investors.

I strongly urge your serious consideration of the above, since I feel that it is important to see our capitalistic, free enterprise system grow and provide jobs or we will lose it to Socialism, if not to Communism. Looking back over the accomplishments

of this great nation in this Bicentennial year should certainly cause all of us to be proud of the accomplishments of our forefathers, and should dedicate us to the fundamental principles which made it all possible.

G. Shelby Friedrichs *

* QUALIFICATIONS:

Forty years in the Investment Securities Business
A founding Partner of Howard, Labouisse, Friedrichs & Company in 1946
(Our predecessor Partnership)
Seven years service as a Governor of the Association of Stock Exchange
Firms (1961–64, 1967–69)

- (The trade association of the New York
Stock Exchange)

Governor, Securities Industry Association – 1971 (Its first year)

Member, Board of Governors, National Association of Securities Dealers, Inc.

1962–65,(Chairman, National Business

Conduct Committee – 1964, Chairman of the
Board – 1965)

STATEMENT ON CAPITAL FORMATION

By the

American Bankers Association

The American Bankers Association expresses its thanks to the Sub-committee for an opportunity to comment on this important issue. We have been concerned about the outlook for capital formation in our economy. We have been engaged in a joint effort with four other major trade associations -- the U.S. Chamber of Commerce, The National Association of Manufacturers, The Securities Industry Association, and the Committee on Publicly Owned Companies -- to reach a consensus on the future capital requirements of our economy and policies needed to assure that such requirements are met. The consensus reached is the product of extensive study and deliberation, including a major conference in New York City on May 19, 1975 in which more than 300 economists, fiscal experts, business leaders, and government officials participated.

The consensus is that legislation is needed to effect the following changes:

- 1. Eliminate double taxation of corporate dividends.
- 2. Increase the investment tax credit and make it permanent.
- 3. Improve capital cost recovery by adjusting and liberalizing tax depreciation.
- Readjust corporate and individual federal income tax rates to effect reductions which will promote capital investment in jobs and productive facilities.
- 5. Eliminate the witholding tax on portfolio investments of foreign investors.
- Reduce the burden of taxation of long-term capital gains, including special consideration for gains realized by individuals, and liberalize the tax treatment of capital losses.

Tax legislation affecting capital formation is very important. It will be a major factor in determining the tools that our children will have available to them when they go to work. The most productive forms

of capital in our economy are those that have long lives. This is the type of capital that is most affected by tax legislation. We must therefore, look beyond the current business cycle and recent episodes of economic instability. Even in periods of high unemployment such as the present, capital that is created now will affect jobs and standards of living for years beyond any period of recovery of the economy to full employment.

In recent years, analysts have made various quantitative estimates of U.S. capital needs over the next five to ten years. Several recent publications have highlighted the problem. Examples include: The Capital Needs and Savings Potential of the U.S. Economy, by the New York Stock Exchange; Capital Needs in the Seventies, by the Brookings Institution; and, most recently, A Study of Fixed Capital Requirements of the U.S. Business Economy, 1971-1980, by the Bureau of Economic Analysis which was summarized in the President's Economic Report. These studies seem to have been prompted by (1) the generally poor performance of the U.S. economy in the area of capital investment over the past ten to fifteen years, and (2) the fear that additional pressures would be put on the capital formation process by government expenditures in non-productive areas. These studies generally start with a list of needs for capital investment. These needs are then compared to expectations of economic growth and the savings that could be generated by such growth. Some have concluded there will be a capital shortfall, others have concluded that "We can afford the future -- but just barely".

These studies have been useful in highlighting the dimensions of a very important economic problem. We would caution the Committee, however, that forecasts of this type are very tenuous. At the very least, they

should be considered guides to policy formulation, rather than predictions of actual happenings. One reason for this is that the list of capital needs is not based on hard and fast choices that have already been made. Future policy decisions about such important needs as pollution control, energy independence, and housing will be important determinants of the amount of funds that will be available for other forms of investments.

The savings behavior of government and its role in the provision of our future capital needs should be examined very carefully. Some of the studies which conclude that a capital shortage will not occur do so on the assumption that inflation will create a surplus in the federal budget and thereby generate needed savings. In the absence of new expenditure programs, inflation will generate a surplus by increasing money incomes and putting individuals in higher tax brackets. a scenario occurs, additional savings will be made available for capital investment. However, inflation inevitably generates political pressures for tax reductions to restore to consumers some of the real disposable income lost through price increases. The pressure of tax reductions under such circumstances would be reinforced by the public's increasing concern over the total size of government. We do not believe that forced savings generated by the interaction of inflation with the progressive tax structure is a good method of providing for future capital needs.

An adequate formulation of economic policy in the area of capital formation cannot be made without a thorough examination of our past record in this area. Here the record is quite clear, and the results are disturbing. Since 1960, the growth of productivity in our economy has been substantially below that of many of our major trading partners. We have been saving less of our income than they have, and we have also

been devoting less of our income to capital formation. Over time, the amount of capital we have been providing for new entrants in the labor force has declined substantially. Also, relative to our major trading partner, our tax system is biased in favor of consumption.

These are some of the trends that have caused many astute observers to become increasingly disturbed about the provision of our future capital needs. These same trends, and the research that has attempted to project the effects of them, have stimulated the tax proposals mentioned in the beginning of our statement. We do not regard these proposals as definitive. We believe that they are a useful starting point for your Committee as it begins its deliberations on this very difficult and important economic problem.

STATEMENT ON CAPITAL FORMATION

By the

American Bankers Association

Presented to the

Subcommittee on Financial Markets

Senate Finance Committee

at Hearings on

Tax Policy and Job Creation

February 18-19, 1976

The American Bankers Association expresses its thanks to the Subcommittee for an opportunity to comment on this important issue. We have been concerned about the outlook for capital formation in our economy. We have been engaged in a joint effort with four other major trade associations — the U.S. Chamber of Commerce, The National Association of Manufacturers, The Securities Industry Association, and the Committee on Publicly Owned Companies — to reach a consensus on the future capital requirements of our economy and policies needed to assure that such requirements are met. The consensus reached is the product of extensive study and deliberation, including a major conference in New York City on May 19, 1975 in which more than 300 economists, fiscal experts, business leaders, and government officials participated.

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STATEMENT OF THE MANUFACTURERS CHEMISTS ASSOCIATION

SUMMARY

This study shows the impact on U.S. employment in the chemicals and allied products industry resulting from changes in domestic tax policy The figures range from an increase of 32,000 new jobs if the temporary change in the investment tax credit from seven to ten percent, provided for in the Tax Reduction Act of 1975, is made permanent, to a loss of 75,000 jobs if the seven percent investment credit were to be abolished. Effects of other changes in federal tax structure are developed also, as shown in the following table.

U. S. JOB IMPACT OF CHANGES IN FEDERAL TAX STRUCTURE

U. S. Employment

Tax Proposal	Change At The End Of 5 Years*
10% Investment Tax Credit (Instead of 7%)	+32,000 jobs
Repeal of 7% Investment Tax Credit (Old Rate)	-75,000 jobs
Repeal of 20% "Class Life" Variance Asset Depreciation Range	-30,000 jobs
Repeal DISC	-46,000 jobs
Repeal Western Hemisphere Trade Corporation	- 5,000 jobs
Increase Corporate Surtax to 28% (Overall 50% rate)	-30,000 jobs
Requirement to Capitalize Mine Development and Intangible Drilling Expenses	- 7,000 jobs
Repeal of Percentage Depletion (01: & Gas Already Repealed)	-22,000 jobs
Minimum Tax Changes	
(i) Increase rate to 30%	Very small
(ii) Repeal Regular Income Tax Deduction	- 8,000 jobs
(iii) Increase rate to 30% and regular income tax deduc-	-

*Job totals shown represent changes in nation-wide employment (all sectors) directly affected by tax changes imposed only on the chemicals and allied products industries.

Too often, in the quest for Federal revenues, sight is lost of the impact of the tax laws on important factors such as employment. The Manufacturing Chemists' Association has tried to quantify in this study the jobs impact of a variety of proposed tax changes. It is important that these facts about employment are taken into account in formulating tax policy.

Repeal of the DISC provisions would have a direct U. S. job effect since U. S. exports would be adversely affected. Workers involved in that lessened production would be U. S. workers. This is particularly important in times of domestic or international surplus capacity when price competition is especially acute. At such times, when jobs are most needed, the DISC tends to favorably stabilize employment and to buoy employment. Furthermore, if, as a result of the repeal of DISC, exports decline modestly, there would be no gain, and in fact, there could very well be a net loss in Federal tax revenues.

A number of proposed changes in U. S. tax policy are directed toward corporate investment outside of the United States. This study has not quantified job impacts arising from those changes. It is a reasonable conclusion from data developed in this study that the impact of adverse tax changes would be to diminish U. S. employment. Peripheral data shows U. S. chemical exports are directly related to the degree of development of overseas manufacturing operations. Federal tax policy that curtails or destroys U. S. ownership of these operations will result in a reduction of U. S. exports and in surplus U. S. plant capacity. A further effect will be lower employment levels than would otherwise exist. Long-term expansion of employment in the U. S. chemical industry will be curtailed because of excess U. S. capacity.

In the material that follows, the quantification of this study and its methodology are more fully described and the conclusions are more completely stated. It is commended to your attention.

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MANUFACTURING CHEMISTS ASSOCIATION SURVEY

Relationship of Changes in the Federal Corporate Income Tax Structure Related to Employment in the U.S. Economy

INTRODUCTION

The federal income tax, as it is applied to corporations, can stimulate or discourage a variety of activities. Alternatives to the present structure are often considered in terms of their revenue impact, measured in dollars. It is clear that there are other impacts that are at least as important as the revenue raised or lost. These other factors generally have been neglected. Effects on them are as demonstrable and quantifiable as the revenue impacts. Moreover, these effects are nearly as direct as the revenue aspects. Among matters affected by our tax structure are employment, balance of payments and capital formation. This study was undertaken to quantify the impact on employment in the United States as a result of modifications in the corporate tax structure, relative to the chemical industry.

This study is limited to the chemicals and allied products industry. The tax impacts shown are limited to those primary impacts resulting from tax changes affecting chemical companies. The relative importance of the chemicals and allied products industry in the U.S. is as follows:

TABLE 1

RELATIVE SIZE OF CHEMICALS AND ALLIED PRODUCTS INDUSTRY

Item	<pre>% of All U.S. Manufacturing</pre>
Shipments	8 %
Value Added	98
Direct Employment	5%
R&D	10%
Income Taxes Paid	14%
Capital Spending	128
U.S. Manufacturing Assets	9%
Direct Foreign Investment	18%
Balance of Trade	\$+4.8 billion vs.
	\$-20.2 billion for
Impact - 1974	other non-agricul- tural merchandise

The chemical companies furnishing data for this study represent one-third of the U.S. chemical industry sales.

Proposed tax changes of current legislative interest were subjected to review. Table 2 reflects measures primarily affecting U.S. manufacturing.

The investment tax credit was one of the proposals reviewed. In the Tax Reduction Act of 1975, Congress enlarged the investment tax credit. The rate was raised from 7% to 10% and certain other liberalizing modifications were made. At several points in the record there are indications the President and members of Congress believed enlarging the investment tax credit would serve to increase employment in the United States. The results of this study confirm that belief. The study shows that in five years induced investment in the chemical industry can be expected to create 32,000 additional U.S. jobs.

GENERAL APPROACH

Following most corporate tax increases, profits are reduced for a period of time. This reduction, partially offset by reduced dividends, leaves fewer internal funds available for investment. Corporate growth and employment are directly related to investment. As a result, the number of jobs associated with a given tax change can be derived from established financial ratios. Balance of trade and certain other effects can be estimated.

This approach calculates only primary tax impacts. Since it omits recycle and psychological effects, total impacts are considerably understated.

President Ford's State of the Union Message, January 15, 1975; 121 Cong. Rec. S. 276 (daily ed. Jan. 16, 1975) (Griffin); 121 Cong. Rec. H.333 (daily ed. Jan. 28, 1975) (Ullman).

Some chemical industry economists believe this understatement may exceed 50 percent.

RESULTS OF STUDY

TABLE 2

IMPACTS OF TAX CHANGES AS RELATED TO DOMESTIC PRODUCTION OF THE CHEMICALS AND ALLIED PRODUCTS INDUSTRY

Tax	Proposal	U.S. Employ-	Change in Chemicals And Allied Prod- ucts Industry Annual Tax Burden	5-Year U.S. Chemicals And Allied Products Industry Invest- ment Change
٠.	10% Investment Tax Credit (Instead of 7%)	+32,000 jobs	\$ -180 million	\$ +830 million
b.	Repeal of 7% Investment Tax Credit(old rate)	-75,000 jobs	+420 million	-1,950 million
c.	Repeal of 20% "Class Life" Variance Asset Depreciation Range	-30,000 jobs	+160 million	- 800 million
đ.	Repeal of DISC	-46,000 jobs	+260 million	-1,200 million
٠.	Repeal Western Hemisphere Trade Corporation	- 5,000 jobs	+ 30 million	- 150 million
f.	Increase Corporate Surtax to 28% (Overall 50% Rate)	-30,000 jobs	+170 million	- 780 million
g.	Requirement to Capitalize Mine Development and Intangible Drilling Expenses	- 7,000 jobs	+ 40 million	- 200 million
P.)	Repeal of Percentage Depletion (Oil & Gas Already Repealed)	-22,000 jobs	+110 million	- 550 million
i.	Minimum Tax Changes			
	(i) Increase Rate to (ii) Repeal Regular I		very small	very small
	come Tax Deducti (iii) Increase Rate to	on -8,000 jobs	+ 40 million	- '200 million
	and Repeal Regul Income Tax Deduc		s +120 million	- 600 million

Table 2 reflects the job impacts of a variety of changes in the Federal income tax structure. For the chemicals and allied products industry those impacts are significant. If a tax package were enacted which included repeals of the investment tax credit, the ADR, Western Hemisphere Trade Corporation (WHTC) and DISC, the 5-year loss of U.S. employment related to this industrial sector would exceed 150,000 jobs. This loss would represent about 4 percent of direct and indirect employment related to the findustry. This is different from gains and losses from current employment levels. Gains and losses of employment shown are from levels that would otherwise exist at a specific point in time.

Increased tax liabilities of chemical companies would lower share values as a direct result of reduced earnings. Erosion of equity values not only reduces the companies ability to obtain further equity capital, but also reduces the ability to obtain debt funding.

All of the proposals except the increase in investment tax credit reduce the portion of chemical production capacity available for exports.

The combination of investment tax credit, ADR, WHTC, and DISC repeal would reduce future sales capacity by \$6.8 billion per year. This compares to 1974 domestic and export sales of \$86.8 billion. This reduction in capacity effect should be considered separately from the direct stimuli of DISC and WHTC.

From the impacts on employment levels within the industry caused by several of the proposals considered in this review it can be expected that one major effect of increased corporate taxes will be long-term reduction in employment levels throughout the economy severely affecting individual workers.

For a proposal including these changes see H.R. 1040.

Repeal of the investment tax credit, ADR, WHTC and DISC taken together would reduce chemical earnings by 10% and secular growth from 8% per annum to 7% per annum. Using a common Wall Street evaluation formula, share values would decline 16%. Chemical shares have a market value of about \$100 billion, so in one sense these tax proposals would destroy \$16 billion in market value.

A question arises as to the degree by which investment in the United States is affected by changes in the U.S. corporate tax structure. Some measures are tied directly to U.S. investment activity. Specific examples are:

- 1. The investment tax credit, and
- 2. The Domestic International Sales Corporation.

The investment tax credit is allowed almost exclusively for assets placed in service in the United States. The 50% of income of a DISC on which taxes are deferred can be invested only in export-related assets. The economic activity stimulated by these measures is domestic.

Incentives to U.S. investments have met with favorable responses by industry in the past 30 years in spite of an unprecedented growth in opportunities outside the United States. Changes in the U.S. tax law are likely to produce at least as much impact on U.S. investment as ratios calculated in this study. Favorable U.S. tax policy can improve the general climate for investment and may well have an impact beyond the results of the tax changes themselves.

FOREIGN INVESTMENTS AND U.S. TAX POLICY

A number of proposed changes in U.S. tax policy are directed toward corporate investment <u>outside</u> of the United States. Since foreign enterprises lie <u>outside</u> the taxing jurisdiction of the United States, these tax proposals, with respect to foreign income, would infringe only on U.S. investors in those enterprises without affecting the underlying economic value of the enterprises themselves. Whereas non-U.S. investors might receive normal returns from the investments, U.S. investors could only receive tax diminished profits.

Among the proposed changes would be the current taxation of undistributed earnings and repeal of the foreign tax credit. The combined effect of these proposals would produce immense burdens on the ownership of overseas operations by U.S. investors, forcing changes in those operations.⁵

The yearly tax increase from the combination of current taxation of undistributed earnings and repeal of the foreign tax credit could amount to 6% of sales or 12% of the equity in foreign chemical subsidiaries. U.S. companies currently have equity in and loans to controlled foreign chemical enterprises totaling \$11 billion.

Among the choices left to managers in this bleak situation would be:

- (1) Subsidizing continued operation of foreign enterprises with funds from the United States with the hope that the tax burden would later be lessened.
- (2) Allowing the foreign enterprises to wither with consequent reduced dividends back to the U.S. parent.
- (3) Selling the enterprises to non-U.S. investors to whom they would have far greater value. Their after tax profits would be roughly double those of U.S. investors. The buyers would possibly be current competitors and almost certainly future competitors in world markets.

An erroneous conclusion which has been drawn from this statement of unpleasant alternatives is that local U.S. investment will increase as a result of withdrawal from overseas operations. The likely result of withdrawal from foreign operations would be to cause U.S. operations to shrink because of reduced demand. Exports of U.S. manufactured chemicals comprise about 1/7th of U.S. production and are now substantially related to the overseas investments of U.S. corporations. Significant exports would be lost if the foreign subsidiaries were weakened or lost, and U.S. facilties would be placed in a position of surplus capacity. Capital and job expansion in a situation of permanently lost export markets is unlikely.

The chemicals and allied products industry is one of the strongest industrial contributors to U.S. exports, accounting for 12% of non-agricultural exports in 1974. The portion of U.S. manufactured product exported has increased at approximately 0.3% per annum over the past ten years. The chemical industry is particularly multinational in character, and much of the credit for this strong export performance must be attributed to its foreign bases.

Present international competitors are more than capable of absorbing the foreign markets U.S. companies now hold. Six of the ten largest firms in the chemical industry are based outside of the United States.

MCA data shows that 20% of chemical exports are intermediates sold to captive subsidiaries. Furthermore, sales of U.S. goods to unrelated customers are greatly augmented by the marketing capabilities of these subsidiaries. It cannot be said that foreign chemical plants are built to export U.S. jobs. Only 8% of the product from foreign subsidiaries returned to the United States, and nearly half of this represented petroleum based raw materials.

A legitimate supposition is that up to half of present chemical exports could be lost without the foreign operations (half was \$4.4 billion in 1974). Furthermore, the efficiency of the remaining U.S. parents would be impaired by loss of the contribution of foreign operations to learning curve progress and the research base.

Summing up, although certain proposed changes in U.S. tax policy are aimed at corporate investment outside the United States, they are likely to have essentially the same negative impact on U.S. employment as domestic tax increases. Unfortunately, the numbers cannot readily be calculated by the capital limited growth method used in this study to analyze taxes on U.S. operations. This is because it is too difficult to predict the corporate response regarding shifting investments between foreign and U.S. opportunities.

COMMENTS ON SPECIFIC TAX PROPOSALS

Increased Investment Tax Credit (7-10 percent) -- 32,000 jobs gained. As was popularly believed prior to adoption of this positive measure, the study reveals that employment will be favorably affected. However, if depreciation basis adjustment is required the benefit of this measure is more than offset for the chemical industry and an effective net reduction in investment tax credit occurs.

Repeal of Investment Tax Credit -- 75,000 jobs lost.
This calculation reflects the reduction from 7 percent to zero. To this should be added the 32,000 potential jobs created by the recent increase in investment tax credit to 10 percent.

Repeal of 20% "Class Life" Variance (ADR) -- 30,000 jobs lost. Effectively, ADR provides earlier recognition of depreciation. If government policy continues to inflate the economy the impact of the provision is understated.

Repeal of Domestic International Sales Corporation (DISC)
Provisions -- 46,000 U.S. jobs lost. The DISC becomes
particularly important in times of domestic or international
surplus capacity since it provides a favorable competitive
tool that enables U.S. manufacturers to continue to sell
when markets become tighter. As a result the DISC tends to
favorably stabilize employment and to buoy up employment
when jobs are most needed.

The impact portrayed in this study is that related to reduced capital formation. There are favorable balance of trade aspects, the jobs implications of which have not been assessed in this study.

Under existing law, 75% of profits derived from exports passing through a DISC are subjected to U.S. taxation. If, as a result of the repeal of the DISC provisions, exports should decline by as little as 25% during periods of tight capacity, or worse, by as little as 5% during periods of surplus capacity, there would be no gain in U.S. tax collections. In that event, the U.S. Government as well as U.S. industry becomes a loser. Only foreign-based competitors and governments gain.

Repeal of Western Hemisphere Trade Corporation Provisions -- 5,000 jobs lost. This provision is used less than would otherwise be the case since for export transactions the DISC is frequently more attractive.

Requirement to Capitalize Intangible Drilling and Mine Development Expenses -- 9,000 jobs lost. The impact of this provision is relatively modest for the chemical industry since drilling and mine development are not primary activities.

Repeal of "Remaining" Percentage Depletion -- 22,000 jobs lost. Because of recent changes in the law affecting oil and gas percentage depletion, this number may be somewhat overstated. It has been impossible to be certain that oil and gas percentage depletion already repealed has not been included in some of the data submitted.

Minimum Tax on Tax Preferences Increase in Rate to 30% -- Insignificant. Companies in the surveyed group already pay very substantial amounts of Federal income tax. Such amounts more than offset any tax preferences which may be generated.

Minimum Tax -- Repeal of Deduction for Federal Taxes
Paid -- 8,000 jobs lost. This represents the imposition of
an excise tax on tax deductions.

Minimum Tax -- Combination of the Imposition of a 30% Rate and Repeal of the Deduction for Federal Taxes Paid -- 24,000 Jobs lost. This is a direct multiplication impact.

ASSUMPTIONS AND METHODOLOGY

Increases in corporate taxes can result in either increased prices for goods and services or reduced profit. A third possible alternative is a reduction in the real rate paid for labor.

There is considerable debate as to whether income tax increases can be passed along through higher prices. Certainly there is a significant lag before any pass-along

can occur. That lag will be dictated by supply and demand conditions which are, in the short term, unrelated to changes in the tax structure.

Moreover, prices of goods sold into foreign markets are limited by foreign competition. No increase in those prices is possible as a result of adverse changes in the U.S. tax structure. On the other hand, favorable changes in the U.S. corporate tax structure can be reflected in international markets as a means of improving the competitive position of a U.S. supplier.

A reduction in the real wages paid to workers in today's economy is not a realistic assumption. The impact of collective bargaining agreements tends to maintain a pressure to at least keep wage rates abreast of increases in the cost of living.

It follows that tax changes are likely to have a direct effect on corporate profits for at least five years. This study is predicated on that assumption. Arguments can be made for assuming prices will increase or labor rates will decrease, but these are found to be generally unacceptable in the United States today.

As reflected in Figure 1, retained earnings have been a major factor in capital spending for plant and equipment. Note that increased debt is dependent on proportionally increased equity which is dominated by retained earnings. Reductions in profit due to tax changes will thus directly reduce investment in the U.S. economy.

Additional debt financing does not offer significant long-term relief in providing funds for expanded capital programs. If national tax policy becomes further prejudiced against capital investment, there will be an even greater reluctance to use additional debt. Prudent management must already be concerned with debt to equity ratios. Lenders will also be reluctant to permit increased leverage.

Continued investments in the U.S. economy are necessary to create jobs at existing wage rates. Stated in 1974 dollars, the national stock of fixed, non-residential business capital per private sector job was \$25,100. Investment in the chemical industry can be presumed to disperse throughout the highly integrated U.S. economy and to generate jobs in numbers not substantially different from this national average. The majority of these jobs would be in the equipment manufacturing, construction, service and raw material consuming industries.

See Appendix C.

Each tax proposal implicitly differs as to its impact on U.S. as opposed to foreign capital spending. Proposals dealing with export incentives and investment tax credits were treated as impacting 100% on U.S. capital spending. Changes to depreciation practices, general tax levels, minimum tax rates, etc., were treated as impacting half way between 100% and the 75% (of capital spending) done in the United States by U.S.-based chemical companies for the past 10 years. No attempt was made to judge the impact on U.S. capital spending caused by tax proposals directed at foreign manufacturing subsidiaries.

Two other important assumptions are:

- A. Historical financial ratios and trends will generally be representative of the future.
- B. Job creation in the public sector is unaffected by private sector tax changes.

Detailed calculation methods used herein are described in the Appendices.

Appendix A

DATA SAMPLE AND SCALE-UP TO REPRESENT THE TOTAL CHEMICALS AND ALLIED PRODUCTS INDUSTRIES

Tax impact questionnaires were distributed mainly to companies having representatives on the MCA's Tax Policy and Economic Policy Review Committees. Of the 35 questionnaires sent out, 27 were returned in time for analysis. 18 were companies classified in major SIC Group 28 and which were presumably categorized in chemicals and allied products by the FTC. Because this 18-company group was directly relatable to FTC industry-wide data, it was used as the starting point for all figures presented herein. Results for the remaining 9 companies were not used directly, but tax impacts and various operating factors were raticed to sales and compared with the 18-company sample. There were no marked differences in these ratios except for those obviously due to petroleum operations. Thus, this group added to the credibility of the 18-company sample.

The primary 18-company sample accounts for the following portion of the U.S. chemicals and allied products industries.

Regarding U.S. Manufacturing:	<u>1973</u>	<u>1974</u>
U.S. Sales	32%	32%
Exports	52%	48%
Total Sales	34%	34%
Gross Plant in Use at		
Original Cost	45%	45%
Regarding Consolidated Foreign Plants:	λ	
Total Sales	27%	29%
Gross Plant in Use	53%	54%

C&AP industry totals for the U.S. were taken from the Federal Trade Commission quarterly reports (1974 data collection basis). Foreign operations were based on Commerce Department Surveys of Current Business and special studies. The seemingly low portion of sale from foreign plants is accounted for by the relatively large position of petroleum companies - which were by definition not in the 18-company sample. It would have been desirable to know what portion of industry profits and taxes were represented by the 18-company sample, but no meaningful data was collected to split these items between U.S. and foreign operations.

Appendix A cont.

The 18-company sample utilized is much larger, much more capital intensive, and much more active internationally for the balance of the chemical industry. This means that different ratios are appropriate for scaling-up different types of tax proposals to represent the total for the chemical industry. The following were used:

Tax Proposals	Measuring Unit	of	Portion C&AP 1974
Investment Tax Credit, 20% Class Life Variance, Remaining & Depletion, Capitalization of Intan- gible Drilling Cost.	Gross U.S. Plant	458	45%
DISC, WHTC	U.S. Exports	56%	481
Overall Foreign Tax Credit Limitation, Minimum Distribution, Current Taxation of Undistributed CFC Earnings, Substitution of a Deduction for the Credit for Foreign Taxes Paid	Avg. between sales from foreign plants gross foreign plant	40%	41\$
General Income Tax Rate Increase, Minimum Tax Changes	Avg. between U.S. sales from U.S. plants & gross U.S. plant.	391	38%

Appendix B

BACKGROUND TO TAX IMPACT CALCULATIONS ON U.S. SOURCE INCOME

Capital Formation Effects

Ultimate tax effects shown here are derived from the extent by which taxes affect the rate of corporate capital formation.

Capital
$$= D + P - Div + E + Debt$$
 Pormation P

Depreciation + Profits AT-Dividends + Infusions + Increases (Retained Earnings) From Outside In Debt

Over the long run, debt is at least conceptually limited by debt/equity ratios, so:

Capital Formation = D + (P - Div + E)
$$(1 + \frac{Debt}{Equity})$$

We are concerned with the change in capital formation per tax related change in profits.

$$\frac{\Delta \text{ Capital}}{\Delta P} = (\frac{\Delta P - \Delta \text{ Div.}}{\Delta P}) (1 + \frac{\text{Debt}}{\text{Equity}}) + \frac{\Delta D_p}{\Delta P} + \frac{\Delta E}{\Delta P} (1 + \frac{\text{Debt}}{\text{Equity}})$$

But depreciation is totally unrelated and net equity infusions are largely unrelated to profits. Both are zero and drop out, leaving:

$$\frac{\Delta \text{ Capital Pormation}}{\Delta P} = (\frac{\Delta P - \Delta \text{ Div.}}{\Delta P}) (1 + \frac{\text{Debt}}{\text{Equity}})$$

Dividends are a function of profits. Short term, they largely relate to previous profit and payout trends rather than to immediate profit changes. Over the long term, they have fluctuated around a central value of 0.50 x profits.* By observation, it appears that the lag between the incidence of and full recognition of a change in the rate of profitability is about 2-1/2 years.

^{*} This derivation does not include adjustments to offset effects of currency inflation. Note that payout ratios presently appear low partly because profits include an "unreal" inflation portion.

Appendix B cont.

Capital Formation Effects (Continued)

Let us also incorporate projected debt equity ratios into our formula. Assuming the current tax proposals became law in 1975, ratios were extrapolated for 1976-1980.

Then, $\frac{\Lambda Capital\ Formation}{\Lambda P\ (Tax\ Related)}$

Year	$\frac{(\Delta P - \Delta Div.)}{\Delta P} \times$	$(1 + \frac{\text{Deht}}{\text{EquIty}})$	4	Pactor Utilized
1976	$(1.00 - 0.10) \times$	1.514	-	1.36
1977	$(1.00 - 0.30) \times$	1.522	=	1.07
1978	$(1.00 - 0.45) \times$	1,530	==	0.84
1979	$(1.00 - 0.50) \times$	1 539	18	0.77
1980	$(1.00 - 0.50) \times$	1.547	==	0.77

Years For Which Data Was Collected

Questionnaire data was collected to quantify tax payments which the current tax proposals would have caused had they been in effect in 1973 and 1974. 1974 was an extraordinarily good year for the chemical industry, with worldwide product shortages enabling price increases to offset rising raw material and energy costs. Even though 1974 margins will be hard to maintain, the higher prices are likely to hold; so 1974 revenues and profits should be considered in projecting the six-year future.

For this study, tax impacts for 1973 and 1974 were calculated separately and then averaged. Due to the offsetting effects of inflation, the job impacts as figured separately were generally less than 10% different.

Accounting for Passage of Time

The time framework of the MCA study is as follows:

- A) Tax impacts calculated for 1973 and 1974.
- B) Current tax proposals presumed to pass in late 1975.
- C) Tax effects on corporate capital formation begin in 1976.

Appendix B cont.

- D) Changes in capital spending and employment begin immediately but, in general, lag capital formation by one year.
- E) Prices do not adjust to offset taxes until at least 1980 (5 years). Therefore, corporate capital formation is affected for years 1976-1980.

Tax impacts calculated for 1973 and 1974 were adjusted for corporate growth to the 1976-1980 profit impact period. Pixed capital formation for chemical industry was projected to grow at a rate 6.5% per annum greater than the rate of inflation in construction costs. This figure represents an interpretation of long term history: Deducting a projected 1.5% per annum growth (vs. 2.2% historically) in capital stock per person employed leaves a projected net growth of 5.0% per annum in jobs related to the chemical industry.

Portion of Taxes Implicitly Impacting on U.S. (vs. Foreign) Jobs

It is possible that the perception by corporate managers of the business climate in the U.S. would be altered to a marked extent by the imposition of additional taxes. This could mean that U.S. investment programs might be changed by more than direct U.S. tax impacts times our capital formation factor. Conversely, the managers have some freedom to offset new U.S. taxes by changing foreign rather than U.S. investment programs. Thus, the tax impacts as borne by U.S. as opposed to foreign capital investments might range from more than 100% to almost 0%. Because, for the past ten years, our (multi-national) sample companies have done about 75% of their capital spending in the U.S., it figures that the predominance of tax impacts will still be directed to U.S. programs.

The several types of tax proposals have somewhat different implications regarding their influence on U.S. as opposed to foreign spending programs. For this study, it was assumed that changes to export incentives and investment tax credits would impact 100% on U.S. investment programs. Similarly, changes to depreciation practices, general tax levels, minimum tax rates,

Appendix B cont.

etc., would impact half way between 100% and 75% (traditional proportion) on U. S. investment programs. This study did not attempt to predict the United States versus foreign impact of tax proposals directed at investments outside of the United States.

Appendix C

CAPITAL NEEDED TO SUPPORT ADDITIONAL EMPLOYMENT IN THE PRIVATE SECTOR

Figure 2 shows U.S. trends since 1958. Private sector capital stock (fixed, non-residential business capital) increased at the rate of 3.6% per annum (in 1958 dollars). At the same time, civilian employment in the private sector increased 1.8% per annum. These increases, plus technological progress, enabled a 3.5% per annum increase in gross output of the business sector, out of which came a 2.2% per annum increase in the real wages of labor.

Average capital stock per private civilian U.S. job was felt to be the most appropriate ratio for calculation of employment effects from investment changes related to current tax proposals. It was used in this study in consideration of the following factors. Only immediate term (0 to 5 year) impacts were included. The majority of the tax proposals would produce negative investment and employment effects. Job creation was assumed to be at current wage levels. Finally, the average ratio represents a statistically understandable input.

An alternate approach would have been to use a derived ratio for the increase in employment per increase in investment at the margin. Such a ratio would be valid for situations involving substantial, long-term increases in capital stock where a great deal of the increase in capital was utilized to improve the productivity of labor. The capital required to add a unit of employment using this marginal ratio approach is approximately double that of the average ratio used in this study.

Equations for the plots in Figure 2 are:

Fixed capital stock = 635 x $e^{.0360}$ billion dollars,

Private civilian employment

 $54 \times e^{.018\theta}$ million persons.

Where:

 θ = Time in years since 1958.

Capital stock is expressed in 1958 dollars.

Appendix C cont.

Dividing these two equations gives a third equation expressing average fixed capital per job.

Average Fixed Capital Stock
Private, Civilian Job

= \$11,800 x e.0180

Alternatively:

Marginal Capital Stock Private Civilian Job = 23,500 x e^{.0180}

The first derivative of the average (above) with respect to increased capital.

In addition to fixed capital, a smaller amount of working capital (for inventories) is necessary. Although available figures show wide year-to-year fluctuations, recent increases to business inventories (after deducting inventory valuation adjustments to offset inflation) have run about 4% of increases to fixed capital stock.

Combining the fixed and working capital portions, the total capital necessary to support new jobs (expressed in current dollars) was \$23,300 in 1973 and \$26,100 in 1974.

From the New York Times, February 23, 1976

SLIGHT U.S. DRAIN SEEN IN INVESTMENT OVERSEAS

By ANN CRITTENDEN

Several recent independent studies indicate that the investment of \$200 billion over-seas by the United States in the last 25 years may have resulted in a slight loss of national income, a decline in American jobs and a shift in the distribution of income from labor to the multinational corporations, their employees and shareholders.

These conclusions have been welcomed by the American labor movement, which has long argued, in an often heated controversy with the business community, that overseas investment has resulted in a loss of American jobs. The multinational corporations contend that the reverse is true—that investing abroad stimulates exports and national growth.

At least one of the new studies also argues that, in the long run, the large-scale export of American technology, managerial skills and capital, amounting to more than 20 percent of annual domestic corporate capital formation in recent years, may be contributing to a decline in the nation's productive capacity and productivity and to a neglect of domestic investment opportunities.

In this regard, the situation in the United States in the late 20th century has been

compared with that of Britain at the close of the 19th century.

"The U.S. might do well to be cautioned by the British experience, where heavy capital export is believed by some to have been one major factor in the stagnation of the British economy over time, and in the abrasive labor relations to which that stagnation has contributed," warned Prof. Peggy Musgrave of Northeastern University in recent testimony before the subcommittee on multinational corporations of the Senate Committee on Foreign Relations.

The subcommittee, headed by Senator Frank Church, Democrat of Idaho, has been attempting to determine the impact of investment overseas on the basic structure of the domestic economy, on the level of income generated and the distribution of

that income.

It commissioned a study by Dr. Musgrave ("Direct Investment Abroad and the Multinationals: Effects on the United States Economy") on these issues, which have been relatively neglected in the debate in this country about capital outflows.

In the past, most of the discussion on foreign investment centered on its effect on the balance of payments and employment. The labor movement has maintained that, by moving production abroad, the large multinational corporations have displaced American exports and exported American jobs.

In rebuttal, the corporations have argued that the activities of American subsidiaries overseas stimulate American exports and growth (and therefore employment) and bring

billions of dollars in repatriated profits back into the country.

At stake in the debate is United States tax treatment of overseas income. Most economists agree that the present tax laws favor foreign investment by allowing companies to deduct foreign taxes from their United States tax obligations and to defer payment of all American taxes on foreign earnings until they are repatriated to the United States.

Neither side has been able to establish its case, partly because of inadequate data and because both arguments must depend on certain key assumptions, such as what

would have occurred if the foreign investment had not taken place.

Thus the answer as to whether the movement of American companies abroad has been good or bad for the American economy has been that described by Prof. Charles Kindleberger of the Massachusetts Institute of Technology as the answer to all significant questions in economics: "It depends."

The authors of the new studies also rely heavily on basic assumptions, and they stress the tentative nature of their findings. But the findings are considered significant in that the research was conducted by academics working independently of either

side of the foreign investment controversy.

The conclusion that overseas investment is reducing labor's share of American income is supported by Professor Musgrave's report and by a study by Robert Frank and Richard Freedman of Cornell University. The thesis is also accepted by Robert Gilpin, a professor of politics at Princeton University, who argues in a new book thatpolitical as well as economic reasons, such as the rise of nationalism abroad—United States policy should not directly encourage foreign investment.

The argument that such investment currently has a slight negative effect on domestic income and tax revenues is found in Professor Musgrave's study and in a forthcoming work by J. Fred Bergston of the Brookings Institution. Thomas Horst of Tufts University

and Theodore Moran of John Hopkins University.

Professor Musgrave's basic assumption is that investment abroad is substantially at the cost of domestic investment—and therefore at the cost of the productivity and

the real wages of American labor.

Her analysis shows that, if all of the American capital accumulated abroad by 1968 had been invested domestically, total corporate income arising within the United States would have been invested domestically, total corporate income arising within the United States would have been 4 percent higher and income to holders of capital would have been 17 percent lower.

"Foreign investment," Professor Musgrave says, "esablished an alliance between U.S. capital and foreign labor, while it is not surprising that U.S. labor and foreign capital

should be less than enthusiastic.'

Professors Frank and Freeman also conclude that most foreign investment directly displaces domestic investment and therefore results in a loss of American jobs. In 1970, for example, their analysis shows a net loss of 160,000 jobs attributable to overseas investment by United States-based multinational corporations, particularly in the machinery, electrical-equipment and chemical industries.

There were indications that the State Department, which commissioned the Freeman-Frank study on the employment aspects of foreign investment, was not happy with

its conclusions.

According to Professor Frank, one member of the State Department said that "we would like to get organized labor off our backs on this issue." Although Professor Frank testified before the Church subcommittee that the man was promptly reprimanded for his remark, when the study was completed its authors were told by their State Department liaison officer that "serious gaps in the data available to you" and the inadequacy of "the tools available to economists" limited the usefulness of the results.

In other recent studies, Prof. Daniel J. B. Mitchell of the Graduate School of Managment at the University of California at Los Angeles concludes that international trade may now also be working against the interests of American labor. His research indicates that by the end of the 1960's in contrast to previous years, American imports were becoming more labor-intensive than exports, confirming the classical economic theory

that this would be true of capital-abundant developed countries.

This trade shift would imply a tilt in output toward more capital-intensive products and a corresponding reduction in the demand for labor. While Professor Mitchell cautions that there is not enough evidence to state that trade could potentially result in a lower real wage for American labor, he notes that the evidence also indicates that it would be "unwise to assume that labor's real income could not be hurt by trade (or not be helped by trade restrictions)."

American Gron and Steel Institute 1000 16th Street, N.W. Washington, D.C. 20036

FREDERICK G. JAICKS CHAIRMAN OF THE BOARD

March 2, 1976

Honorable Lloyd Bentsen
Honorable William E. Brock
Subcommittee on Financial Markets
Senate Committee on Finance
Washington, D. C. 20510

Dear Senators Bentsen and Brock:

We wish to express our appreciation for the opportunity to set forth our views on the importance to the steel industry of the tax legislation which your Subcommittee, as well as the full Finance. Committee continues to review.

The American Iron and Steel Institute intends to testify in detail when the Senate Finance Committee considers tax legislation later this spring. However, we do appreciate the opportunity to respond to the particular areas which your Subcommittee is considering at this time.

In June, 1975 the Institute published a revised study "Steel Industry Economics and Federal Income Tax Policy". A copy of this study was previously furnished to you and members of the Committee Staff and is attached for convenient reference.

This study concluded that the capital needs of the steel industry for the period 1975-1983 would be \$5 billion annually, in 1975 dollars, to maintain existing capacity, meet environmental standards, and to add 30 million net tons of integrated capacity in order to accommodate the projected domestic demand for steel products. The potential cash flow available to the industry during this period, based on recent history, was calculated to be \$3.3 billion annually, producing an annual capital shortfall of \$1.7 billion.

The additional 30 million tons of raw steel capacity which the industry and independent experts predict will be required by the early 1980's will, when operational, require 85,000 to 90,000 full time employees for mining through steel finishing operations and a substantial number of job opportunities for supplier and other types of ancillary

industries. Because they are basic to most other major industries, steel products also support a substantial volume of employment for the entire country. Finally, on the employment point, construction and installation of the facilities to produce this additional steel requirement, plus the facilities required to maintain present production capacity will entail substantial immediate employment requirements.

The primary effort for reducing this projected shortfall must be directed toward continued improvement in the industry's internal cash flow. That improvement began in 1973 and 1974 when, after several years of returns at or near the lowest levels of all industrial groups, the steel industry achieved a return on equity approximately equal to the average of all manufacturing industries. Further improvement will require realistic government policies which would not have a deterrent effect on profit margins and which help counteract noncompetitive practices of foreign steel producers supported by their home governments. The achievement of reasonable rates of return will maximize borrowing opportunities and, for the long-term, could permit the industry to obtain some part of its shortfall in funds from the equity market. These efforts at improving cash flow must be supported by Federal income tax policies that specifically encourage capital formation, particularly for those industries such as steel which require significant amounts of capital.

The American Iron and Steel Institute believes that for the long-term, the adoption of tax measures which encourage capital formation and business investment will not result in reduced Federal revenues. To the contrary, through the faxation of the activities of the resulting expanded economy, the Federal Government should increase its tax revenues.

The specific major revisions of the Federal income tax laws which the industry recommends include:

- 1. The adoption of a flexible capital recovery allowance system that will significantly accelerate the rate at which capital costs are recovered.
- 2. The adoption of a permanent 12% investment tax credit which (a) is applied to expenditures as they are made, (b) does not provide for a reduction in the basis for depreciation, and (c) which would be fully applicable to all property subject to the capital recovery system recommended above.

- 3. The adoption of provisions permitting the immediate write-off of the cost of pollution control facilities.
- 4. The improvement of provisions designed to encourage the discovery and exploitation, both domestically and abroad, of the raw materials that are absolutely essential to the industry.
- 5. The reduction of corporate tax burdens in order to (a) maximize the amount of cash flow that business may retain and reinvest in productive facilities and (b) provide the incentive to invest in such facilities.

We realize that some of these recommendations are longer range goals but Congress should now take steps to begin their implementation. The enactment of a permanent 12% investment tax credit and provisions for the immediate deduction of the cost of pollution control facilities should be accomplished this year.

The importance of the investment tax credit as a vital element of capital formation cannot be overstated. Its effectiveness throughout the years has been diluted somewhat by its suspension on one occasion, and termination on another. In addition there have been recurring suggestions that it be modified in a manner which would convert it to a counter-cyclical fiscal tool. Capital expenditures in the steel industry are on a large scale often covering several years and frequently must be planned on an integrated basis. Rational capital investment planning is very difficult if the element of outguessing the next change in the investment tax credit is introduced. In the absence of any Congressional action, the rate will revert to 7% at the end of this year. If the investment credit is to effectively accomplish the objective of encouraging capital formation, it should be retained as a permanent feature of the tax laws, preferably at a 12% rate.

The Congress has already taken a major step in improving the effectiveness of the credit by providing that in some cases it is allowed as expenditures are made, rather than waiting until the facilities are placed in service. A logical extension of this action to cover all qualified expenditures would not result in any overall reduction in the Federal revenues. It would, however, increase the effectiveness of the credit and remove some of the complexity in the current law.

The second major area that should be acted upon this year concerns expenditures for pollution control equipment. To put the matter

in perspective, the steel industry anticipates average annual expenditures of \$1 billion annually over the next eight years in order to meet environmental standards on existing plants. This amount excludes the cost of pollution control equipment, etc. which is integrated into and adds substantially to the cost of new production facilities.

These data are corroborated by an independent in-depth analysis on an individual plant basis released in May 1975 by the consulting firm of Arthur D. Little, Inc. According to the A. D. Little study, the total annual capital cost of all pollution control facilities will be \$1.5 billion or 30% of the industry's projected capital expenditure requirements.

It is apparent from these data that more realistic tax treatment of the costs of pollution control facilities is required in order to minimize the adverse effects on capital formation and the significant adverse impact on employment. The A. D. Little study discloses that as many as 93,000 existing jobs are in jeopardy at marginal plants because of the potential shutdown of these facilities due to the impact of environmental requirements.

Congress has previously recognized the validity of special treatment for pollution control facilities in the Tax Reform Act of 1969, when it provided for the amortization of the cost of these facilities over a sixty-month period. That provision expired at the end of 1975. This treatment, however, for all practical purposes, proved to be ineffective for the steel industry. This results primarily from the fact that the investment tax credit was not available for the cost of facilities for which taxpayers elected the five-year amortization allowance.

What Congress should now do is to enact legislation which would permit all expenditures for air and water pollution control facilities to be deductible as incurred, the reasoning being that these expenditures are not capital in nature because they do not, in a physical sense, prolong the life of the related asset or assets nor do they add to productive capacity; and, most significantly, they are generally not income-producing. If this cannot be accomplished immediately, then an interim step should be taken to reduce the recovery period, while allowing accelerated methods of depreciation and the full application of the investment credit.

Congress should also more precisely define "pollution control facility" so the incentives intended will not be denied by unduly restrictive administrative interpretation.

Yours very truly,

Frederick G. Jaicks

Chairman

American Iron and Steel Institute

FGJ/lm

STATEMENT OF CARL E. BAGGE, PRESIDENT, NATIONAL COAL ASSOCIATION

Association. The membership of the National Coal Association consists primarily of producing coal companies, the operations of which comprise over half the commercial production in the United States. We appreciate this opportunity to present our views on the importance of enacting tax legislation to help meet industry's capital needs. I cannot speak for other segments of the nation's industrial complex; however, I have serious doubts that the capital needs of the coal industry can be met short of an all-out commitment to the production and utilization of coal in this country. An all-out commitment would include action by the Congress to encourage investment, production and utilization of coal.

BACKGROUND

Two short years ago, Project Independence proposed a goal of energy self-sufficiency for the nation by 1985. At that time we testified before the full Senate Pinance Committee, and said that to carry its share of this burden, the coal industry must double production in ten years. This will not be accomplished without a favorable financial climate for the industry. In fact, our 1975 production exceeded that of 1974, but by six percent.

Today, in spite of the obvious demands that coal will face and the knowledge that markets will exist, investing in coal is extremely speculative.

Coal industry economists estimate, on the assumption that we must double production by 1985, that coal's capital needs would range between \$18 and \$22 billion during the next ten years to meet demand requirements. This is projected in 1975 dollars. For an industry with a current capitalization of slightly more than \$5 billion the magnitude of the task seems almost unattainable.

However, this is a realistic national goal if the coal industry can make the necessary investment now in production capacity and if the nation is willing to construct the type of institutional framework favorable to the rapid coal development. A pivotal ingredient in such a framework is an equitable and realistic tax structure for coal.

Coal must compete for its investment funds. To do so successfully it must be an attractive investment opportunity with a competitive short— and long-range rate of return. Currently, the industry simply does not have a rate of return commensurate with the risk, and thus the potential for development remains only that — a potential.

Coal production in 1975 was 640 million tons. This represents a six percent increase over 603 million tons produced in 1974 and an 8.3 percent increase over the 591 million tons mined in 1973. Tragically, coal's productive capacity has remained essentially stagnant for over twenty years. We can produce little

more coal today than we could shortly after World War II. This static condition cannot be permitted to continue. The industry must substantially increase production, and the cost will be high.

While capital costs may vary according to the terrain and the depth of the seam, it is generally accepted in the coal industry that the capital cost of installing a new deep mine is \$35 to \$40 per ton of annual production. This does not include the substantial administrative costs prior to start-up, such as securing permits, preparing maps and other related costs. Thus, a medium-large mine, with a capacity of one million tons a year, represents \$35 million to \$40 million investment by the time it begins commercial production. For a surface mine the costs vary widely, but on the average run from \$15 to \$20 per annual ton of production. Here, too, costs of such items as environmental impact statements and permits are not considered.

Since the industry needs to replace about three percent of its capacity every year simply to replace mines that are worked out, it must open new mines with about 15 million tons of capacity annually just to stay even, much less make headway towards offsetting our nation's suicidal reliance on foreign oil.

With this background let us turn to specifics. The data set forth in the various categories below reflects the best estimates of our economists if the coal industry were to double production over the next ten years.

CAPITAL REQUIREMENTS

Annual Production. Total Capital Investment End of Period Required During Period 1976 - 1980 890 million tons \$ 8.8 - \$10.7 billion 1981 - 1985 1,200 million tons \$ 9.4 - \$11.4 billion

TOTAL \$18.2 - \$22.1 billion

This simple chart illustrates the magnitude of financing facing the industry; \$18 - \$22 billions of new dollars will be required by 1985 to reach a production rate of 1,200 million tons per year. Of this amount, we estimate that approximately fifty to sixty percent, or in the neighborhood of \$12 billion can be generated internally by the coal industry. You must remember that only in the last three years has the coal industry made a sufficient return on investment to begin to attract outside investors.

Fortunately for the coal industry the promise of the future was recognized by a few farsighted corporate planners many years ago, when profitable companies bought into the industry. For the most part we have not maintained production with coal profits. Rather, we have been able to maintain the current rate of production primarily with the infusion of capital from the profitable corporate parents of some of our coal companies.

However, I doubt that even these companies, backed by relatively strong internal financing, can meet the capital demands of the future. It will be necessary to turn to the financial

community for investment capital. To be favorably received we must have an acceptable return on investment.

LABOR REQUIREMENTS

requirements far into the future. For instance, in 1969, we were averaging 15.61 tons per man day in deep mines. Today, with more mechanization, the average is down to approximately 11 tons per day. This decline in directly attributable to the Pederal Coal Mine Health and Safety Act. This should not be construed as our believing production is more important than health and safety. It merely illustrates the unforseen with which we must deal. On the other side of the coin, technology may develop a new and a more efficient method of mining coal. Should this happen, production per man could escalate.

Based on current mining methods, anticipated retirements, and the production goals set forth above, we estimate that a total of 125,000 new miners must be brought into the industry over the next ten years.

Today, the average miner earns about \$50 a day, and, according to the Bureau of Mines, works an average of 225 days a year. Without overtime, but including holiday and vacation pay, his annual wages are about \$12,400. Thus, if 125,000 new miners are working in 1985, it would mean an increased payroll

of nearly \$1.6 billion. Considering the multiplier effect of new jobs, this would be a substantial factor in absorbing the expanding available work force and a large contributor to government revenues through individual income tax collections. In addition, it would add appreciably to the country's gross national product.

BALANCE OF PAYMENTS

Often overlooked in the discussion of the economic impact of the coal mining industry is our contribution to the balance of payments. Last year, countries such as Japan, France and Germany purchased over \$3.2 billion worth of American coal. This is not coal in the accepted terms. Rather, it is metallurgical coal, used as a necessary ingredient in the manufacture of steel. Actually, it is more of a chemical than a combustion product. Fortunately, we have adequate reserves of this product to meet our own needs and assist in satisfying the requirements of the Free World for years to come.

TAX REPORM TO AID IN MEETING THE DEMAND

Recently, the Mational Coal Association undertook a study of the coal industry's expansion plans through 1985 which is attached as Exhibit A. In doing so, certain basic assumptions were made in arriving at the coal industry's projected increased productive capacity. These included the following:

- the Clean Air Act Amendments proposed by the Administration will be enacted;
- capital will be available for the projected expansion;
- no unreasonable surface mining legislation will be enacted;
- 4. a viable Pederal coal leasing program will allow development of Western coal;
- realistic means of complying with the National Environmental Policy Act (MEPA) will allow energy development without undue delay or restraint; and,
- 6. adequate transportation will be available.

 All six items above should be of vital interest to the Congress.

 However, only number two bears directly on the subject of this hearing.

TAX INCENTIVES

To insure the availability of capital, both that which is internally generated and that originating in the financial market, a favorable tax climate is absolutely necessary. Summarized below are our views on tax legislation which would contribute to the expansion of the coal industry over the next five years, and ultimately to our country's energy independence. While many tax incentives might be discussed, I will restrict my remarks to those which we believe would most impact on the financial markets of the nation, which is the subject of this hearing.

A. Accelerated Depreciation Rate

The promulgation of the Accelerated Depreciation Rate

(ADR) system by Treasury, as quoted from Treasury Department

Release of June 22, 1971, was intended to produce the following results:

"...the uncertainty and complexity of the application of the depreciation provisions of the Internal Revenue Code will be significantly reduced and substantial administrative benefits will be achieved;

the establishment of the Office of Industrial Economics in conjunction with the ADR system will, for the first time, permit useful lives for each asset class to be as current and as accurate a reflection of a 'reasonable allowance' as possible, based upon a broad spectrum of up-to-date information reflecting both the trend of past experience and what may be anticipated for the short run future;

increased investment resulting from ADR will produce economic growth which will increase our Gross National Product and reduce unemployment;

additional investment in more modern productive equipment stimulated by ADR will increase productivity and dampen inflation; and

the competitive position of American producers in world markets will be greatly strengthened."

The ADR system still far exceeds the depreciation periods of most industrialized nations. United States' businesses must compete with foreign competitors for both limited natural resources and available markets. Capital recovery is one of

the significant factors which affects our ability to maintain our share of the world market and also expand the nation's industrial base.

As detailed elsewhere in this statement, the coal industry is faced with the prospect and task of providing the United States with a significant portion of its energy needs for the remainder of this century. To be able to meet this commitment, the coal industry will be required to invest heavily in additional machinery and equipment.

A stable and favorable depreciation policy is a vital ingredient in justifying and encouraging current and future capital outlays in the coal industry. Your Subcommittee should consider liberalizing the existing ADR allowances by at least twice the current rate.

The coal industry strongly supports an increase in allowances made under the ADR system. To repeal ADR as advocated by some, would prove a serious deterrent to the economy of this country, which is only now emerging from a severe recession.

B. Investment Tax Credit

To encourage the purchase and construction of business assets and equipment, the Tax Reduction Act of 1975 -raised the investment tax credit rate to ten percent for the years 1975 through 1976. The House Ways and Means Committee had included

in its Energy Conservation and Conversion Act of 1975 the extension of this rate for coal mining equipment for three additional years, 1977 through 1979. Thus, that Committee recognized the need for large capital expenditures in coal mines and the desirability of encouraging such expenditures.

This legislation is now before the full Senate Finance Committee.

In addition to the investment necessary to develop a new mine or to expand production in a working mine, the lead time required to bring a new coal mine to full production is four to five years during which income, if any, will be minimal. Yet the large amounts of investment credit can only be used to reduce regular income taxes. As a result, the preference tax may be the more burdensome tax to the coal producer during this period.

Therefore, to make the investment credit provision fully effective in accomplishing the objectives desired we suggest the following amendments in the Internal Revenue Code:

- Increase the investment credit to at least fourteen percent.
- 2. Allow the investment credit to be applied against all taxes imposed by Chapter 1 of the Code, including the preference tax imposed by Section 56. An alternative to this approach, would be to allow the present limitations to apply against all the taxes indicated above.

3. In order to give coal producers some assurance that the investment credit can be utilized, provide that the credit be used on a first-in, first-out basis and that the carry-over period be extended to ten years. Under current law, the investment credit applicable to the taxable year must be used before considering carry-over.

C. The "Minimum Tax"

The minimum tax was originally conceived to insure that a select group of very wealthy individuals would be subjected to some measure of income taxation. As intended, and originally passed by the House in the Revenue Act of 1969, that end would have been accomplished. However, in the process of legislation, the provisions of the Limitation on Tax Preferences (LTP) changed considerably. Ultimately, it came to apply to corporations as well as individuals, and encompassed a series of "preferences" which were not part of the original Treasury package.

From the coal industry's point of view, the LTP bears most heavily with respect to the depletion allowance. It is a pronounced detraction from what incentive exists with respect to the depletion allowance. In the coal industry, or any other mining operation for that matter, there is already a restriction on the depletion allowance, since the depletion deduction is limited by the fifty percent of taxable income rule.

The ten percent minimum tax is suspect as valid tax policy when applied only to individuals. As applied to corporations

it is completely fallacious. It is a restriction on virtually all the attempts by the Federal government to encourage business expansion through to the tax system.

CONCLUSION

The nation's cosl industry stands ready to do its
part in putting the United States back on the road to energy
self-sufficiency. Although coal presently supplies less than
twenty percent of our energy, it constitutes more than eighty
percent of the domestic economically recoverable fuel reserves.
The timely and orderly development of this prodigious, indigenous
energy asset is essential to achieving this vital national goal.

Piscal policy and financial incentives such as those outlined herein are vital ingredients in providing an expansionary climate for coal. The provisions we have discussed would go far toward restoring this essential ingredient in order to achieve energy self-sufficiency.

ATTACHMENT

New Coal Mines and Major Expansions of Existing Mines Flammed, Assessment or Under Construction in the United States: 1975 - 1985 (millions of tone)

Rogins and State	Vitimte Capacity of Additions S/	1975	1976	1977	1978	1979	1900	1901	1903	1983	1994	1983
VESTERN UNITED STATES	•											
Artzona					2.20	5.30	- 5.20	••••	3.90	1.80	••••	
Incremental .	27.00	2.50 2.50	3.00 5.30	0.60 6.10	8.30	13.60	18.80	18.80	22.70	24.50	24.50	34.50
Colorado								•				
Incremental .	••••	0.15	0.15	1.00	1.60	••••	••••	••••	••••	••••	••••	••••
Cumulative	2.90	0.15	9.30	1.30	2.90	2.90	2.90	2.90	2.90	2.90	2.90	2.90
Nont and	•											
Incr eme nta l	••••	6.80	5.00	6.00	8.00	14.00	4.30	4.00	1.00	40.10	49.10	49.10
* Cumilative	57.30	6.80	11.80	17.80	25.80	39.80	44.10	48.10	49.10	49.10	47.10	47.10
Hew Hesico												
Incremental	****	••••	••••	••••	3.00	3.00	3.00	2.60	••••	••••	••••	••••
Cumulative	13.40	••••	••••	. ••••	3.00	8.00	11.00	13.60	13.60	13.60	13.60	13.60
Both Dahota	•				,							
Incremental	****	3.00	1.00	0.30	2.00	2.00	1.80	3.80	3.60	1.40	2.00	••••
Cumulative	21.90	3.00	4.00	4.30	6.30	8.30	10.10	13.90	17.50	18.90	20.90	20.90
Tens s												
Incremental	****	1.00	3.50	3.00	1.60	1.00	2.80	1.30				
Cumulative	16.70	1.00	4.50	7.50	9.10	10.10	12.90	14.20	14.20	14.20	14.20	14.20
Otah												
<u>locronotal</u>		1.50	2.70	1.40	2.60	8.40	8.50	3.00	5.90	1.80	****	••••
Cumulative	36.60	1.50	4,20	3.60	8.20;	16.60	25.10	28.10	34.00	35.80	35.80	35.80
					*							

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Exhibit A

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MATIONAL COAL ASSOCIATION

New Coal Mines and Major Expansions of Exiging Mines-10H Planned, Announced or Under Construction in Intelligible of COAL 1973 - 1985

Pogton and State	Ultimate Capactly of Additions a/	1975	1976	1977	1978	1979	1960	1981	1962	1983	1984	1985
WESTERN UNITED STATES												
Westington Incremental	••••	1.30	0.30	0.60	0.40	0.30	0.10		••••	••••	••••	••••
Cumulative	3.00	1.30	1.60	2.20	2.60	2.90	3.00	3.00	3.00	3.00	3.00	3.00
Wyoming			17.70	21.20	22.20	21.80	15.50	5.50	3.50	3.00	2.00	2.00
Incremental Cumulative	. ` 123.40	5.40 5.40	23.10	44.30	66.30	88,30	103.40	109.30	112.80	115.80	117.80	119.80
Sub-Total, Vestern						<u> </u>						
******	••••	21.65	33.35	34.10	43.60	57.80	41.20	20.20	17.90	8.00	4.00	2.00
Cumulative	302.40	21.65	55.00	89.10	132.70	190.50	231.70	251.90	269.80	277.80	281.80	283.80
Total United States									·· ···			
Incremental		51.40	79.75	76.31	86.43	90.70	62.60	32.40	26.20	14.00	9.70	4.50
Cumulative	577.80	51.40	131.15	207.44	293.91 *	384.61	447.21	479.61	505.81	519.81	529.51	534.01

a/ Ultimate especity of new mines and expansions, including especity that was added before 1975.

New Coal Mines and Ha joy Expansions of Existing Mines Planned, Annonced or Under Construction in the United States: 1975 - 1985 (millfone of tone)

i.	Vitimate Capacity of		•									
Region and State	Additions a/	1975	1976	1977	1978	1979	1900	1961	1962	1983	1984	1905
EASTERN UNITED STATES			•									,
Alabama												
Incremental	••••	3.55	3.45	2.95	\$.60	1.50	0.50	••••	••••	••••	••••	
Cumulative	19.55	3.55	7.00	9.95	14.55	16.05	16.55	16.55	16.55	16.53	16.55	16.53
Illinois												
Incremental	••••	1.75	7.75	7.70	7.70	5.10	2.90	2.20	1.90	1.80	••••	••••
Cumulative	40.60	1.75	9.50	17.20	24.90	30.00	32.90	35.10	37.00	38.80	38.80	36.80
Indiana												
Intremental	••••	2.80	2.70	••••		1.00	1.00	1.00	. 1.00	••••	••••	• • • •
Cumulative	11.00	2.80	5.50	5.50	5.50	6.50	7,50	8.50	9.50	9.50	9.50	9.50
Kentucky, Esetern												
Incremental	•••	3.80	6.80	5.10	3.40	3.20	1.00	• • • •		• • • •	••••	:
Cumulative	24.60	3.80	10.60	15.70	19.10	22.30	23.30	23.30	23.30	23.30	23.30	23.30
Zentucky, Vesters												
Incremental ·	••••	3.10	2.80	3.00	4.30	6.00	5.40	6.00	2.60	3.60	4.20	1.00
Cumulative	44.40	3.10	5.90	8.90	13.20	19.20	24.60	30.60	33.20	36.80	41.00	42.00
Rentucky, Total												
Incremental		6.90	9.60	8.10	7.70	9.20	6.40	6.00	2.60	3.60	4.20	1.00
Cumulative	69.00	6.90	16.50	24.60	32.30	41.50	47.90	53.90	54.50	60.10	44.30	45.30
ı Ohio		j										
In remente?		£.00	2.60	3.00	2.60	1.20	1.10	.:*::	.:•::		.:•::	.::::
Committee 1 cm	14.20	2.00	4.60	7.60	10.20	11.40	12.50	12.50	12.50	12.50	12.50	12.50

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New Coel Mines and Na for Expansions of Existing Mines Flammed, Announced or Under Construction in the United States; 1975 - 1985 (millions of Eose) NATIONAL COAL ASSOCIATION

	Ultimate ·													
	Capacity of		1076	1977	1978	1979	1980	192:	1982	1983	1984	1982		
Region and State	Additions a/	1973	1976	1977	27:0	37.7		ننند						
BASTERN UNITED STATES					•									
Pennsylvania =	•	4,40	7.70	7.80	6.00	2.90	2.20	5.10	••••	••••	••••			
Incremental	31.50	4.40	12.10	19.90	25.90	28.80	31.00	31.10	31.10	31.10	31.10	31 10		
Cumulative	31.50			•										
Tennessee		•	1.00	1.10	1.25	1.00	0.50		••••	••••	••••	•••		
Incremental		• • • •	1.00	2.10	3.35	4.35	4.85	4.85	4.85	4.85	4,45	4.85		
Cumulative	4.85	••••	1.00	••••	0.00									
Virginia					3.00	1.30	1.10	1.60	1.20	0.60	••••	• • • •		
Incremental	••••	0.30	1.70	1.90 3.90	6.90	8.20	9.30	10.90	12.10	12.70	12.70	12.70		
Cumulative	13.70	0.30	2.00	3.70	4.70		****							
West Virginia, Northern			2.10	1.40	1.40	3.00	1.60		••••	••••				
Incremental		2.60 2.60	4.70	6.10	7.50	10.50	12.10	12.10	12.10	12.10	12.10	12.10		
Completive	13.20	2.00	4.70	0.10		••••								
West Virginia, Southern	•			8.26	8.60	6.70	4.10	1.30	1.60	••••	1.50	1.50		
Incremental	••••	5.45	7.80 13.25	21.51	30.11	36.81	40.91	42.21	43.81	43.81	45.31	44.81		
Cumulet Lve	57.80	5.45	13.23	21.31	<i>3</i> 0.11	20.00				•				
West Virginia, Total		8.03	9.90	9.66	10.00	9.70	5.70	1.30	1.60	••••	1.50	1.50		
Incremental	****	8.05	17.95	27.61	37.61	47.31	53.01	54.31	55.91	55.91	37.41	58.91		
Cumilative	71.00	•.03	17.73	21.01	37.00	~		•						
														
Sub-Total, Eastern		29.75	46.40	42.21	42.85	32.90	21.40	12.20	8.30	6.00	3.70	2.56		
Incremental	275.40	29.75	76.15	118.36	161.21	194.11	215.51	227.71	236.01	242.01	247.71	250.2:		
Cumulative	27.40	2,.,,		223100										

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STATEMENT OF ROBERT M. BRANDON, DIRECTOR, PUBLIC CITIZEN TAX REFORM RESEARCH GROUP

Mr. Chairman and Members of the Subcommittee:

I would like to discuss the question of capital formation and what tax policy should be in that regard. The purpose of my statement is to caution against moving toward unwise ad hoc solutions to a perceived capital crisis.

First, I would dispute the existence of a crisis in the capital markets or the existence of a need to revise the tax code to encourage capital formation. I hope, at the very least, to convince the members of this subcommittee that there are serious problems with the economic studies which predict severe shortages of capital in the next 12 years, the studies upon which many calling for tax reductions to stimulate capital have relied. There are certainly enough problems, with the data that have been developed to date to warrant removing the issue from any immediate consideration by the Full Finance Committee. The committee has a responsibility to produce a comprehensive and equitable tax bill this year and should be focusing it's full attention on making the tax code fairer rather than overburdening it with additional questionable tax subsidies. It could also make a significant contribution toward insuring the existence of adequate capital for the U.S. economy by revising the treatment of foreign source income that has encouraged the exportation of capital abroad and the reduction of Treasury revenues at home. (See attachment # I).

I. The Investment Community has made previous claims of capital shortages which did not materialize.

I think it is important, before this committee gets into the thick of the economic arguments on capital formation, to put the whole issue into perspective. This is certainly not the first time that the investment community has sounded the alarm of capital shortages and demanded larger tax subsidies to avert the economic ruin they claimed was inevitable.

There are even those within the ranks of the investment community, however, who realize that these predictions of doom are really just part of the business cycle and should be taken with a grain of salt. The First National City Bank, in its newsletter of December, 1974, remarked:

"Even a casual glance back through history shows that alarms over looming capital shortages are nothing new. They are typically sounded during periods of inflation, whenever credit demand for inventories and working capital drives short term rates above the level of long term rates, thereby encouraging investors to hold out for higher inflation premiums.

The alarms are likely to fade soon, at least somewhat. The policies that caused the current inflation are over and deflationary strategies have been in place for almost two years."

Historically, the last post war period of the late 1940's also produced inflation and, as the City Bank noted above, cries of capital shortage. The financial journals of those times were full of articles with very similar reasoning to the claims we read today. For example, the Commercial and Financial Chronicle, published in New York by the National Association of Securities Dealers, had such familiar sounding articles as "Capital Formation and the Equity Market" (1948), "Bleak Prospects for Corporate Financing" (1949) "Plight of the Equity Capital Market" (1949) and "How Real were 1948 Profits?" (1949). And the claims were the same then as now: that corporate financial structures were running into dangerously precarious debt-equity ratios, that depreciation allowances were too low, and

that there was insufficient risk capital. Interestingly enough, the Chase Manhatten viewpoint then was about the same as now: "The capital gains tax has worked against the full functioning of the equity markets... we should... ignore capital gains and losses in computing taxable income."

Congress, however, did not respond with larger deductions and lower rates. In fact, the corporate tax rate was raised 14 points from 38% in 1948 to 52% in 1952 and remained there through 1963.

Obviously, the financial market did not collapse as a result. The great capital crisis did not materialize. The 1950's were a time of growth and prosperity for American industry. In spite of the alleged lack of capital, in spite of the higher taxes on business and in spite of the diversion of some resources into Korean war production, the real rate of economic growth in 1951 was 4%. (The 50 year average for 1920-1970 is only 2.9%). The following years the growth rates were 7%, 5%, 0%, and 6% in real terms, and the rate for the decade was 3.2%.

I am not trying to tell this committee that the economic trends are the same or that the capital market will follow the same pattern in the 70's as it did in the 1950's. My point is that these claims should not be taken at face value as a program for tax subsidies that are absolutely necessary to American industry. We have heard these claims before and they proved false then.

II. Claims that there is a shortage of capital ignore the basic structure of our economic system.

To begin with, we must recognize that in some sense there has always been a capital shortage because there is always a gap between what the country would like to do and what it can afford to do. There is and always has been in any year a

finite pool of capital and as a result, how that capital is allocated depends on how much any segment of society is willing to pay for it. Those who are willing to pay the price will get the needed capital. That is how our capital market has always worked.

We are not today in a position any different than we have been in the past in that regard. The rate of personal savings which is an important source of investment capital has remained roughly constant for decades. And the portion of GNP that goes into business' plant and equipment investment has, according to the Department of Commerce, been increasing in the last decade (1965-1974) computed in either current or constant dollars. What is causing the outcry from the investment community now is the economy in general. The current recession and inflation we are experiencing has sparked this push for greater tax breaks. But the entire country is suffering from the economic downturn and this committee should be worrying about more general problems than additional tax breaks for a relatively small and wealthy segment of society. More capital is the last thing we need in the midst of a recession.

Furthermore, there are several well respected economic commentators who have expressed serious doubts about the validity of the few studies that are predicting a capital formation crisis. Some of them -- Joseph Pechinan, Richard Musgrave, Henry Wallich--have appeared before the House Ways and Means committee to dispute these studies and conclusions or to suggest other remedies. I amnot here to simply reiterate their data. Ifear, however, that their voices will be lost in the rush of private interests seeking to preserve or increase their own tax subsidies. Many private interests see this opportunity as the best time to increase their tax preferences: the investment tax credit was increased for two years in the Tax Reduction Act of

1975. With the groundwork already laid, many private interest groups are here now hoping to seize the opportunity to convince this committee of the necessity for a permanent investment tax credit increase, most asking that the credit be raised even further to 12%.

I would caution the committee against acting too hastily on so complex an issue on the advice of self-interested groups. To date, the two major sources of the capital crisis alarm are the Chase Manhattan Bank and the General Electric Company - both interested parties, both members of groups that stand to gain greatly from the types of corporate tax changes they are claiming as necessary to the entire economy.

There are some serious errors and inadequacies in the studies and I will get to these in detail in a few minutes. Even a superficial examination of the arguments, however, should convince this committee that the data is too sketchy and the conclusions too unfounded to warrant an immediate change in the corporate tax structure. Even the \$20 billion 1975 Tax Cut bill and the 1976 tax cut extension passed as a stimulus to the economy did not make such broad changes as this committee is now being asked to make in the name of a hypothetical capital shortage.

Clearly, more study is needed into the present and future needs of the capital market before any legislative action, tax or otherwise, is taken. Serious consideration must be given to the question of whether the tax code is the proper instrument of financial regulation. I maintain that even if a competent, independent study were to conclude that a severe capital shortage is going to occur that any government action should, as a matter of policy, be a course of direct action rather than the indirect approach of increasing the huge tax expenditures which

already subsidize the capital markets.

III. The present tax subsidies to business are already huge and inefficient. Any additional tax cuts should be made through the personal income tax.

Mr. Pechman, of the Brookings Institution, has estimated that about a third of the tax expenditure budget, or roughly \$33 billion, is now spent through the existing tax preferences which are designed to encourage investment. With an increasingly large federal deficit, it should be the task of this committee to critically examine all tax preferences in hopes of raising revenues by eliminating those preferences that are not cost effective or necessary. Instead, you are being asked to increase several specific tax preferences to give certain types of corporations reductions in the already low taxes they pay.

Selective tax cuts, such as the investment tax credit and ADR, are more valuable to some types of companies than to others and will increase the existing disparity of corporate tax benefits and burdens. The investment tax credit, for example, is of far less benefit to labor intensive industries than capital intensive industries generally. There are many corporations which do not have sufficient immediate demand to occupy their existing machines or which are really too small to take advantage of the credit incentive, but are just as much in need of the capital as any other corporation. ADR similarly favors those with a greater proportion of depreciable investment over labor intensive industries.

A cut in the corporate tax rate is at least neutral in its benefits. I am not advocating such a move, but only pointing out that those who are crying for a tax cut are only interested in one which helps them most, as opposed to what might benefit the market generally.

In fact, it is unfortunate that a reduction in corporate taxes is viewed as the only way to stimulate business and create capital. Tax cuts for individual taxpayers put more money in the hands of consumers and that money does not simply evaporate from that point, although Chase and GE seem to ignore it. It increases savings in a fairly direct proportion according to studies by Martin Feldstein of the Harvard Institute of Economic Research. Such savings are an important source of investment capital, particularly for many of the small businesses financed not through Wall Street but through private capital. What is not saved is spent on increased consumption which does filter through the cirporate structure, increasing profits and retained earnings, another important source of capital for corporate expansion. It is also a much needed stimulus at a time when business is operating at 66% of capacity, and more in need of customers than of larger tax credits or more machines to stand idle.

I think it is important to note here that using consumer demand to control and direct corporate growth is, of course, one of the natural and non-discriminating market mechanisms we should be depending on to keep the economic system healthy and responsive.

The increased demand is a very direct and rapid way to expand the need for both employees, and plant and equipment. It has the added benefit of easing the "capital crisis" that the average consumer is experiencing as a result of inflation.

Arthur Burns has noted that 25 years ago a typical worker with 3 dependents gave up 1% of his gross weekly earnings in federal income and social security taxes. Since then that fraction has risen steadily to 13% in 1974. Mr. Burns claims this has cut worker's incentive and reduced productivity. At the same time, corporate taxes have deopped from 30% of the federal revenues in 1954 to 21% in 1964 and 14% in 1974, with the personal income tax collections - primarily from social security - making up the difference.

IV. Capital is not overtaxed in the present system.

Mr. Jones of G. E. and others who want corporate taxes reduced frequently state that capital is presently over taxed. They quote Secretary Simon's statement that the corporate tax burden is really 69% when inflationary factors are considered. Furthermore, they argue, taxing profit to both the corporation and the shareholder is really double taxation of the same income.

First let me say that I think Secretary Simon juggles the figures to suit his own purpose by deflating corporate profits to adjust for inflation without similarly deflating debt obligations and taxes paid. Since outstanding corporate debt now totals \$1,3 trillion, the ability to repay this debt with cheaper dollars must have produced an untaxed gain perhaps approaching 10% of that amount in 1974, cutting real corporate tax burden by more than a third. 1974 taxes are also paid with cheaper dollars. The huge appreciation in corporate real and personal fixed assets and resources are also untaxed and therefore unaccounted for in Mr. Simon's figures. Finally, the value of inventory goods due to shortages went up much faster than the general inflation index. According to William Fellner, two-thirds of inventory profits were real not inflationary gain. Therefore, discounting for all "inventory profits" understates real corporate profits and overstates the tax burden.

The claims of double taxation ignore the fact that much of the second or individual tax on stockholders is imposed at the very light capital gains rates. Wealthy tax-payers who receive corporate profits in the form of dividends often pay taxes at rates far below their statutory rate. For a typical wealthy taxpayer, whose actual effective tax rate is around 30%, the combined burden of corporate and individual taxes is only 60% -- the 30% average effective corporate tax rate plus 30% average effective individual tax rate. This does not appear to be overtaxation, in fact

this is actually lower than the 70% rate wealthy people are supposed to pay under our system of progressive taxation. And note that I have assumed that the entire burden of the corporate tax falls on shareholders. To some extent this tax is really borne by workers and consumers through lower wages and higher prices, so the portion passed on to shareholders is even lower than in the above example. Furthermore, those composite taxes are lower where wealthy people invest in the many companies paying little or no federal tax-or issuing tax-exempt dividends.

While we can argue on the theoretical level over who pays the corporate tax -- the shareholder, the consumer or the worker -- common sense suggests that there are probably an abundance of cases where the absence of competition or substitution keeps prices and wages rigid so that tax preferences will accrue to the benefit of shareholders and not the consumers. In any event, even if corporate tax cuts were wholly passed on to the consumer, the same objective could be achieved directly by cutting individual taxes. Cutting corporate taxes, or reducing taxes on corporate dividends on the other hand, will presumably increase the capital owned by the 1% of Americans who own 51% of U.S. corporate stock and who already receive the bulk of the \$33 billion of corporate tax presumes. The 53% of Americans who own only 10% of U.S. corporate stock will receive only what "trickle down" benefits remain after most of the money flows into profits rather than new investment,

V. The existing tax preferences have created a distortion encouraging more debt financing.

There is no doubt that tax preferences have a great deal of affect on financial decisions and frequently taint or distort the normal market mechanisms. Rather than removing distortions when they prove harmful, this committee is being asked to increase them by creating a compensating bias.

The growing use of debt instead of equity for financing corporate growth is cited by G. E. (and Chase) to prove the lack of available capital. The solution, it is claimed, is to make dividends deductible to corporations to put them on an equal footing with interest payments which are already deductible.

But the increased reliance on debt financing is not really an indication of a problem. At least part of the reason for the increase in debt is voluntary choice because of the bias in the tax code which favors interest over dividends. It is not that no other capital is available and so corporations are driven into debt financing. The fact is that the tax bias makes debt financing cheaper and therefore more attractive as long as the investment return exceeds the interest costs. Financing with debt also has the advantage, from a corporate management point of view, of not diluting the per share earnings of existing shareholders.

There are, of course, factors other than the tax code which affect debt equity ratios. In times of recession, investors holding convertible debentures will convert them into bonds instead of stock, increasing the proportion of debt to equity (stock) financing.

Debt is greater than it was 20 years ago throughout the economy. It has been suggested that debt financing has simply become more acceptable to the consumer over the years. The economy as a whole now has \$8 of debt for each \$1 in the money supply, double the ratio of 20 years ago. While corporate debt has tripled in 15 years, consumer installment debt has at least doubled and the debt of federal agencies is up over 1000%. So the growth of corporate debt is not all that unusual.

But it cannot be denied that the tax bias encouraging debt is considerable. Henry Wallich regarded this as the major problem in capital formation when he addressed

the Ways and Means committee last July. His solution is to reduce the tax deduction for interest rather than increase the distortion by allowing corporations a comparable deduction for dividends, as the Chase and G.E. studies would propose.

VI. Additional tax cuts would make capital harder to get than now,

It is a simple fact, glossed over by the proponents of tax cuts, that any additional tax preference will cost the federal government additional loss of revenue. Since there is already a sizeable deficit in the budget, an increased deficit means increased government borrowing, which can raise the interest rate as the government competes with industry for capital.

The dimensions of the problem are hard to predict, but every economist who has testified before. Congress—on the subject has agreed that there is a potential for the private sector to be crowded out of the market by the government. They further agree that a serious crowding out problem will not arise until we reach a time of full employment when businesses are required to expand through new investment rather than through hiring additional workers.

According to President Ford, unemployment will remain substantially above full employment levels well into the end of this decade. If this is the case, then no capital squeeze problem will arise for several years to come. Obviously then, the time for this committee to deal with the problem of capital shortages is when and if they arise in the future. In the interim, there is little sense in cutting taxes so that interest rates are forced up for all consumers.

VII. Foreign growth rates cannot be compared to our own,

Another divice being used by those claiming a need for more capital is to compare the growth and investment rates in this country with those of other countries. Since the growth and investment rates here are lower, it is asserted that we need to reduce the taxes on investment. Mr. Pechman refuted these conclusions by describing the vastly different starting points of post-war economies in Europe and Japan have demanded a much higher rate of growth than in the U.S. since we did not have to rebuild after the ravages of war.

It must also be remembered that investment is translated into growth through the technology available and Japan and Europe have been able to skip generations if technological development and invest in the highly productive technology pionerred in this country. It is not unlikely, according to the economists in this field, that when these countries reach the frontier of technological development attained in this country, their rates of growth in GNP per capita will be no higher than ours. The Japanese government projects a real rate of growth of only 2% for the year enting next April. It is also interesting that Japan's rate of inflation also exceeds ours - it recently hit 24% (Oct, 1974).

VIII. The data is too speculative to be relied upon in making legislative decisions.

I think it is important to carefully examine the figures used by the Chase-and G.E. studies. But first I would like to quote, as a general comment, economist Erich W. Streiggler's book on the problems of long range economic predictions (Pitfalls in Economic Forecasting, U. of Vienna) "It is a commonplace of long standing that exact forecasts are impossible in economics. Because of the use of judgment even forecasts very complicated in method, when made at the wrong moment may be hardly better than passing fancies." The problems that the major economic forecasting models have had in this past year keeping up with changes in the economy from one quarter of the next are a good illustration of the vagarios of economic predictions.

The problem in making forecasts for economic activity 12 years in the future is that too many elements are difficult or even impossible to estimate. Technological advances, for example, can hardly be anticipated with any accuracy at all and yet they contribute heavily to capital growth. According to Edward F. Denison's noted book Sources of Economic Growth, for the years 1909 through 1957, of total growth in real national income per person employed, capital and land contributed 12%, while increased education of labor, economies of scale and dissemination of technical knowledge contributed over 85%.

If we examine carefully the studies done by Chase and G.E., we find several major flaws. The prediction of a shortfall in savings in comparison to investment needs is based entirely on guesses as the amount of saving and investment that will occur. For example, the president of the Chase Manhattan Bank has estimated that capital needs over the next ten years will total \$3.6 trillion (assuming a 5% rate of inflation). However, he adds another \$500 billion out of thin air when he goes on to say that "what we really need... could go to \$4.1 trillion." He then uses the \$4.1 trillion as an investment needs figure to compute a savings deficit of \$1.5 trillion. In other words, the President of the Chase Manhattan Bank is asking the Congress to make tax policy on the basis of sheer guesswork.

Similarly, the General Electric Company forecasts are also based on guesses. For example, in its June 20, 1975 forecasts, G.E. assumes that non-military government investment will be 145% greater in the period 1974-1985 than it was over the period 1962-1973. This is based on "a detailed projection of federal, state and local spending based on program trends, demographic factors, and receipts" But suppose that G.E. has guessed erroneously as to the pattern of government spending? In that case, their prediction of capital shortage might be entirely incorrect.

Other problems with the G.E. study, aside from the susceptibility of its results

assumptions about the rate of either inflation or unemployment. Such information is crucial, however, to its predictions. The rate of inflation makes a major difference in investor confidence and especially on an investor's willingness to hold equity instead of bonds. The level of unemployment makes a major difference both in investor confidence in the strength of consumer buying power and in whether new capital is required to increase business production. Yet G.E., has stated that its economic forecast is "company proprietary data" and therefore unavailable for the purpose of checking its crucial underlying assumptions. Without knowledge of this data, it is impossible for this committee -- or anyone else -- fo properly evaluate the G.E., predictions.

Another major problem is that both G.E. and Chase make assumptions about our future capital investment needs in energy production that must be examined closely. The oil companies, for example, have been very vocal in their demand for tax incentives to encourage investment in research and development of new sources of oil and gas. The oil shortages of the past few years were pointed to as the result of inadequate investment in domestic oil sources. Yet, a 1974 FEA study concluded that by 1985, the petroleum industry would have excess capital of \$96 billion available to invest in other industries. In fact, the major oil companies have so much excess capital now that they are already moving into other industries, and this in spite of the recent repeal of percentage depletion. Standard Oil of California paid cash of over \$300 million for an interest in Amax, a coal producer, Gulf Oil had announced plans to acquire Rockwell International, which has revenues of \$4 billion yearly, Gulf's former President, Bob Dorsey, stated: "In the past we put 40% of our capital investment abroad, but now that those areas are shut off to us and now that domestic oil demand is no longer growing as fast, we have more capital available for diversification".

Obviously, the Chase assumption of continued increase in the demand for energy is unfounded. But it is also interesting that the Dorsey statement illustrates some of the other variables that are impossible to predict, such as the repatriation of capital investments, and foreign policy. Also, the oil industry is particularly affected by technological changes, both as they affect the energy industries as well as industries which rely on energy, and technological changes, as we have already said, are impossible to predict.

IX. The Administration Utility Tax Proposals Ace Misguided and Wasteful

The administration proposal for tax relief for electric utilities and their shareholders is a wrongheaded approach to the problems of the utility industry. Their
basic financial problems have stemmed from an over expansion of plant capacity without
considering conservation induced reductions in demand, an over reliance on unreliable and costly nuclear power plants and cumbersome rate making procedures.

More intelligent load management, slower plant expansion, and responsive rate
making are the answers. In fact, with utilities forced to face up to these problems,
some of their recent difficulties have eased. With more direct attention to these
problems, their financial picture can continue to improve. That is the proper
answer to the utility industry's problems. The answer is not a billion dollar a year
raid on the U. S. Treasury.

The First National City Bank recently noted that the first quarter profits of 81 power companies were 12% higher (in real terms) over the same time interval.

Yalue Line Investment Survey, a leading Wall Street financial analysis publication, advises its readers to buy utility stock in the following glowing terms: "Hawaiin Elec-

tric offers a generous return...good profit levels should continue a while longer...

Florida Power Corp: Improved carnings prospects should help these shares to outperform the market averages in the year shead.

The electric industry itself recognizes that its situation is improving. W. Donaam Grawford, head of the Edison Electric Institute whose membership comprises 98% of the investor owned utility companies, noted in April of this year that "interest rates have come down. Bonds and common stocks are being sold on a more satisfactory basis." Even some members of the Administration see no problem in public utility financing. In testimony given last April 14 before the Subcommittees on Intergovernmental Relations and on Reports, Accounting and Management of the Senate Government Operations Committee, Assistant Secretary of Interior Jack W., Carlson stated: "A decline in interest rates combined with rate increases leading to improved earnings performance has increased investor confidence in the industry, resulting in a 25% imporvement in utility stock performance.... The evidence does not indicate to me that there is a major problem over the long run."

In short, whatever the condition of the utilities in 1974, they currently are having far fewer problems in raising the capital they need. Under these circumstances, any need for further tax breaks for utility companies and their stockholders is diminishing rapidly. Moreover, as pointed out by Assistant Secretary Carlson, rate relief is what is responsible for the current imporvement in the utility financing picture, and rate relief is capable of handling those financial problems that remain.

Not only are the Administration's utility tax proposals not needed, but they would in many cases bring about no increase in utility company investment and would instead go only to increases in the after-tax profits of utility investors. The increases in the investment tax credit proposed by the Administration is a perfect example of the upside down character of its proposals. This credit can be used by profitable com-

panies to offset their tax liability, but it fails to assist the unprofitable companies -the ones who may be in need of help -- because these companies lack of profits prevents their having any tax on which a benefit from the investment tax credit could be
realized. According to one recent study one-third of 150 electric utilities surveyed
paid no tax in 1974. With the recent 150% increase in the investment tax credit that
percentage should more than double. To the extent that the financially troubled
utilities number among these non-taxpaying companies, they will receive no help
at all from the Administration's proposed investment tax credit increase.

Meanwhile, the increased tax credit increases the return to investors. Utility companies can use it to expand the proportion of their dividends which is tax-exempt as not being paid out of earnings and profits. One hundred percent of VEPCO's dividend payments were non-taxable in 1974. Furthermore, the situation of the profitable companies is such that they are in some cases able to show a tax loss, in spite of the profits they report to their shareholders, because the tax laws give them such liberal treatment. For example, VEPCO earned profits of \$84 million in 1974 -- an 11% return on investment -- while receiving a refund of previously paid taxes in the amount of \$7.15 million for their 1974 tax loss. It's the stockholders of these companies who benefit chiefly from these phony tax losses. In a recent company perspectus, the company states that it will have no tax liability in 1975.

The Administrations' proposed tax postponement for reinvested utility dividends is another misdirected tax subsidy with questionable value for the utilities involved and is, at the same time, a potential tax bonanza for the rich. Under the Ford Administration's proposal, a shareholder's stock dividends would not be taxed as ordinary income in the year received, as they are now, but could be deferred for many years - an interest free loan from the U.S. Treasury. If the Administration's plan goes through, wealthy taxpayers will have their taxes on dividends significantly

reduced. However, this plan would be of no help to those less well-off stockholders, particularly retirees and employees with a few shares of stock, who rely on periodic cash dividends as a means of meeting basic living expenses and have no use for stock dividends.

If the Administration is really concerned about those utilities that are in financial trouble, it should consider either direct loans to them, or measures to expedite the granting of rate increases consistent with increased operating costs. As Treasury Secretary Simon pointed out in testimony before the Ways and Means Committee, "the most fundamental problem... is adequate rates"--not taxes. Recent increases in utility rates are a principal cause of the recent improvement in utility stock market performanc — as Assistant Secretary Carlson has pointed out, and can be used to help out these companies that are still in fanancial difficulty. Furthermore, as FEA Administrator Frank Zarb has indicated in several recent speeches, intelligent load management - i.e., more widespread power distribution and more efficient use of existing capacity, half of which is currently unused in off-peak hours -- can reduce plant expansion needs by one-third over the next decade. Intelligent, efficient load management is clearly the way the nation must go in a decade when conservation will be the watchword and when huge amounts of idle utility generating capacity just can no longer be afforded.

In conclusion, inefficient tax subsidies are hardly needed when two direct and proven solutions to utility financial problems -- rate relief and more efficient load management -- are available.

Conclusion

I think I have made the point that I feel it is inappropriate for this committee to cut corporate taxes in response to the outcry for more capital. Obviously, there

are many unresolved questions about who pays what taxes and how that affects capital. But the real problem underlying this whole discussion is the lack of affirmative policy in the area of capital allocation.

In other words, given the finite capital that we have, how do we determine who gets it. In a perfectly free economy, the market would settle that question: those who can afford to pay for it. However, we have a market that is already very greatly affected by the tax policy and has been severly distorted by the different biases that have been created. Before more distortions are created, we should be looking at the relative claims of the different segments of the economy. Should housing be allocated more or less capital than it gets now? What type of housing should be favored? How much capital should go into energy investments? Capital can not be encouraged into one area without depriving another.

There are those who would go farther and demand that the tax code be used to encourage the creation of more capital (through savings and investment) so that we can continue to have an ever increasing growth rate. But the social costs of such rapid economic growth can be fairly high since we would have to raise taxes right now on the low and middle income taxpayers to reduce the burden on the wealthier through the selective tax cuts that have been proposed, or risk the costs of increased deficit spending.

It must be remembered that capital doesn't spring out of thin air. Increases in investment necessitate cuts in consumption. This committee is being asked to do that through the tax code by reducing the spendable income of consumers and increasing the spendable income and the profits of corporations. But profits will not remain high if consumers cut down on their purchases. The approach seems to be self defeating. I would urge the committee not to react to the cries of a well orchestrated campaign to cut taxes for business and their owners in the name of capital formation.

TAXATION, INVESTMENT AND CROWTH

BY

JOSEPH A. PECHMAN*

Statement before the House Ways and Means Committee, June 25, 1975

I am pleased to have this opportunity to discuss the allegation that there is a serious capital shortage in this country and that unusual tax measures should be adopted to remedy this deficiency. I have examined the arguments usually made to support this position and do not find them to be persussive. In my opinion, our capital needs during the next several years can be met without distorting the tax structure by additional measures to promote saving and investment. The type of tax changes that are usually suggested would reduce the taxes of corporations and high income recipients at a time when there is a public demand to remove tax preferences for investment income. Instead of tampering with the tax system, the Congress should devote its attention to restoring high levels of employment and income as quickly as possible. This is the best contribution it can make to promote investment and a satisfactory rate of economic growth.

Capital Needs

Proponents of new tax incentives often dramatize their position by aggregating estimates of investment needs over a decade or longer. In this way, they come up with a huge figure which, it is suggested, cannot possibly

^{*}Director of Economic Studies, The Brookings Institution. These views are my own and do not necessarily represent those of the officers, trustees or other staff members of the Brookings Institution.

be met. Little attempt is made to compare the savings flows out of which the investment would be financed.

Three of my colleagues, Barry Bosworth, James Duesenberry and Andrew Carron, have just completed a projection of investment and savings for the year 1980 in a new Brookings book, <u>Capital Needs in the Seventies</u>. They find that capital requirements for the public and private sectors will indeed be large, but the amounts are not out of line with past saving and investment ratios in periods of high employment.

Contrary to the impression given by proponents of more investment tax incentives, the level of private investment during the past decade has been extremely high by any standard. As Table 1 shows, the portion of the gross national product that went to business fixed investment in 1973 and 1974 was close to a post World War II peak, whether the figures are expressed in current or constant dollars. The averages for the pest decade, 1965-74, easily exceeded the averages for the previous decade and even exceeded those for the immediate postwar decade, when investment demand was extremely high as a result of war-created shortages. Furthermore, the investment ratio in 1973 and 1974 exceeded the ratio in 1929 when it is measured in current dollars, although it was below the 1929 ratio in constant dollars—as was every year since the end of World War II. There is no evidence in these figures that investment has been lagging in recent years, or that the tax system has been a drag on investment.

Of course, the nation's private investment needs will not be satisfied if the federal government runs significant deficits when the economy is doing well. In such situations, the deficits compete for funds in the capital markets and do crowd out private investment. For this reason, it is important to run surpluses in periods of high employment. These surpluses are used to retire

TABLE 1. Business Fixed Investment as a Percent of the Gross National Product in Current and Constant Dollars, 1929, 1946-74

Year	Current dollers	1958 dollars
1929 —	10.3	13.0
1946	8,2	9.7
1947	10.1	11.7
1948	10.4	11.7
1949	9.8	10.6
1950	9.8	10.6
1951	9.7	10.3
1952	9.1	9.7
1953	9.4	9.9
1954	9,2	9.7
1955	9.6	10.0
1956	10.4	10,6
1957	10.5	10.5
1958	9.3	9.3
1959	9.3	9.3 - 9.7
1960	9.6	- 9.7
1961 1962	9.0	9.2
1963	9.2	9.4
1964	9.2 9.7	9.4
	9.1	9.9
1965	10.4	10.7
1966	10.9	11.3
1967	10.5	10.8
1968	10.3	10.7
1969	10.6	11.0
1970	10.3	10.7
1971	9.9	10.3
1972 1973	10.1	10.6
1973 1974	10.6 10.7	11.2 11.4
Averages		***
1947-54 ·		
•	9.7	10.5
1955-64	9.6	9.7
1965-74	10.4	10.9

SOURCES: Economic Report of the President, 1975, pp. 249, 250, 264 and Survey of Current Business, May 1975, p. 5.

debt and thus help to provide funds to finance private investment.

In recent years, except for the early Vietnam War period, the federal budget has in fact been close to belance or has run a surplus when unemployment has approached the 4-4-1/2 percent range. For example, in the second quarter of 1973, when unemployment averaged 4.8 percent of the labor force, the budget computed on the national income account basis—which is the relevant budget for this purpose—ran a deficit of only \$2 billion at an annual rate. The Council of Economic Advisers has estimated that the deficit would have been converted to a surplus of \$3 billion if unemployment had been running at 4 percent in this period.

Bosworth, Duesenberry and Carron expect that the ratio of private investment to the gross national product will need to be only slightly higher in 1980 than the level it reached in 1973. To finance this amount of investment, it would be necessary to run a surplus of one-half of one percent of the gross national product if unemployment were reduced to 4 percent and somewhat over one percent if unemployment were reduced to only 5 percent. (This is a demonstration of the obvious point that, if the economy produces less, we will have to reduce consumption and government expenditures relatively more in order to supply our capital needs.) The authors conclude that these surpluses are within the capabilities of our present fiscal system. Special efforts would not be necessary to induce more saving in a high employment economy than we are likely to have with the present tax system and prospective increases in government expenditures from present programs, although opportunities for large new programs will be limited.

A much more serious constraint on investment than the tax system is the recession which we have been experiencing for the past year and a half.

During the first year of the recession, investment held up well, but now it

is declining rapidly as business managers are faced with excess capacity and find their profits falling sharply. The shortfall of investment below the levels it would have reached if we had avoided the recession is of the order of \$28 billion in 1974 and 1975 alone; another \$22 billion will probably be added in 1976, making a total deficiency for the three years of \$50 billion. (These figures are expressed in 1975 prices.) This amount is the equivalent of over a half year's worth of investment at current levels. I know of no technique, tax or otherwise, that would raise investment by that amount over a period of three years. The moral of the story is that the best way to secure adequate investment is to avoid recessions; and, now that we are in a recession, we should try to return to high employment levels as quickly as possible. This will not only alleviate the human suffering from high unemployment, but also contribute to a higher level of investment.

Comparisons with Other Countries

Another favorite technique used by proponents of tax incentives for investment is to compare growth and investment rates in the United States and other developed countries. It is a fact that the ratio of investment to the gross national product is lower in the United States than in many European countries and in Japan. It is also a fact that the U.S. growth rate has been lower than the growth rate in many European countries and in Japan during the past two decades. On the basis of these two sets of facts, it is asserted that investment is too low in the United States and something must be done about that, preferably by reducing taxes on investment income.

There are at least two significant omissions from this chain of reasoning. First, despite the difference in investment rates, capital per worker is higher in the United States than in practically any other country. (By some measurements, France, Germany and Canada may have already caught up to the United States, but not other countries for which data are available. Europe and Japan needed to invest more heavily than the United States because they were not only behind us when World War II began but also suffered inmeasurable destruction during the war. Thus, they had a long way to catch up, and it is to their credit that they have tried to do so. But I see no reason why their investment ratios should be used as a standard to appraise the U. S. performance.

Second, there is no guarantee that continued high investment rates in Europe and Japan will produce as much growth in the future as it has in the past. As investment deficiencies are made up, the economic growth produced by extra investment declines. Presumably, when Europe and Japan catch up to the United States (in terms of capital per worker) the additional growth that investment will produce will be roughly the same in Europe, Japan and the United States. But even when the investment deficiency is made up, the other economies may not produce as much per worker as the United States does, because there are many other determinants of productivity beside investment. On this point, my colleague, Edward F. Denison, who has produced the only authentic analysis of the sources of economic growth in Europe and the United States (in Why Growth Rates Differ, Brookings Institution, 1967), expressed the following cautionary note:

...Although most of the European countries have achieved higher growth rates than the United States, this was not because they were doing more to obtain growth. They were able to secure higher growth rates only because they were operating in a different environment. Conditions were very different

with respect to the existing level of technology, management, and general efficiency in the use of resources; and to economies of scale. Some have supposed that the United States could have matched the growth rates of European countries if only. Americans had done as the Europeans did. I conclude that this is simply not so.

Comparisons with the postwar growth rates of European countries, therefore, do not provide grounds for dissatisfaction with the American growth record. The point needs stressing because the conditions that enabled Europe to obtain higher growth rates are not exhausted. Aside from short-term abstrations Europe should be able to report higher growth rates, at least in national income per person employed, for a long time. Americans should expect this and not be disturbed by it. Nothing in this analysis suggests that the conditions making for higher European growth would continue to operate if the European countries were to reach American levels of national income per person employed.

In brief, the investment ratios or other economic indicators cannot be used as a guide for U. S. policy. Whether we should invest more and grow a little faster depends on our evaluation of the benefits of growth as compared to the costs. I strongly disagree with those who believe that growth should be halted for environmental or other reasons. But I also disagree with those who want to increase growth at the expense of other urgent national priorities and at the expense of equity in the tax system. The long run growth performance of the U. S. economy has been eminently satisfactory. Our major problem has been, and remains, to avoid the extremes of inflation and recession. Clearly, a national decision to raise the investment ratio by a few percentage points will not provide the solution to this problem.

It is true that capital shortages were evident in some U. S. industries during the upsurge of 1972 and 1973. Many of these shortages occurred because the boom was of world-wide dimensions, and production pressed against capacity

almost everywhere. It is to be hoped that the same type of boom will be avoided during the next economic expansion. In any event, as business responds to the signals of the market place, investment will increase in the very industries where it is needed. Some of the correction has already taken place; and more of it is to be expected in the months and years ahead. Generalized tax incentives will hardly remedy this type of investment deficiency; and I am sure this Committee will recognise that special tax devices create more problems than they solve.

Taxes on Investment Income

Everybody knows that the tax laws contain numerous special provisions to ease the burden of taxation on investment income, but until recently it was impossible to determine the cost of these provisions. Now, the President is required by law to present in his annual budget message a list of all "tax expenditures," which are defined as "exceptions to the 'normal structure' of the individual and corporation income tax." For fiscal year 1976, the tax expenditures were expected to amount to \$70.8 billion for individuals and \$21.0 billion for corporations, or a total of \$91.8 billion.— Of this amount, \$31.4 billion are tax expenditures that,

Special Analyses. Budget of the United States Government. Piscal Year 1976, pp. 108-09. The list does not include capital gains on assets transferred at gift or death, the deferral of tax on foreign income, the asset depreciation range system, and the maximum tax on earned income.

in one way or another, reduce the tax on investment income. The Tax Reduction Act of 1975 increased these totals somewhat.

The tax law imposes maximum rates of 70 percent on individual income and 48 percent on corporate income, but because of the tax expenditures the actual effective rates are much lower. For the year 1972, the effective rate of the individual income tax on persons with economic incomes of \$1,000,000 or more was 32 percent;— while the effective rate of the corporation income

tax is probably of the order of 35 percent. Clearly, the tax expenditures for investment income are already generous.

Under the circumstances, it seems to me that any proposals to add to
the list of tax expenditures for investment income should be accompanied by
suggestions for raising the revenue lost, without making the distribution of
tax burdens less equitable. This can be done either by eliminating other
wasteful tax expenditures or by raising the corporation tax rate and the highbracket individual income tax rates. Of the two alternatives, eliminating
tax expenditures is such to be preferred. Higher tax rates would penalize
those who cannot take advantage of special provisions and would further distort
economic behavior as taxpayers try to arrange their affairs so as to avoid them.

I should like to give a few examples of the type of changes I have in mind.

First, the investment credit and the asset depreciation range (ADR) system now cost a total of about \$8 billion a year. Both are acknowledged to be wasteful because they do not reward businesses that make an extra effort to increase their investment. Such a stimulus could be provided—at a much higher rate than the 10 percent now allowed under the investment credit—by repealing the credit and ADR and substituting a net investment credit. This would be a credit for the amount of investment in excess of the firm's depreciation allowances. Most economists believe that the net investment credit

would be a much more effective investment incentive than the present credit and ADR.

Second, today the tax law encourages people to hold on to their stock and other assets indefinitely because gains that are transferred at gift or by bequest are not subject to tax. This look-in effect is substantial and tends to reduce the supply of securities that would otherwise be available. If these gains were treated for tax purposes as if they were realised, revenues would be raised by at least \$2 billion a year at present capital gains rates and by a such larger amount if the capital gains rate were increased. Such increases in revenue could be used to reduce the top bracket individual income tax rates, a swap that would improve the equity of the income tax as well as the operation of capital markets.

Third, I agree with Henry Wallich that it would be desirable to reduce the tax incentive to use debt to finance capital investment, rather than equity. Providing a significant deduction for dividends would be much too costly, but his proposal to eliminate the deduction for interest on future capital issues and to cut the corporation income tax at the same time merits serious consideration.

Finally, the recent spate of proposals to integrate the individual and corporation income taxes does not come to grips with the question of who will pay the cost of the change. Full integration—that is, taxing corporate earnings to the individual when they are earned—would reduce 1976 revenues by \$19.5 billion. About two-thirds of the reduction, or \$12.5 billion would go to tax-exempt organisations, and only one-third, or \$7 billion, would go to individuals. To recoup this revenue loss and to avoid a wholesale redistribution of tax burdens, it would be necessary to levy a separate tax on the

dividends or total investment income of tax-exempt organisations and also to apply the individual income tax rates to all incomes across the board, rather than to a small segment of that income as we do today. Furthermore, the adoption of integration with such rates would require taxes to be withheld on corporate earnings at a rate that was equal to or close to the present top bracket individual income tax rate. Otherwise, individuals would not have sufficient funds to pay their tax liabilities on the amount of corporate income they would be required to include in their income tax return. That might be acceptable to the individuals, but for the corporations itwould mean the payment of 70 percent of their earnings in the form of a withholding tax and therefore a limitation on retained earnings to 30 percent of profits before tax (instead of 52 percent under present law). Perhaps the country would be better off under a system that taxed the investment income of non-profit organisations directly and reduced corporate savings to that extent. However, these issues have been neglected by most proponents of integration, which suggests that they are either unaware of the problems or are not very serious about their proposal.

In summary, there is little basis for concern about the adequacy of saving and investment in this country. There is still less basis for the argument that the U.S. tax system imposes excessive burdens on investment income. Proposals to add preferential tax provisions for investment incomeshould not be entertained unless they are accompanied by suggestions to make up the revenue loss. Otherwise the income tax bases will be further eroded and the equity of the tax system will be correspondingly reduced.

STATEMENT OF THE SMALLER MANUFACTURERS COUNCIL



Subject: Tax Policy and Job Creation Gentlemen:

We appreciate very much the opportunity which you have extended to us to submit a statement regarding tax legislation which will help meet our nation's growing capital needs, and create new jobs for our expanding labor force, and will promote stable noninflationary economic growth. The Smaller Manufacturers Council (SNC) is a trade association headquartered in Pittaburgh, Pennsylvania, with approximately 600 member companies in Pennsylvania, Ohio and West Virginia, with a combined employment of over 55,000 people. Our members represent a very broad range of manufacturing activity, and as such I would hope that our comments could be regarded as typical of those of small and independent manufacturing enterprises throughout the United States. Accordingly, the "sector of the economy" on which we will comment herein is intended to be applicable broadly to small and independent manufacturers. For the further purposes of this discussion, a "small" manufacturer typically has less than 500 employees.

OFFICERS

Taylor E lams (Taylored industries Inc.)

Laurs J. Schenman (Schenman-Neamen Co.)

Vance M. Smith. Jr (Baherstown Contenter Core.)

When we think of small business, the impression that often comes to mind is the inventiveness that begins as a small business and blooms into a major industry. This certainly does happen in many cases, and according to one count, half of some 61 major inventions in this century have been the work of either a single individual or have come out of a small business. However, the smaller enterprise is ideally suited for certain kinds of products and services: short-run job-lot manufacturing; products having a short production cycle (because of change in seasons or styling) and low capital requirements; or low-volume production requiring individual and/or special attention.

In these comments I would like to concentrate on three particular matters of importance: (1) the relationship between jobs and capital; (2) the difficulties of access to capital by smaller enterprises; and, (3) tax reform to provide capital for the smaller enterprises.

Jobs and capital

The National Association of Manufacturers, in their Tax Impact Project, has very effectively demonstrated the relationship between capital investment and job growth. The text of their project can be found in full in the publication "Small Business Tax Reform", reporting Joint Hearings, June 17 to 19, 1975, of the Select Committee on Small Business and the Sub-committee on Financial Markets of the Finance

Committee. Unfortunately, this study was unable to obtain sufficient data to reveal differential impact between large and small entemprises. However, an analysis is summarized in the table below. While the data is rather old, it is unfortunately the most recent available for analysis. Nevertheless, we feel the trends indicated between 1963 and 1967 are equally true today. A one-billion-dollar addition to the capital base of the small business sector of the economy will produce more job opportunities than will an equivalent amount of cash to the overall business community.

Corporate Employment Trends

	1963	Employment (millions) 1967	Change
Large business *	17.3	15.8	- 1.6
Small business **	9.8	15.9	+ 6.1
-	-	Sales & Receipts (\$ millions)	ı
Large business	\$312.1_	\$500.3	+ \$188.2
Small business	423.8	500.6	+ 76.8

Large business assumed to be all corporations with \$50 million or more sales & receipts.

^{**} Small business assumed to be all corporations between \$100,000 and \$49,999,999 sales & receipts.

A survey of our SNC member companies has indicated that many of them express a serious need for investment capital. I think it is safe to say that, generally, if the investment capital is available, the small businessman will use it in such a way that it will result in more jobs for our economy. It should be noted that this capital can come from one of several sources, such as the following:

- 1. loans to the business
- 2. equity investment in the business
- 3. government grants
- 4. retained earnings

At this point I would now like to review the general situation with respect to the first two items indicated above.

II. Difficulty of Access to Capital by Smaller Enterprises

As I am sure you are all well aware, banks, as well as anyone else, naturally prefer to lend their money to those who are most likely to repay the loan. Particularly in these days when banks have many loans of questionable value already outstanding, banks are very reluctant to finance the smaller enterprise, and if they do so to any substantial extent, they tend to charge interest rates well above prime. We state this situation merely as a fact of life.

As to equity capital, the situation for the small business is all but hopeless. Even the largest of companies find their price/earnings sultiples so low that they do not choose equity financing, and it is thus the very rare small business that can anticipate generating sufficient return on equity to make feasible a public stock offering. It should be noted further that the costs of being a public company can represent a very substantial portion of income for a small enterprise, in view of annual reports to shareholders as well as to the SEC.

rurther, in the view of many of our members, loan and/or equity capital from a small business investment company (SBIC) is unattractive to the typical small business owner. The amount of control that the owner is forced to give up in exchange for the SBIC support is felt in many cases to be unreasonable. An SBIC is often looking towards making a substantial gain on the equity portion of its holdings, if the enterprise should be successful. This usually means that the SBIC is anticipating either a future public stock offering or the sellout of the small business to a much larger business entity. In the introduction to this statement, I have commented on certain areas where we believe that small businesses have natural and sound economic advantages, but SBIC's do not tend to be, at least in our opinion, long-range holders of non-marketable small business stock.

III. Tax Reform to Provide Capital for the Smaller Enterprises

In the above Section II, we have attempted to set forth the difficulties of access of small businesses to loans or to equity investment. In our initial list of sources, we suggested one possibility as being that of government grants. Let me make it clear that we are not suggesting that the government at this time need to provide direct grants to small business.

Nevertheless, we feel that present tax laws have a bias against savings and in favor of consumption, and have a further bias against the small business segment of the business community.

Accordingly, to partially reduce this adverse treatment of small business, we advocate the following tax reforms:

1. Graduated corporate tax rates

We recommend a graduated corporate tax rate, as follows:

1. Taxable Income	Rate		
\$ 0 to 9,999	100		
10,000 to 19,999	\$ 1,000 + 12% of excess over \$ 10,000		
20,000 to 29,999	\$ 2,200 + 14% of excess over \$ 20,000		
30,000 to 39,999	\$ 3,600 + 16% of excess over \$ 30,000		
40,000 to 49,999	\$ 5,200 + 19% of excess over \$ 40,000		
50,000 to 59,999	\$ 7,100 + 22% of excess over \$ 50,000		
60,000 to 69,999	\$ 9,300 + 25% of excess over \$ 60,000		
70,000 to 99,999	\$ 11,800 + 28% of excess over \$ 70,000		
100,000 to 149,999	\$ 20,200 + 31% of excess over \$100,000		
150,000 to 199,999	\$ 35,700 + 34% of excess over \$150,000		
200,000 to 249,999	\$ 52,700 + 37% of excess over \$200,000		
250,000 to 299,999	\$ 71,200 + 40% of excess over \$250,000		
300,000 to 349,999	\$ 91,200 + 43% of excess over \$300,000		
350,000 to 399,999	\$112,700 + 46% of excess over \$350,000		
400,000 and over	\$135,700 + 48% of excess over \$400,000		

The argument supporting this proposed rate structure has been effectively presented by the National Federation of Independent Business (NFTB), and appears on page 1156 of "Small Business Tax Reform", Part 2, (hearings held September 23 to 25 and November 13, 1975).

Based on 1970 corporate income statistics, there would be an estimated direct tax revenue loss of 2.35 billion dollars.

2. Revisions in capital gains rates

We recommend a stepped reduction of the alternative capital gains tax rate, in order to encourage long term-investment in smaller enterprises, rather than hit-and-run speculation. We recommend the alternative rate of 30% on investments held 1 to 5 years; 25% on investments held 5 to 10 years; and 12-1/2% on investments held over 10 years. In our opinion, such rates would make short-term speculation less attractive and would encourage the kind of long-term investment that is so badly needed.

3. Estate and gift tax rates

We propose that the \$60,000 estate tax exemption should be increased to \$180,000, and that estate tax rates should be as follows:

Taxable Estate	Tax Rate	
\$0- 50,000	59	
50,000- 100,000	10	
100,000- 150,000	15	
150,000- 200,000	20	
200,000- 400,000	25	
400,000- 600,000	30	
600,000-1,000,000	35	

Supporting arguments for this change have been effectively put forth by NFIB, and appear on page 1157 of "Small Business Tax Reform", part 2.

The gift tax is currently set at a rate of 75% of that of the estate tax rate, and we propose that it would remain at 75% of the estate tax rates proposed above. There should also be a proportionate increase in the lifetime and annual exemptions to \$90,000 and \$9,000, respectively.

4. Redemptions at death

At present, in order for an estate to undertake a Section 303 redemption at time of death, the closely-held stock must be at least 35% of the gross estate or 50% of the taxable estate. We suggest these restrictions be changed to 20% and 40%, respectively. This change would facilitate stock redemptions through which an individual's estate pays the estate taxes. This, in turn, would be an incentive for small businesses to be continued in operation rather than being sold out to big businesse. Under existing law, the estate

of the deceased must often sell the whole business in order to pay estate taxes. Small businesses usually aren't liquid enough to redeem stock easily. Such a sale to an outside company usually is at a substantial loss and often leads to quick dissolution of what could have been an on-going business.

Adopting lower restrictions is especially important in view of lower stock prices, which have decreased the value of stock as compared with the total estate, making it more difficult to qualify for a Section 303 redemption.

In our view, the revenue impact of this change will be minimal.

5. Transfers of business interests

Section 368 reorganizations, which parmit tax-free exchanges of stock, are subtly responsible for the increasing concentration of the economy in the hands of large business. Because a cash deal is taxable, an exchange in stock is more attractive. This generally means that the only entity to which the owner of a small company may desire to sell is a large company. We suggest that, similar to the provisions covering the sale of a personal residence, the sale of "qualified small business property" shall be tax-free if the proceeds are reinvested within one year from the date of sale. The selling taxpayer would retain the old basis for the acquired assets or stock.

For the purpose of this provision, "qualified small business property" means

- (A) property which
 - (i) is held by an individual for productive use in a trade or business carried on by the individual; or
 - (Ti) is real property or is personal property if
 such personal property is of a character
 subject to the allowance for depreciation; or
- (B) any interest held by an individual in "qualified corporation".
- A "qualified corporation" means any corporation
 - (A) which does not have more than 10 shareholders;
 - (B) which does not have as a shareholder a person (other than an estate) who is not an individual; and
 - (C) not more than 10 percent of the gross receipts of which for the last taxable year ending before the sale or exchange is passive investment income (as defined in section 1372(e)(5)(C)).

6. Equalisation of investment tax credit for small business

Surveys by such associations as the Mational Association of Manufacturers have documented the fact that the investment tax credit, in its present form, provides significantly greater benefit to large companies than to smaller companies. To correct this inequity, we strongly support a permanent graduated investment tax credit, as follows:

20% of the first \$5,000, if 3 or more years of useful life
15% of the amount between \$5,000 and \$10,000, if 3 or more years
of useful life

10% of the amount in excess of \$10,000, if 7 or more years of useful life 6-2/3% of the amount in excess of \$10,000, if 5 to 7 years of useful life 3-1/3% of the amount in excess of \$10,000, if 3 to 5 years of useful life

Further, as an aid to small business, the limit of \$100,000 of used equipment purchases should be eliminated completely. It is recognised that there may be the need for provisions in the Code to prevent unreasonable use of this investment tax credit by "equipment swapping" transactions.

7. Depreciation

The Council of Smaller Enterprises (COSE) has presented an extensive proposal on depreciation reform. This appeared beginning on page 958 of "Small Business Tax Reform", part 2. In summary, we propose that a taxpayer be permitted to elect to depreciate assets

such as furniture, machinery, and equipment over a period of not less than five years, and to depreciate real estate over a period of not less than ten years.

Transmich as we recognise that the above changes would have a very severe initial financial impact on government revenue, we feel that it is acceptable to restrict the amount of assets eligible for the special depreciation schedule to \$100,000, and to eliminate the special 20% first-year depreciation paralited by Section 179.

8. Relief from penalty for accumulated earnings

retained in business. The practical effect of Section 531 has been to make it very difficult for independent businesses of reasonable size to retain sufficient earnings to permit major expansion moves. It is not at all unusual for an expansion of a capital-intensive manufacturing enterprise to require from \$500,000 to \$1,000,000 or more in capital. We have already emmaned the difficulty of raising such capital through loans and equity, and yet Section 531 makes it vary difficult to expand through retained earnings, because of the constant threat of penalty of the tax on unreasonable accumulations. The practical effect of Section 531 in most cases has been to reward spending and penalise saving. We do not quarrel with the need for means to penalise tax avoidance schemes. However, we feel that there

is a necessity for a significant adjustment in the accumulated earnings credit, in order that business may be allowed to accumulate funds for expansion. In our opinion, Section 531 should impose a penalty tax only in cases where tax avoidance is the sole motive behind the retention of earnings. Further, legislation should increase the accumulated earnings credit to \$500,000, without regard to the "reasonable need for the business".

9. DISC

In our opinion, DISC program as currently established provides a reasonable incentive for the promotion of exports. In our view the concept is sound, and the incentive would be greater if the amount of tax deferral were increased to 100%.

has passed legislation which would change the DISC Program, basing the tax deferral only on an incremental addition to exports. The House has fortunately seen fit to provide a special exemption with respect to the first \$100,000 of taxable income. We certainly hope that the Senate, even if it agrees with the House on the incremental DISC approach, would at least retain the small business exemption.

Small business has been slower in adopting the DISC Program than has large business, and it is only now that small business is really starting to recognize the incentives that the DISC concept offers. To put the DISC Program on an incremental basis for small business would undoubtedly result in many small businesses totally terminating their DISC activity, as the additional complexity of operating and accounting would virtually offset the tax deferral in most cases. It should be further recognized that DISC is merely tax deferral, not tax reduction.

In closing, may we take this opportunity to again express our thanks for your concern over the continued survival of a very important segment of our free enterprise system. STATEMENT OF THE COLUMBIA GAS SYSTEM, INC., SUBMITTED BY HART T. MANIKIN, VICE PRESIDENT AND ASSISTANT GENERAL COUNSEL

INTRODUCTION

As has been noted by Chairman Ullman of the House Ways and Means Committee, some estimates of capital requirements over the next decade are as high as \$4.5 trillion or approximately three times the capital consumed during the last decade. This massive increase in capital requirements is the natural result of an expanding, developing and inflationary economy.

There can be no dispute that massive amounts of capital will be required during the coming years. The ability of conventional capital sources to meet the need must be the focus of the discussion. The experience of the Columbia Gas System indicates that although capital may not be impossible to obtain, attracting capital will be increasingly-difficult and increasingly expensive.

Tax reform to facilitate the development of capital is required. A time has come to stop evaluating tax reform as "pro-consumer" or "pro-business" or "pro-individual" versus "pro-corporate enterprise". The fact is that corporations such as Columbia which supply essential services to satisfy the human needs of millions must have a governmental climate which

encourages capital formation so that financing is not only possible but is accomplished on reasonable terms. The cost of capital is part of the price each consumer of natural gas or any other product or service must pay. If this cost can be reduced by wise tax policies, the individual consumer benefits.

Tax reform to facilitate capital formation benefits all--the work force and the consuming public as well as investors in the corporation.

and sources of Columbia and the natural gas industry in perspective,
Columbia is the largest integrated natural gas system in the nation
with \$3.352 billion in gross plant investment and \$2.171 billion in
net plant after depreciation. Columbia is a public utility holding
company which, through its subsidiaries, is engaged in the production,
transmission and distribution of natural gas. Columbia supplies
essentially all of the natural gas needs of 87 affiliated and
nonaffiliated distribution companies which in turn render gas
service in the seven states of Kentucky, Haryland, New York, Ohio,
Pennsylvania, Virginia and West Virginia and the District of Columbia.
These distribution companies serve about 4 million residential and
commercial customers. Approximately 10,000 industrial users are
served.

The natural gas industry of which Columbia is a part is the sixth largest in the United States in terms of capital investment with an investment of \$48.1 billion as of December 31, 1974.

The industry supplies more than 30% of the nation's energy requirements, provides warmth for approximately 55% of the nation's homes and is the main supplier of fuels to American industry.* Thus, the capital needs of Columbia and the natural gas industry have significant impact on the nation's economy as a whole.

THE INCREASING NEED FOR CAPITAL

Of the \$4.5 trillion in capital estimated to be required over the next decade, \$1 trillion is estimated to be required for energy development. That figure is, if anything, conservative. This increasing capital need results from many factors which have increased industry costs on a constant dollar basis and from the compounding effects of inflation.

On A Constant Dollar Basis--The Need to Expand Gas Supply

As is shown on the attached Appendix A, Columbia estimates that the natural gas industry will require approximately \$160

^{*}All forms of domestic energy must be fostered if domestic energy independence is to be achieved in an economic and efficient manner. (See Exhibit I hereto.)

billion in 1974 dollars to achieve optimum levels of natural gas "upply. During the next ten years, approximately \$4 billion dollars will be required by Columbia to complete new gas procurement projects in progress.

Columbia estimates that to develop supplies in the lower forty-eight states including reserves on the Outer Continental Shelf and reserves requiring secondary and tertiary recovery techniques, \$86 billion will be required. Drilling on the Outer Continental Shelf which presents vast potential for increased gas reserves, presents producers with costs which are escalating far more quickly than inflation. Lease bonus costs are high. In the last eleven federal lease sales since 1972, the Federal government has collected \$11 billion from industry. Columbia itself has expended over \$168 million since 1972 in the purchase of interests in federal tracts. Drilling costs have also escalated. Columbia's experience with costs in the Gulf of Mexico is that in the last two years alone, costs have nearly doubled.

To produce gas in Alaska and transport it to the lower forty-eight states an additional \$32.6 billion-will be required.

The initial system to transport the gas is projected to cost between \$9 and \$10 billion assuming no cost overruns and a modest rate of inflation.

Gas from foreign countries in the form of liquefied natural gas is projected to require \$8 billion. LNG transport vessels currently cost between \$100 million and \$165 million and take 2 to 3 years to construct.

Synthetic natural gas will require an additional \$16.5 billion in capital. Each high Btu coal gasification plant costs over a billion dollars.

It is imperative that Columbia and the natural gas industry be able to finance these natural gas supply projects. The costs to the American public of a natural gas shortage are far greater than the costs of capital to achieve supply.* Attached hereto as Appendix B is a projection of supplies if capital requirements are met. By 1980, the United States could have 21 Tcf of natural gas supplies; by 1985, 26.4 Tcf and by 1990, 28.3 Tcf. This represents a modest growth rate of only 5 Tcf over 1973 supplies. The alternative, however, is decreasing supplies. Failure to finance these projects will mean increasing curtailments and increased reliance on imported oil. As is indicated in Appendix C, in the case of Columbia, the development of new supply sources is essential if supply is to increase over the next decade.

^{*}See Exhibit I.

Inflation

The second compounding source of increasing capital needs is inflation. The \$160 billion estimate is based on constant 1974 dollars. If inflation is considered, even at a nominal rate, that figure could almost double. Columbia's estimate of the \$4 billion in capital it will require is based on a conservative inflation rate of approximately 4%.

Construction costs in particular have been affected by inflation. Between 1967 and 1974 consumer prices increased by nearly 50%. In contrast, construction costs increased by nearly 90% during the same period.

CONSTRAINTS ON SOURCES OF CAPITAL

To obtain the financing necessary, there are two main conventional sources: debt and equity.

Debt

Amounts of debt which can be sold are limited.

Most utility companies and many others are subject to indenture restrictions on the amount of debt which can be issued. The restrictions may provide that debt issued cannot exceed a stated percentage of total capitalization. Furthermore, before issuing additional debt, it may be required that pre-tax earnings be 2.25 or 2.5 times total interest cost, including interest on the debt to be issued. Due to increases in interest costs, the average cost of long-term debt has increased substantially in recent years and coverage ratios decreased. According to the Federal Power Commission, National Gas Survey, Transmission Technical Advisory Reports, the coverage ratios for natural gas transmission companies decreased from 3.5 to 2.5 between 1960 and 1970.

There is another limit on the amount of debt which may be issued. The arctic gas project and other nonhistoric gas supply projects assume a capitalization structure of 75% debt and 25% equity. Companies must, however, maintain a low debt ratio in order to maintain the "A" rating of their debt. If companies were forced to issue large amounts of new debt, and the ratings of the debt are lowered as a result, the problem of financing would become much more difficult. Many of the large institutional buyers of debt securities are limited (either by law or by internal policy) to bonds which are rated "A" or better. If a company loses that "A" rating, a substantial number of investors would be lost. Utilities in particular are dependent on such institutional investors for a substantial portion of their financing efforts.

Equity Capital

To some extent additional equity can be issued through the issuance of preferred stock. Columbia issued \$50 million in preferred stock in both 1974 and 1975. Due to the limited demand for this type of stock, this is the largest marketable offering which can be made at any one time in the opinion of the company.

Common stock is the key to future financing efforts.

As is shown in Appendix D hereto, the market value of The Columbia

Gas System, Inc. common stock has been substantially below book

value during the last two years. As of December 31, 1975, the

market value of common stock was only approximately 77% of the book

value and at one point was only 60% of book value. A sale of

common stock at below book value will substantially dilute the

value of current stockholders' interests. Using the market price

at December 31, 1975 of 22-7/8, if new common stock equivalent to

10% of presently outstanding shares were sold, the net proceeds to

be realized by Columbia would probably not exceed \$21 per share

which would be only 71% of the book value per share of the previously

outstanding shares. Under current regulatory practices, the earning

ability of common stock is related to its book value. Its market

value is in turn related to earnings. Thus, when common stock is

sold at less than book value, the earnings generated from each sale are less than the average generated by prior common stock investments. Thus, earnings per share decline and a domino effect begins.

The ability of companies such as Columbia to attract capital sufficient to meet the needs of our economy are dependent on reform of the governmental structure which discourages investment and capital formation.

PROPOSALS

1. Integration of Corporate and Individual Taxes

Under the present tax laws, a corporation's earnings are taxed at the rate of 48% on the corporate level and, when distributed to shareholders as dividends, are taxed at a rate which depends on the shareholders' individual incomes. This double taxation results in the increased use of debt financing due to the appeal of the interest deduction, in a higher return requirement for corporate equity investments, in deterrents to investments by middle income individuals,* in barriers to the distribution of corporate income and an advantage to corporations which retain rather than pay out income. If industry is to be able to accumulate

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[&]quot;In conjunction with his State of the Union address, President Ford made a proposal which seems to be aimed at encouraging investment by medium income individuals. Individuals could receive a \$1,000 to \$1,500 deduction for investments in a fund for investment in American enterprise. While the investment was maintained, dividends would not be taxable.

necessary capital, issuance of, and investment in, equity securities must be made more attractive through the elimination of this double taxation.

In testimony before the House Ways and Heans Committee on July 31, 1975, Secretary Simon suggested a phase out of the double taxation using both the corporate level deduction and the stockholder credit.

Specifically, the Secretary proposed that approximately half of the total deduction would be accomplished by a dividend deduction. Thus, ultimately there would be a deduction for roughly 50% of the dividends distributed. The dividend deduction provided for the first year, 1977, would be that percentage which produces a net reduction of approximately \$2.5 billion in corporate tax liabilities for that year. Additional dividend deductions required to bring the total deduction up to approximately 50% of dividends distributed would be phased in from 1978 through 1982, causing the revenue loss to increase at a rate of about \$1 billion a year (at 1977 levels). The balance of the double tax would be eliminated by a stockholder credit to be phased in equally over the five-year period from 1978 to 1982 inclusive. This would cause a revenue loss in each of those years, increasing at the rate of about \$1.25 billion a year (at 1977 levels).

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To the extent that the stockholder credit increases the attractiveness of equity investments, capital formation would be facilitated. To the extent that the corporate deduction reduces taxes, regulatory commissions will undoubtedly require that the benefit be flowed through to the consumers in the form of reduced rates. Therefore, the result will not only be an increase in the ability of the company to generate capital but also lower prices to consumers.

2. Establishment of a Capital Recovery System

As a result of the extreme rate of inflation which has been experienced recently, the capital needs of companies have increased substantially. Although the rate of inflation has slowed slightly, inflation is expected to continue at a rate above normal for the United States. In this inflationary economy, the asset depreciation system under which original cost of items is recovered over an extensive period of time has not yielded depreciation deductions sufficient to generate the capital necessary to replace the items depreciated. This, of course, is particularly true of corporations which are capital intensive and have long-term rather than short-term assets. To remove the disadvantage caused by inflation to such capital-intensive companies, an alternative capital recovery system should be adopted under which capital

invested in industry will be recovered quickly before its value is eroded by the effects of inflation. Therefore, it has been proposed that capital investments in equipment and machinery should be recoverable within a five-year period and capital investments in industrial buildings should be recoverable within a ten-year period. Such a uniform method of capital cost recovery would not only limit the erosion of capital by inflation as a result of the short time within which capital would be recovered, but would also eliminate the confusion caused by the multitude of depreciation rates under the current systems.

An alternative to a rapid turnover in depreciation would be to permit depreciation based on reproduction or current value rather than historical costs.

3. Taxation of Capital Gains and Losses

The taxation of capital gains under the federal income tax law is a substantial deterrent to investment in equities. This deterrent must be reduced if equity investment is to be made attractive to investors. Various measures have been proposed for reform of the tax laws with respect to capital gains and losses. Proposals range from that of not taxing capital gains at all on the grounds that they do not represent an increase in the amount of

goods and services available, and thus are not part of the national income,* to that of a special lifetime or annual deduction to encourage middle income investors. Two proposals in particular offer the benefit of encouraging the maintenance of investments in industry and encouraging such investments in general through a reduction in the tax burden on capital gains:

- a) It has been proposed that the capital gains deduction be increased according to the length of time that the asset is held. In connection with the Tax Reform Bill of 1974, the House Ways and Means Committee considered a deduction, in addition to the present 50% deduction for long-term capital gains of individuals, equal to 1% of the gain for each year that the asset is held in excess of five years, limited to 20% of the gain on the asset and to 25% of the taxpayer's overall net capital gain. This proposal would encourage stockholders to maintain their investment for longer periods in order to decrease the tax burden upon sale.
- b) It has also been proposed that \$1,000 of capital gains from the sale or exchange of securities in domestic corporations be excluded from taxable income, thus encouraging greater investment in industry in general.

^{*}President Ford's proposal for an investment fund discussed earlier would adopt this rationale to the extent that gains on sales would not be taxed if reinvested.

4. Proposals Particularly Applicable to the Energy Industry

a. Deferral of Taxation on Reinvested Dividends

With respect to the electric utility industry, the Administration has proposed to permit a shareholder of a regulated electric public utility to postpone the tax on dividends paid by the utility on its common stock by electing to take the dividend in the form of stock in lieu of cash. The amount of the dividend would then be taxed as ordinary income when the stock was sold.

This proposal represents a minimal effort to improve the ability of a specific industry to generate capital. Through the mere deferral of tax expenses, reinvestment in the industry would be encouraged.

This proposal, if enacted, should be applicable to the natural gas industry as well as the electric utility industry. As is discussed in Exhibit I hereto, the capital needs of the natural gas industry are as important as that of the electric industry and are far in excess of the ability of the industry to meet.

The proposal as supported by the Administration is, however, insufficient to solve the capital problems encountered by Columbia, the natural gas industry and industry in general.

(Of course, if proposals for the elimination of the double taxation of corporate earnings are enacted, this proposal would be unnecessary.) To encourage investment and enable companies to be able to accumulate capital, the proposal should be modified to provide that dividends reinvested should not be taxed until the stock is sold, and, at that point, capital gains treatment should be available if the appropriate holding period requirements are met.

b. Exclusion of Funds Received from Customers

To further enhance the ability of energy utilities to generate capital, it has been proposed by the American Gas Association, among others that energy utilities be given an exclusion from taxable income of up to 10% of their gross receipts from customers if segregated and applied to certain energy supply investments which are approved by a regulatory agency where the investments are not included in the company's rate base, and do not qualify for depreciation or amortization deductions.

c. Current Depreciation

As has been noted, regulated energy companies often expend huge sums of money for substantial periods prior to the

earning of a return. To ease the financial strain and assist the financing of long-term projects, energy companies should be permitted to claim depreciation with respect to funds expended on projects which require in excess of two years for completion.

EXHIBIT I

An Adequate Supply of Matural Gas is Essential To This Nation's Well-being

An adequate gas supply is critical not only to the social welfare of the nation but to its economic progress. Three facts support this conclusion:

Gas supplies about 1/3 of the nation's total energy requirements

Gas provides heat for 55% of the nation's homes

Gas is the dominant (about 50%) energy source for U.S. industry

Because of its key role in the economy, the welfare of this industry is important to the prosperity, finances and revenues of the Federal government.

Moreover, at a time when this nation is confronted with a capital shortage and capital formation is a major concern of this Committee, we point out the following facts:

Natural gas, using a wellmouth cost of \$1.55/Mbtu (equivalent to \$9/bbl oil) would currently result in a cost to the residential consumer of \$2.60/Mbtu. New supplies, using 1974 cost levels, will require capital of \$9.90/Mbtu of annual deliverability. Overall efficiency is 63%. The capital requirement in all cases is the total at 1974 cost levels required, to develop and deliver 1 Mbtu/year to the consumer.

Synthetic gas from liquid hydrocarbons currently costs the residential consumer \$4.45/Mbtu. New supplies will require capital of \$19.20/Mbtu/year. Overall efficiency is 57%.

Synthetic gas from coal would result in a cost to residential customers of \$5.05/Mbtu. Capital costs would be \$13.70/Mbtu of deliverability. Overall efficiency is 38%.

Oil currently costs the residential customer \$2.75/Hbtu. Hew supplies will require capital of \$15.70/Hbtu/year. Overall efficiency is 49%.

Electricity generated from coal, oil and nuclear currently costs the residential customer \$9.67/Mbtu. New supplies will require capital of \$49.90/Mbtu of deliverability. Overall efficiency will approximate 29% for coal and oil and less than 1% for nuclear.

The foregoing is summarized in the following tabu-

lation:

COMPARATIVE UNIT COST AND INVESTMENT AND EFFICIENCY (RESIDENTIAL CUSTOMER)

	Delivered Cost \$/Million Btu	Unit Investment \$/Million Btu/Year	Overall Efficiency
Natural Gas	2.60	9.90 -	63.0
Synthetic Gas Liquids	4.45	19.20	57.0
Synthetic Gas Coal	5.05	13.70	38.0
011	2.75	15.70	49.0
Electricity	9.67	49.90	29.0

Quite properly, the nation must take measures to assist the electric industry in financing generating and transmission projects. But, equally the nation should concern itself with having the gas industry in a position to finance gas supply projects.

As shown by the foregoing data, because of this great disparity in efficiency, delivered electricity will cost the consumer 2 to 5 times more than gas. Total capital cost for electricity will be 4 to 5 times more than for gas.

Expressing in another way the great advantage of gas in minimizing capital requirements—deliverability of 1 Tcf/year of natural gas will require a capital cost of \$9.9 billion, 1 Tcf of synthetic gas from liquids—\$19.2 billion and 1 Tcf of synthetic gas from coal \$13.7 billion—while the capital required to deliver the same Btu equivalent of electricity to the consumer is \$49.9 billion—hence compared to gas, electricity requires \$30 to \$40 billion more of scarce capital for delivery of the same unit of energy.

ESTIMATE OF UNITED STATES GAS SUPPLY

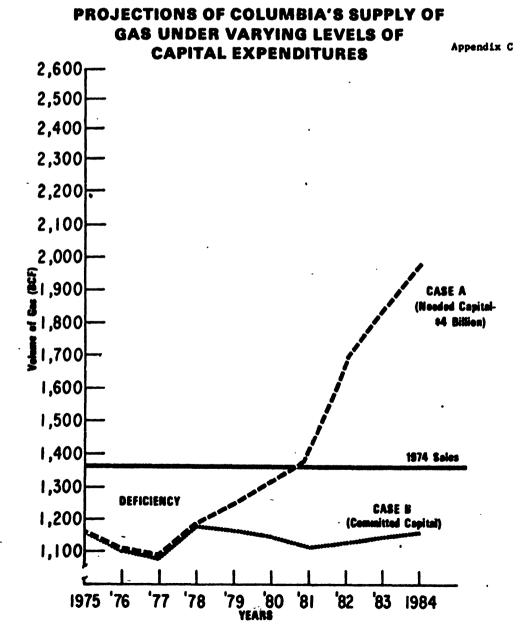
CAPITAL REQUIREMENTS (Billions of 1974 Dollars)

Period	Lower 48 States	Alaska	Canadian Imports	LNG	Synthe Gas Liquids		<u>Total</u>
1976 to 1980	22.0	9.8	•	4.0	0.5	3.0	39.3
1981 to 1985	32.0	10.8	13.4	2.0	1.0	5.0	64.2
1986 to 1990	32.0	12.0	6.7	2.0	•	7.0	<u>59.7</u>
					TOT	AL	163.2

ESTIMATE OF UNITED STATES GAS SUPPLY

(Trillions of Cubic Feet per Year)

Year	Lower 48 States	Alaska	Canadian Imports	LNG	Synthetic Liquids	Coal	Total
1975	19.3	•	1.0	•	0.4	•	20.7
1980	18.3	0.1	1.0	0.7	0.6	0.3	21.0
1985	21.0	1.4	1.3	1.1	0.9	0.7	26.4
1990	21.0	2.1	1.7	1.4	0.9	1.2	28.3



THE COLUMBIA GAS SYSTEM, INC. AND SUBSIDIARY COMPANIES Comparison of Market Price and Book Yalue Per Common Share

	Market Price of Common	Book Value <u>Per Share</u> \$
1975		
December 31	22.88	29.69
September 30	23.38	29.28
June 30	27.88	29.06
March 31	26.50	29.56*
1974		
December 31	22.13	28.59*
September 30	16.88	28.09*
June 28	20.25	27.93*
March 29	25.63	28.32*
<u>1973</u>		-
December 31	25.13	27.46
September 28	28.00	27.02
June 29	27.88	26.75
Merch 30	28.88	27.06

^{*} Restated for estimated rate refunds.

STATEMENT OF LOUIS O. KELSO, MANAGING DIRECTOR AND NORMAN G. KURLAND, WASHINGTON COUNSEL KELSO BANGERT & CO., INCORPORATED, INVESTMENT BANKERS SAN FRANCISCO-NEW YORK-WASHINGTON

We applaud governmental policy that encourages capital formation, particularly under the present circumstances of our economy that is so iff-designed to finance the Nation's economic growth. Only those most removed from the practical world of business and politics would deny that the strength of the United States is dependent upon its technology, its great accumulations of capital instruments, and its ability to bring into

existence greater productive power in the form of new capital formation.

The United States today is in a perilous condition. A major, though presently unmeasured, portion of its economy is withheld from bankruptcy by governmental subsidies of one thousand and one varieties. The national debt grows apace and inflation ravages our currency. As goods and services become technologically easier and easier to produce, income becomes harder and harder to get, and the great majority of U.S. families and consumers struggle vainly for what is—relatively speaking—a meager liv-

ing.1

Our largest cities, several of our largest states, our largest railroads, many of our major banks, many of our largest manufacturing concerns, and thousands upon thousands of businesses in general are bankrupt or teetering on the verge of bankruptcy. To believe that this perilous situation is going to correct itself is simply to be blind to the fact that it is directly traceable to the structural flaw in the economy: most of our goods and services are produced by capital and only 5 percent of our consumer units own all of it, in any practical sense. The top I percent owns over half of all individually-owned corporate stock, for example.2

One the degree of concentration of ownership of productive capital, see Robert J. Lampman, National Bureau of Economic Research, The Share of Top Wealth-Holders in National Wealth. 1922-1956 (Princeton: Princeton University Press, 1962) pp. 23,

108, 195.

McClaughry Associates, Inc., Expanded Ownership (The Sabre Foundation, Fond du Lac, Wisconsin, 1971) On pages 101-198 is a comprehensive survey of the studies on "The Distribution of Wealth in the Twentieth Century," by Professor James D. Smith of Pennsylvania State University. It confirms the findings of the Lampman analy-

See also "Stock Ownership in the United States: Characteristics and Trends," by Marshall Blume, Jean Crockett and Irwin Friend, Professors of Finance, The Wharton School, University of Pennsylvania Survey of Current Business, November 1974 (U.S. Department of Commerce: U.S. Government Printing Office), Table 4, page 27.

Redistribution by government and by government supported wage coercion (all of which go into inflationary costs) has reached the point of unprecedented hostility to government and to the brink of a taxpayers' general strike.

Nothing short of the most strenuous effort on the part of government to restructure our tax system and monetary and banking policies to facilitate the building of capital ownership into the noncapital-owning majority of consumers will pull us back from the brink of total disaster. The standard menu of tax and other Federal stimulants to investment that make the rich even richer, while keeping the poor poor, should

no longer be tolerated.

We take false comfort in the fact that our example has been followed by all of the other market economies of the world, yet in following our example they are into trouble as deep and even deeper than ours. Thus, relatively, we may not look so bad, although we are all on our way to certain economic collapse unless we begin to apply some common sense in our economic thinking and begin to convert our economies into more rational economic systems, systems that work because they are grounded, not on ignorance and illusion, but on concepts that conform to the realities that a free society and maldistribution in the ownership of the means of production are incompatible.

¹The affluence of an economy can only be honestly measured by comparing what it is technically capable of producing in goods and services, with what its people expect and desire it to produce. By that standard, U.S. citizens are poorer than the people of India!

² While the quantitative studies indicate some 30 million shareholders in the U.S., the qualitative studies show virtually all the stock in the top 5 percent. As to indirect ewsership, through financial intermediaries such as insurance companies and mutual funds, investments of this kind are almost never acquired on a self-liquidating basis (the logic under which business investment decisions are made), so that they do not make a net increase in the buyer's standard of living. Ownership to most investors requires a reduced standard of living and "stored" purchasing power, subject to the effects of inflation, for future use. In our advanced industrial economy, with conventional investment techniques, it is rare indeed for one not born with capital to acquire through personal savings a capital holding that would yield a viable income. capital holding that would yield a viable income.

DEPECTIVE TAX POLICY FOLLOWS DEFECTIVE NATIONAL ECONOMIC POLICIES

Over the past half century, our tax system has been gradually transformed from an instrument structured to meet the costs of traditional and indispensable governmental functions to an appendage of our overall welfare system. More and more it is geared to redistributing consumer power from those with high job and capital incomes to those with little or no productive incomes. Together with Keynesian "fine tuning" monetary stimulants, our national tax policy today mainly seems aimed at stimulating consumption artificially, not on stimulating real production. By injecting cash, services and consumer credit into the economy—in recent years, through the printing press, when it has become politically inexpedient to raise more taxes to cover these costs—we have continued to try to "fine tune" the economy...but to no avail. Our tinkering has brought us continual cycles of inflation followed by unemployment, and, recently a phenomenon that most economic theorists have emphatically told us was theoretically impossible ("It contradicts their sacred "Phillips Curve"), rising prices

together with rising unemployment.

Having virtually nationalized our Northeast railroads, our economy has not yet reached the state of disorder of our British friends. Even there, the British Government has finally discovered, before us, that the road that the followers of Keynes have

led them, comes to a dead-end.

Certainly, Congress is not oblivious of the production side of the national economic equation. Spreading contrived spending power (i.e., "pump-priming") throughout the economy is supposed to generate new demand to which business will respond by increasing their porductive outputs. Unfortunately, the "hand-out" approach to stimulating consumption, as the British may have learned from experience, can have an opposite effect: it adds new costs to producers and demotivates and drives workers from the work force, resulting in even more "funny money" chasing fewer and fewer goods. Meanwhile, more disciplined foreign competitors take over British markets.

Congress has also developed an array of tax subsidies designed to artifically stimulate increased production, shifting resources to less efficient from more efficient producers. This reduces our productive capacity still further. Direct subsidies to agricultures, real estate developers, and to bankrupt and near-bankrupt defense contractors and railroads illustrate some of the artificial props made available to encourage expanded production from the private sector. The investment credit is obviously a direct tax subsidy to induce industry to add newer and more efficient equipment, supposedly to "create" jobs". Accelerated depreciation is another. (It should be noted that if our Nation's wealth-producing assets were distributed more broadly among working Americans in the first place, as the proposals we will make would rectify for the future, artificial stimulants and "subsidies" would be less necessary for correcting today's mismatch between production and consumption levels; Congress' new strategy would shift more to removing tax and structural credit barriers to expanded production, thus leaving it to expanded competition and the forces of supply and demand to reach their own natural levels.)

Quite properly, the thrust of tax subsidies like the investment tax credit is aimed at the right engine of change, new capital formation, the main source of increased productivity within an industrial society. Economists that divert policy-makers from the capital formation target distort our economic priorities and understanding of how we can stop treating the symptoms of poverty: without our tools, even with the fullest of full employment, we will all share scarcity and misery.

There is ample evidence, we now recognize, that our Nation's rates of investment in new and more efficient tools of production (and not our investment in people, as many economists suggest) are lagging behind that of our competitors. Whatever industrial might and affluence we enjoy in today's global marketplace, rests heavily on the foundation of our previous technological lead, the fabricated frontier of structures and machines we employ in our industries. Clearly, our future is endangered to respond vices to the contract of the contra if we fail to respond vigorously to industry's growing needs for replacing their outmoded plants and equipment with the most advanced capital instruments that advanced technology has already made available. The case for all-out exploitation of new capital formation seems clear-cut. In the final analysis, it is a question of survival.

Paradoxically, tax policy designed to encourage new capital formation has been policitally and economically counter-productive. Instead of stimulating the private sector to become more productive and less dependent on government hand-outs and bailouts, the private sector has become addicted on the need for subsidies. Even worse, to reduce welfare and unemployment costs, all our subsidies to new investments have reinforced the single must significant cause of the disease that has distorted our capital ownership and income distribution patterns: conventional modes of corporate finance (i.e. roughly 98 percent of new investments are financed through retained earnings and

direct corporate borrowings; the tiny fraction of new capital financed through new equity issuances require "savings" or reduced consumption, so new capital essentially stays in the same hands.) Thus, the process of new capital formation—now growing incrementally at annual rates exceeding \$100 billion and scheduled to double and triple in coming years—works only for the already rich. The capital-less 95 percent of American consumers become more dependent on government income redistribution and "created jobs", including the "inspired" idea by people who regard themselves as progressives and liberals to offer everyone a job with government as "the employer of last resort". The faster industry adds newer and more efficient (i.e., job-destroying) capital instruments, financed in traditional ways so that no new owners are added in the process, the more impossible it becomes for the private sector to solve the problem it has abdicated (for lack of better answers) to government: linking increased production directly and efficiently with increased private consumer demand. Thus, business has "forced" government to fill the demand vacuum with indirect and inefficient recycling schemes.

THE INVESTMENT TAX CREDIT: A PRIME EXAMPLE OF DEFECTIVE TAX POLICY TO ENCOURAGE NEW CAPITAL FORMATION WITHOUT REGARD TO WHO WILL OWN IT

If, as we are confident is the case, there is a time bomb ticking away in the U.S. economy because most of our goods and services are produced by capital, and only 5 percent of the consumer units own any capital, then it is nothing short of astonishing that Congress—particularly those of its members who consider themselves liberals—should order a gift to be made by all taxpayers to the already rich, to the extent of about \$8½ billion a year! While the goal of stimulating new investment is sound, the means chosen by Congress cannot be justified unless it also helps solve the capital ownership problem. For the investment tax credit is, in fact, a naked gift from the taxpayers as a whole, to the top 5 percent of wealth holders who now own the corporations that take the investment credit. If the investment credit was distributed equitably so as to preserve the status quo for the concentrated owners of capital (for one cannot build a private property economy upon the destruction of anyone's private property), then 5 percent of the investment credit would flow to the existing stockholders, and the remaining 95 percent of the investment credit would flow to the existing stockholders, and the remaining 95 percent of the investment credit would flow the employees of the corporations taking the investment credit. Thus, a sounder use of the investment credit would not only provide a means of greatly expediting the building of capital ownership into the noncapital-owning working employees of the concentration of ownership of wealth that constitutes the Achilles' Heel of the American economy.

Moreover, Congress, in considering the investment credit and other stimulants to investment, should recognize that the present "carrot" of an investment credit totally fails to correct (indeed, exascerbates) the pernicious cause of our Nation's grotesquely unbalanced distribution of capital ownership: traditional modes of investment finance. Hence, when the company goes out to buy the "qualified investment", 98 percent of the time it is likely to finance the costs either internally with retained earnings or externally through direct debt financing. These methods clearly will not add a single new owner of the new capital which the government helps subsidize. The investment credit does nothing to encourage new equity issuances, which represent only 2 percent or so of new capital formation, and, because such stock purchase generally requires cash, is likely to be acquired by those with "surplus" incomes, the already rich. (We will discuss below the shortsightedness of proposals by the Administration to encourage small investors to buy stock through payroll deductions and other "forced savings" programs, which eventually find their way into higher corporate costs and may encourage speculation, rather than investment in new capital formation.)

A small step in the right direction of correcting the ownership-concentrating tendencies inherent in the investment credit was taken by the Congress in the Tax Reduction Act of 1975. An additional 1 percent bonus was added to the 10 percent investment credit for companies that added an Employee Stock Ownership Plan ("ESOP") and gave stock to their employees equal to the 1 percent gift from the taxpayers. Many businesses, including several in the Fortune 500 list, responded to this signal by Congress that business should no longer ignore who will own the new capital formation encouraged by our tax laws. See attached article, "Employee Stock Plans Begin to Catch Fire", Business Week, March 1, 1976. Even this tiny bonus was sufficient to give corporate leadership their first "taste of ESOP" and apparently many liked what was offered.

Technically, an Investment Tax Credit ESOP is not a "true" ESOP. The ESOP, if properly designed, invloves no give-away or subsidy, but is essentially a radically

new mode of investment finance, designed to eventually supplant ownership-concentrating methods of generating funds for new capital formation. It is a tax-exempt vehicle for channeling borrowed funds into new capital formation at costs less than direct corporate borrowings. As many companies have "discovered" through the ITC/ESOP bonus, the ESOP itself is gradually being improved as a result of four laws already passed to facilitate its use as a corporate financing alternative. And through the ESOP, businesses have also learned of other financing alternatives, all based on two-factor economics, which are now being studied by several prestigious research organizations and several Congressional committees. Even under present law, a "true" ESOP is the only technique of corporate finance through which a company can attract outside loan funds and repay its debt service obligations with pre-tax earnings. This not only saves most companies roughly half of their capital costs compared to financing through retained earnings or direct loans, both of which use after-tax dollars. It also simultaneously connects its employees to the capital formation process, providing them ownership benefits in the form of stock in their company which would ordinarily be inaccessible to them. (A comparison between ESOP financing and traditional techniques of corporate finance is described below.) porate finance is described below.)

Now that Congress has brought the merits of ESOP financing to the attention of the business and banking community, where it is now becoming acceptable, the message that the goals of new capital formation and broadened capital ownership are inextricably linked, should, we feel, be incorporated in all future tax incentives to business. Thus, in the process of creating new capital we will systematically be creating new owners

as well.

as well.

Hopefully, if Congress extends the present 10 percent investment credit, now scheduled to expire on December 31, 1976, it sould not only "sweeten up" current ESOP incentives by allocating a significantly greater portion of the "gift" from our taxpayers to capital-deficient workers. A 50-50 split between present owners and workers would seem to be minimal from an equity standpoint. Congress should also link the ITC bonus with an encouragement to shift from modes of finance that perpetuate concentrated ownership to ESOP and other ownership-diffusing modes of financing their new plants and equipment. In this regard, Congress should also correct weaknesses in previous laws affecting ESOP's, which have either discouraged their adoption (as in the special problems they pose to public utilities) or which have made ESOP's vulnerable to being misused by the incompetent and abused by the unscrupulous.

The Accelerated Capital Formation Act, H.R. 462, which is discussed below in more detail, goes a long way toward eliminating many drawbacks and roadblocks to the expanded use of ESOP financing not reached by the present investment credit laws. Other proposals, particularly those to reduce interest rates on ESOP loans, would

laws. Other proposals, particularly those to reduce interest rates on ESOP loans, would also make it vastly easier for industry to meet its future capital requirements, while directly providing American workers a growing piece of the capital pie as a supplement to their present paychecks.

THE CORPORATE INCOME TAX: SHOULD IT BE VIEWED AS A KEYSTONE OF OUR TAX SYSTEM, OR SHOULD IT BE TRANSFORMED INTO A MAJOR LEVER FOR MOVING OUR ECONOMY TOWARD A MORE ADVANCED AND DEMOCRATIC PORM OF CAPITALISM?

To put things in their proper perspective, roughly 14 percent of total Federal revenue receipts, or \$40.6 billion in fiscal 1975, was derived from the Federal corporation income tax. The question we raise is whether the benefits flowing from the corporation income tax, both short-term and long-term, outweigh its "drag effect" on our overall production and income distribution system. Is is inherently a fair tax? Does it help solve our government revenue needs or does it make it worse? If these questions are answered "No", then the time has come to re-examine this "sacred cow" and its purposes and functions within our overall tax strategy. Then, rather than eliminating this tax suddenly, we can use it as a trade-off for achieving a simpler and more equitable tax system, as well as for vigorous stimulation of the U.S. production system through more well-conceived tax incentives for new capital formation and broadened capital ownership. For if any part of our tax policy is a drag on our production system, our tax priorities must necessarily be out of kilter. We will have put the cart before the horse.

It is our contention that much of the complexity in our Federal tax laws originate from the fact of concentrated capital ownership and reflect over a century of attacks and counter-attacks on corporate profits, the target of all laws taxing corporate income. Since, according to a study published in the November 1974 issue of SURVEY OF CURRENT BUSINESS (U.S. Department of Commerce), the top 1 percent of Americans own over 50 percent of all individually owned corporate stock, these attacks

and counter-attacks on corporate profits should surprise no one.

In the light of our presently drifting economy and growing demands from taxpayers for basic re-structuring of our tax priorities (which include pressures for increasing the tax yield from corporate profits), let us take another look at the origins and

purposes of the corporate income tax.

The corporate income tax is an inherently discriminatory "double tax" on private incomes from capital. The owner of capital is taxed on his earnings, once before they leave the corporate treasury and again when the fruits of capital flow into his hands as dividends or capital gains. Originally devised as a "populist" measure to redistribute capital incomes from the few who owned corporate wealth and to relieve the non-owning masses of rising governmental costs, the corporate income tax has had an anti-populist effect: it constitutes a major reason for the monopoly of access to the ownership of new productive capital by present owners. At least part of it is passed on to consumers anyway through the price system. The bulk of the Internal Revenue Code represent countermeasures by capital owners to minimize the erosion of their capital incomes, making tax simplification more difficult to accomplish. And, finally, the corporation income tax stands as a major barrier to expanded rates of capital investment and to a fairer distribution of national incomes.

HOW HAVE OUR LAWS ERODED THE LEGAL FOUNDATION FOR "PRIVATE PROPERTY" OWNERSHIP IN CORPORATE STOCK AND WHAT STOCKHOLDER RIGHTS MUST BE RESTORED TO ENCOURAGE BROADENED CAPITAL OWNERSHIP?

The logic of business finance is, and always has been, to invest in capital on terms where it will first pay for itself within a reasonably short period of time (normally three to five years) and then go on throwing off net income indefinitely. But lacking a rational economic theory of a private property, free-market economy, our laws and institutions were designed under the guidance of some sound theoretical insight, but heavily influenced by the personal greed of wealthy individuals in power and heavy doses of simple business expediency. Thus, for 150 years we have been able to maintain an economic growth rate that looked good (compared to the economically primitive past) and still enabled us, as a national economy, to turn in an economic performance that was superior to all other countries on earth. Nevertheless, it was a crude performance compared to what it might have been if we better understood the significance of technological change and how to harness technology to the human society in such manner that we could maximize the production of goods and services, minimize toil,

and maximize leisure, self-sufficiency, and personal security.

It is true that the logic of business is to invest in capital on terms where the future profits earned from that investment will pay off its formation costs within a reasonably short period of time (three to five years normally). But under conditions where state and federal governments take 50 percent to 60 percent of the wealth produced by capital before it can be used by the corporation, and the principle of private property, as applied to the stockholders of a corporation, is wholly negated, as it is in every state of the U.S., so that the shareholders have no legal right to their proportionate share of the annual net earnings of the corporation, then there is no opportunity on the part of the shareholder to buy common stock in the market-place on terms where he can reasonably expect to pay for its price out of its yield. In fact, the reverse is true. With rare exceptions, and they have been extremely brief, the interest rate on personal loans has been higher than the yield of capital stocks. Nor is it adequate to say that in a few instances, the personal investor, had he sold his "investment", might have paid his interest costs out of his capital gains plus his yield, had he borrowed to purchase his stock. The end result is that he had a petty windfall of no investment significance, and has parted with the capital he might have retained had he been an "investor" rather than a "speculator" as the system forces him to be. Further, had the corporation, through its board of directors, determined to pay some part of the annual net earnings in dividends—something they are under no legal obligation at all to do—every income-taxing jurisdiction would have taken its bite out of those dividends once they reached the stockholder, thus assuring that his ultimate usable personal income from his capital stock.

On the other hand, the more fully we give corporate stock the characteristics of private property (i.e., the right of the owner of stock to receive periodically and dependably the full yield, or proportionate net income, of his equity in the corporation), the more fully, expeditiously and efficiently we can enable those who do not own capital to buy it, pay for it out of what it produces, and then own it and employ it to enhance their lives, with rising personal incomes to meet their consumer needs

and share of government costs.

Technically, it is not a "tax break" for government to protect the private property of a stockholder in his right to receive the full wages of his capital before it taxes

him. Private property is a basic tenet of a democratic free society. We have not accorded the ownership of industrial capital the same rights of private property originally accorded to agricultural private property simply because our economy was put together out of a patchwork of expedients, in the absence of any comprehensive

theory of capitalism.

The theory of capitalism dates from the publication of The Capitalist Manifesto, written by Mortimer J. Adler and Mr. Kelso in 1958. Prior to that time there was no theory of capitalism. There were a collection of ideas believed to be characteristic of a capitalistic society, but these were not part of a comprehensive logic. The word "system" means "logic". One cannot call our economy an "economic system" unless he can define its logic. The failure of our laws to accord the stockholder the right to receive the wages of his capital, paid periodically and dependably like the wages of labor, was simply one of the missing links in more primitive concepts of what constitutes a capitalist economy.

Nor was that link missing without reason. Lacking a method of providing adequate financing for the growth of newly-formed capital, without permitting management to arbitrarily withhold the wages of capital indefinitely, meant that economic growth would

be totally stifled.

We have written extensively and have testified on earlier occasions on some of the monetary and banking reforms that are needed to provide low-interest, unlimited credit to meet our shortages of new capital formation.⁵ Space will not permit us to repeat the complete set of reforms that Congress should adopt to convert today's economy into a more democratic and workable capitalist "system". Here we will confine ourselves to some of the needed tax reforms.

The corporate income tax is one of the chief lapses in the rights of the stockholder to receive his proportionate share of the total net income produced by the underlying capital he owns. The government intercepts the income in the corporation before it reaches the stockholder. As long as all of the capital ownership is in the top 5 percent of wealth-holders in the economy, however, it would be a disaster to suddenly repeal the corporate income tax or even to request desirable attack tax rates, as many have naively suggested. But it would be a most desirable step toward eventual repeal of this tax to make payments of the wages of capital to new beneficial owners of capital tax-deductible to the corporation to the extent the funds are used, as in ESOP financing, to enable them to accumulate equity participation in newly-formed capital or, after their shares are paid for, to provide the new shareholders with "second incomes" in the form of taxable dividends. On the other hand, tax incentives encouraging the reinvestment of dividends of existing shareholders would simply concentrate the ownership of the top 5 percent even further, and would work against the goal of broadened capital ownership.

When we have built an economy sufficiently large to produce a high standard of living for all consumers, and in that process have built capital ownership into all consumers so that they can participate, on the one hand, in the production of the goods and services representing that high standard of living, and, on the other hand, receive the income represented by their productive inputs—whether through their labor power, their capital ownership, or both—it would then be appropriate, we believe, to repeal the corporate income tax altogether and to rely solely on the taxation of individual income. In this way, we correct the original mistake (the corporate income tax), while also correcting the concentration of the power to produce goods and

services represented by the concentrated ownership of capital in the U.S. economy.

When property is restored to the stockholders of American corporations and financing techniques that broaden the proprietary base become the order of the day in financing new capital formation—and in the process eliminating structural causes for inflation and unemployment—we believe that within a relatively brief period of time the major portion of every employee's income will be derived from capital, for the simple reason that most of the goods and services in the U.S. economy are produced by capital.

⁸ See especially the testimony and written statements by Louis O. Kelso, Joint Economic Committee, Hearings on Employee Stock Ownership Plans, December 11-12, 1975. See also, Louis O. Kelso and Mortimer J. Adler, The New Capitalists, Random House, 1963; Louis O. Kelso and Patricia Hetter, Two-Factor Theory: The Economics of Reality, Random House, Vintage paperback, 1968, and "Uprooting World Poverty: A Job for Business", Business Horizons, Indiana University Graduate School of Business, Fall 1964; and Louis O. Kelso and Norman G. Kurland, "Memorandum on the Role of Institutional Investors in the Stock Market," Subcommittee on Financial Markets, Committee on Finance, U.S. Senate, Hearings on Financial Markets, September 24, 1973.

PUTTING THE HORSE BEFORE THE CART: SOUND TAX POLICY FOLLOWS SOUND NATIONAL ECONOMIC POLICY

A sound tax policy cannot be constructed upon confused or unsound political or economic principles. Two-factor economics offers a solid foundation upon which business, labor and government can forge a new common strategy to enable our Nation to cope more realistically with today's industrial world and with the challenges we

can expect from accelerating technological change.

Sound tax policy is based upon a re-assertion of the political, moral and social philosophy that once made America "the last best hope of mankind". It recognizes that government does not produce wealth and that every "subsidy" must originate with those individuals whose productive toil and productive capital actually produce society's marketable goods and services. It also recognizes that wealth is produced most efficiently within competing private enterprises vying to satisfy private consumer demand, with every buyer "voting" with his own dollars to reflect his choices among available goods and services.

Government, through its taxing and spending powers, can, of course, redistribute wealth, besides carrying on its traditional functions of enforcing contracts and otherwise maintaining a just and peaceful society. And, to the extent voluntary associations and other specialized social institutions, like the business corporation, become disfunctional and create, rather than solve, problems of society, government is literally "forced"

to fill the social vacuum.

Today we have reached a point where, as a result of the maldistribution of wealth and income caused by defects in our economic institutions, government itself is suffering from an acute case of functional overload. The mere shifting of centralized governmental functions to state and local levels totally ignores this problem. Increasingly burdened with economic matters better handled by individuals and private institutions governed by the more democratically responsive laws of supply and demand, the State—civilization's most important social invention—cannot effectively carry on the highly specialized and limited functions for which it was originally designed by creative geniuses like our Founding Fathers. As a natural monopoly of coercive powers, it is a highly dangerous and unnatural tool when it tries to assumes powers best left in the hands of individuals and their private associations, as in economic decision—making.

Since capital within the context of a modern corporation—next to the State itself, our most important social tool—produces an increasing share of the wealth of an industrial society, a sound and just governmental policy would remove roadblocks to broader corporate stock ownership, so that the need for governmental intervention and income redistribution would gradually and systematically be reduced to tolerable levels. The corporation is, after all, a mere creature of law and to the extent it

produces injustices, our system of justice is necessarily deficient.

Correcting our ownership distribution patterns through changes in the laws under which our corporations are born and nourished, means that the necessary costs of government can then be shared by a constantly growing base of citizens with direct private incomes from our corporate sector as a whole. Such a policy would also automatically broaden the accountability of management of our largest and most powerful corporations to an expanded stockholder constituency base, making the corporation more "popular" as a social institution. Corporate profits would soon lose their socially and politically undesirable connotations. Making its ownership accessible to all citizens would enable the corporation as a basic component of a democratic society to make a quantum advance in its own evolutionary development. (In terms of its present extremely narrow constituency base and its efficiency as a direct distributor of mass buying power, the modern corporation is still remarkably primitive, about at the same stage in its evolutionary history as democratic government was over a thousand years ago, at the time of the Greek city-state.) Nothing short of widespread ownership of large U.S. and multinational corporations will save them and provide them a political buffer from their eventual nationalization.

Some critics, before understanding the logic of two-factor economics and ignoring the case-tested effectiveness of ESOP financing tools, have asserted that they involve "tax loopholes", that Congress would be forcing taxpayers to subsidize and buy shares for workers. Such assertions, indeed, put the cart before the horse, the tax system before the system of wealth production. Treating every tax reform as a "subsidy" or "tax expenditure" ignores the fact that the corporation income tax, the only tax conceivably reduced by ESOP financing, is already a "double tax" on productive capital. It is absurd to call a reduction in the "penalty tax" imposed on owners of capital a "government expenditure", particularly when the reform merely restores the institution of private property ownership of corporate stock and enables the econo-

my to increase its productive capacity and spread the distribution of new wealth and private incomes on a more equitable basis. Tax subsidies are generally palliatives to treat the symptoms of poverty and defective economic policies. ESOP's are solutions

to those problems.

If it is a "tax break" that is required to enable more working people—who make up the overwhelming bulk of our taxpaying public—to become economically self-sufficient through broadened capital ownership, then one could make a persuasive case that not only would Congress be hard-pressed to mandate a more desirable social objective, but that by design it would strengthen and simplify our tax system and broaden its ownership base. Fortunately, no tax subsidy is needed to make the ESOP work. Basic tax reform, as we have proposed, involves no subsidy. If anything, greater use of ESOP financing would provide more wealth upon which truly subsidized governmental activities and direct welfare must ultimately rest.

In our opinion, the soundness of our tax policies should be judged by whether their net effect holds governmental functions to irreducible minimum and whether such costs are derived from the broadest possible base of increasingly self-sufficient taxpayers. In this regard, we believe all our proposals would have two beneficial effects on the revenue picture at all levels of government: (1) it would revitalize and stimulate growth within the private sector, thereby enabling underproductive and non-productive workers, plus many now working for government, to be hired by expanding private corporations, while reducing levels of government spending for direct welfare, for new government jobs, and for subsidized jobs in private industry; and (2) it would expand the Federal, state and local taxpayer base derived from expanded corporate payrolls, rising dividend incomes, and a larger estate and gift tax base. At the same time, it would gradually eliminate basic disincentives to the creation, maintenance, and renovation of productive capital, upon which the quality-of-life of modern civilization ultimately depends.

IS IT NECESSARY OR DESIRABLE TO FORCE WORKERS TO ACCUMULATE SAVINGS BEFORE THEY CAN ACCUMULATE SIGNIFICANT CAPITAL ESTATES?

President Ford, in his State-of-the-Union Message of January 1976, announced a "Broadened Stock Ownership Plan", which would encourage Americans to save their money to buy corporate stock. While we are encouraged by the Administration's newly announced goal of broadening the U.S. capital ownership base, we believe the "belt-tightening" road to reach this goal is counter-productive and could conceivably result, not in sorely needed new capital formation, but in higher stock prices from misguided speculation in recycled, outstanding securities peddled by high-pressure stock brokers.

In contrast to the "Invest in America" promotional schemes—which encourage speculation, not investment—compare the stock ownership program launched by Lowe's Companies, Inc., as reported in Newsweek on March 31, 1975. A warehouse laborer worked for Lowe's for 17 years and never earned more than \$125 a week. Lowe's is a company headquartered in North Wilkeboro, N.C. with 129 building-supply stores. For its employees it set up an employees' trust into which it contributes an amount equal to 15 percent of their pay and invests the funds mainly in Lowe's stock. When the warehouse laborer retired, and he paid nothing into the fund, he received a distribution tion of \$660,000! The same fund has already produced a score of millionaires! Over 50 retirees accumulated an equity in six figures.

The solution to the conventional mismatch between the ownership of productive power and the possession of present or potential unsatisfied needs and wants is to facilitate financing a significant portion of new capital formation and normal transfers in the ownership of existing assets, such as the transfers of ownership of closely-held businesses, or acquisitions; divestitures or mergers by corporations, by techniques that legitimately build the ownership of viable capital holdings into corporate employees without taking anything from their take-home pay or their universally inadequate (or

non-existent) savings, and without impairing the property rights of existing owners.

Buying capital on self-liquidating credit can be demonstrated no more effectively than by referring to Simon Kuznets definitive book on Capital in the American Economy: Its Formation and Growth, published in 1961 by the National Bureau of Economic Research. In this volume, Dr. Kuznets (pp.394-399) answers the question of why financing is necessary in connection with new capital formation by saying that it is because businesses have a need for capital instruments before they have saved the funds

to buy and pay for them.

However, Dr. Kuznets seems totally oblivious to the fact that in a private property industrial economy, all households have a need to own equity capital before they have saved the funds to pay for it. Indeed, individuals need to own equity capital so that they can save the funds to pay for it. Yet it takes no argument to demonstrate that while we have devised elaborate means for financing the purchase of consumer

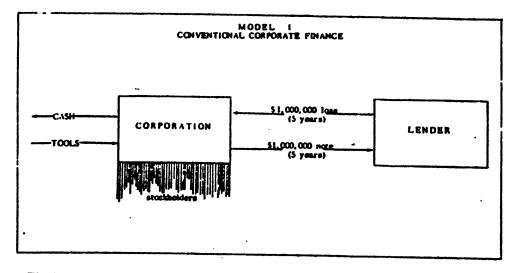
goods and homes (which produce no marketable wealth and thus do not assist buyers to pay their costs), we have virtually no techniques for financing the purchase by individuals of newly issued equity securities, although new capital formation which takes place under reasonably competent management normally produces income in successive cycles in amounts sufficient to pay for stock representing it over and over again.

The "forced savings" approach has another basic weakness. By taking cash out of the hands of potential consumers, it produces a shrinkage of consumer demand which businesses need to justify expansion and marginal businesses need for sheer survival. There are better answers on how to finance a closer match between new

productive capacity and new consumer power, as we will point out.

THE FATAL DEFICIENCIES OF TRADITIONAL TECHNIQUES OF CORPORATE FINANCE OTHER THAN SALE OF STOCK

The process by which newly formed capital (improved land, new structures or structural additions, and new machines and tools) is brought into existence under conventional financing techniques can be functionally analyzed from the following example. Suppose a corporation has done its feasibility study for a contemplated expansion (self-liquidation within a reasonable period of years is the essential logic of business investment) and concludes it should spend a million dollars for new tools in order to increase output of goods and services for which it foresees a profitable market. The corporation goes to its bank or other lender, convinces the lender of this "feasibility", and borrows the necessary funds—let's say repayable in installments over five years. The picture looks something like this:



The important aspects of this technique of finance are:

When the loan is paid off, the incremental productive power represented by tools costing one million dollars has been built into a stationary stockholder base. An individual may sell stock which he owns in the corporation, and another individual with capital may buy the stock, but no net new capital owners are created in the

-Since, as a matter of fact, virtually the entire personal ownership of productive capital in the U.S. economy lies in the top 5 percent of wealthholders, it is clear that a principal contributor to this concentration of ownership of productive power (productive input being the business basis as well as the moral basis for personal outtake or income) under the double-entry bookkeeping logic of a market economy, lies in a technique of finance that builds all incremental productive power into a tiny stock ownership base that already owns functionally excessive productive power, having in mind that the economic purpose of production is consumption. Those who must constitute the great majority of ultimate customers for business—the people with present and potential unsatisfied consumer needs and wants—do not acquire incremental productive power through this process. Those who are in fact already excessively productive (in relation to their present or potential consumer needs or wants) through it acquire all incremental productive power.

-The other principal methods of financing new capital formation, those using internal cash flow such as retained earnings, investment credits, depletion, accelerated depreciation, etc., all have precisely the same concentrating effect. In the aggregate, all of the conventional techniques of finance above mentioned accounted for nearly 98 per-

cent of new capital formation during the past fifteen years.

—As we have already observed, the sole remaining financing method, the sale of new equities for cash, has the same concentrating effect: the new stock is sold to people with capital—the top 5 percent of wealthholders—who can pay cash for it.

In short, the logic used by business in making investments—the logic of investing in things that will pay for themselves—is not available to the 95 percent of U.S. residents born without family capital ownership. As the non-human factor increases in quantity and in relative productive power, its ownership remains concentrated in a stationary fraction of the population. With rare exceptions, employees, including management employees, do not own functionally significant amounts of productive capital

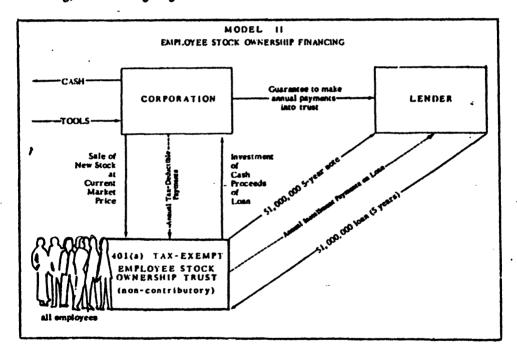
capital.

The conventional economists have failed either to see the problem or to propose

significant solutions.

THE EMPLOYEE STOCK OWNERSHIP PLAN ("ESOP"); AN ALTERNATIVE MODE FOR FINANCING THE FUTURE OF AMERICAN INDUSTRY TO PROVIDE RISING DIVIDEND INCOMES AND VIABLE CAPITAL ACCUMULATIONS FOR WORKING AMERICANS

The basic building block for bringing about such change in the pattern of ownership of capital in the U.S. economy is ESOP financing (the possible variations are numerous). Using the assumptions referred to in connection with the above discussion of traditional financing, the following diagram shows how it works:



The most important aspects of the ESOP financing technique are:

The loan is made not directly to the corporation, but to a specially-designed ESOP Trust that qualifies as a tax-exempt employee stock bonus trust under Section 401(a) of the Internal Revenue Code and corresponding provisions of State laws. Such trusts normally cover all employees of the corporation and their relative interests are proportional to their relative annual compensation (however reasonably defined) over the period of years that the financing is being paid off. The trusts are normally under the control of a committee appointed by management and its membership may include labor representatives.

-The committee invests the proceeds of the loan in the corporation by purchasing

newly issued stock at its then current market value.

—The trust gives its note to the lender, which note may or may not be secured by a pledge of the stock. If it is so secured, the pledge is designed for release of

proportionate amounts of the stock each year as installment payments are made on the trust's note to the lender and the released stock is allocated to participants' accounts.

-The corporation issues its guarantee to the lender assuring that it will make annual payments into the trust in amounts sufficient to enable the trust to amortize its debt to the lender. Within the limits specified by the Internal Revenue Code, such payments to the lender. Within the limits specified by the internal Revenue Code, such payments are deductible by the corporation as payments to a qualified employee deferred compensation trust. Thus the lender has the general credit of the corporation to support repayment of the loan, plus the added security resulting from the fact that the loan is repayable in pre-tax dollars.

—Each year as a payment is made by the corporation into the ESOP Trust there is allocated proportionately among the accounts of the participants in the trust a number of shares of stock proportionate to the participants allocated share of the number of shares of stock proportionate to the participants allocated share of the number of the second the participants allocated share of the number of the participants.

payment. Note that this permits the employees to acquire stock in increments over a period of years at a price fixed at the time the block of stock is first purchased. Special formulas have been designed to counteract the relatively high proportion of early amortization payments used to pay interest and the relatively high proportion of later amortization payments used to repay principal.

—As the financing is completed and the loan paid off, the beneficial ownership

of the stock accrues to the employees. Most trusts are designed to permit the withdrawal of the portfolio in kind, subject to vesting provisions, either at termination of employment, or at retirement. However, it is desirable to so design the ESOP and Trust that any dividend income on shares of stock that have been paid for by the financing process and are then allocated to the employees' accounts may be distributed currently (with a minimum two-year deferment possibly required by law) to the employee-participants, thus giving them a second source of income.

-Diversification of the assets of the Trust can be achieved if desired after a particular block of stock has been paid for by exchanging the stock, at fair market value, for other shares of equal market value. Since the Trust is a tax-exempt entity, such

diversification is without tax impact.

A brief comparison of conventional financing methods represented by Model I, with ESOP financing represented by Model II, is as follows:

A Brief Comparison of Conventional Finance Represented by Model I With EMPLOYEE STOCK OWNERSHIP FINANCING, REPRESENTED BY MODEL II

MODEL I

CORPORATE GROWTH FINANCED® IN CONVENTIONAL WAYS

TAX TREATMENT OF INTEREST

Interest deductible for corporate income tax purposes as such.

TAX TREATMENT OF PRINCIPAL*

Repayment of the principal, which is not deductible for corporate income tax purposes, requires \$2.3 million pre-tax dollars.

WHO OWNS THE STOCK WHEN IT HAS PAID FOR ITSELF

When the financing is paid off, the employees have acquired no capital ownership. Since their labor is their only means of making productive input, and they are faced with rising living costs and taxes, employees must demand ever higher compensation for the same or less work input.

CORPORATE STRATEGY IMPLICATIONS

The corporation, by constantly replacing labor input with capital input, without recognizing the need of employees to make up for their declining economic productiveness through ownership of capital instruments, forces employees to demand more pay for the same or less work. This raises costs without raising output.

INTERNATIONAL COMPETITIVE ADVANTAGE TO U.S. BUSINESS

Because the corporation cannot provide better increasing economic security or increased incomes to its employees except by increasing its costs, its only hope, visa-vis foreign competitors, is that they suffer the same or a worse fate.

^{*} Comparison based upon an assumption that a corporation has determined to invest \$1 million in new plant, and has persuaded its bank to loan that amount on a five-year installment payout basis.

ECONOMIC ALIENATION

The natural antipathy between owners (who generally do not work in the corporation) and workers, who own no part of the corporation, grows, and reflects itself in alienation of the workers, lack of common goals, decline of craftsmanship, high turnover, waste, social unrest, and, in extreme cases, even sabotage.

GOING PUBLIC VS. GOING PRIVATE

Close holding stockholders may remain in a position where either they or the corporation, or both, will at some future time be required to make an expensive public sale of stock to establish its market value to provide valuation and liquidity to handle estate tax problems.

MODEL II

CORPORATE GROWTH FINANCED® THROUGH EMPLOYEE STOCK OWNERSHIP TRUSTS

TAX TREATMENT OF INTEREST

Interest deductible for corporate income tax purposes as a contribution to a qualified trust.

TAX TREATMENT OF PRINCIPAL*

Repayment of principal, which is deductible for corporate income tax purposes, requires only \$1 million pre tax.

WHO OWNS THE STOCK WHEN IT HAS PAID FOR ITSELF

When the employee stock ownership financing is paid off, the employees, including executive employees, each in proportion to his relative income from the corporation, have purchased through their trust, on installment credit that is non-recourse as to them, newly issued stock, under conditions where the proceeds to the corporation are invested in new tools, and where the employees, in economic theory (as distinguished from tax theory) are entitled to receive a preferential dividend representing the "full wages" of their new capital to enable them to pay for it.

CORPORATE STRATEGY IMPLICATIONS

The corporation, by financing its expansion on terms that are not only more favorable to it but which also build equity ownership into employees without diminishing takehome pay or invading their savings, puts employees in a position to build a capital estate without reducing spendable income and within a few years to add a growing second income to their wage or salary.

INTERNATIONAL COMPETITIVE ADVANTAGE TO U.S. BUSINESS

Because the corporation can provide increasing economic security and, after the stock has in effect paid for itself, increasing income for its employees without increasing its costs, it puts itself progressively in a better position vis-a-vis its competitors, domestic and foreign.

ECONOMIC ALIENATION

There is a growing unity of interest between owners and employees, as employees become equity owners through their tax-exempt, in-house mutual fund, the ESO Trust, having been given the opportunity to invest on the same terms the corporation traditionally insists upon for itself when it makes an investment—that it pay for itself.

GOING PUBLIC VS. GOING PRIVATE

The ESO Trust itself can buy close-held stock, on pre-corporate income tax dollars, and solve normal estate tax problems and return the full fair market value of the stock to the selling stockholders, without subjecting either the corporation or its stockholders to the vagaries of the public stock market, while building equity ownership into corporate employees in the meanwhile.

^{*}Comparison based upon an assumption that a corporation has determined to invest \$1 million in new plant, and has persuaded its bank to loan that amount on a five-year installment payout basis.

CORPORATE GROWTH FINANCED IN CONVENTIONAL WAYS

RETIREMENT SECURITY AS AN OPPRESSIVE BUSINESS COST OR AS A SOURCE OF NEW CAPITAL FORMATION?

No anxiety of the American working man or woman could be better founded than the concern for income after retirement. Most corporate and public employers have policies of mandatory retirement at 65 or less. Unless the typical employee reduces his current standard of living (and his potency as a customer for business) sufficiently during his life to accumulate a fund to privide one-third to ½ his income throughout his retirement, even with pensions and Social Security, his income drops to the poverty level on retirement.

Nevertheless, inadequate as governmental, union, and corporate pensions are, they are a devastating cost to corporations and taxpayers. The reason is quite apparent: the funds so accumulated are mostly invested in outstanding pieces of paper (stocks or bonds) at yields that assure that the investments will never, if the market cost of money is considered, pay for themselves. Corporations for their own accounts, would never knowingly or intentionally make investments that will never pay for themselves, but for their conventional pension and profit sharing trusts, they, like governments and unions, almost invariably do!

So year after year, the corporate, union, and governmental costs of pensions go up. Year after year their inflationary impact pushes up the cost of living, for they contribute nothing to the output of goods and services to offset their costs. In other words, the sums invested do not go directly into new capital formation. Year after year the functional inadequacy of retirement plans in the face of rising costs of living and rising taxes brings grief, privation and frustration to those who have looked forward to depending upon them. At the same time, many corporations would be insolvent or stripped of most of their equity, if their retirement plans were currently fully funded. Their stocks would plummet in the market place.

LABOR-BUSINESS STRIFE OR LABOR-BUSINESS PEACE?

The employees are gradually conditioned to think in terms of the permanent employee-management warfare, using raw coercion and the threat of coercion to extract more pay from the employer in return for the same or a diminished work input. The "economic solution through coercion" syndrome involves maximizing inconvenience to trade, business, the economy and the public as a means of making coercion of the employer more effective. Income, in the mind of the worker, becomes more a function of coercive power than of quality and quantity of productive input, so coercion grows, and the quantity and quality of goods and services shrinks.

CORPORATE GROWTH FINANCED THROUGH EMPLOYEE STOCK OWNERSHIP TRUSTS RETIREMENT SECURITY AS AN OPPRESSIVE BUSINESS COST OR AS A SOURCE OF NEW CAPITAL FORMATION?

In terms of accumulation for retirement of corporate or governmental employees who participate in Employee Stock Ownership Trusts, it is realistic (and theoretically sound) to look at payments made by the employers into the trust as part of the yeild (along with dividends) on the trusts' original investments. Thus in economic theory (as distinguished from tax theory), the contribution is simply the preferential dividend that enables the investment on non-recourse credit (as to the employee) to pay for itself in pre-tax corporate income dollars. It amounts to a relatively full payout of the "wages" of capital to enable the new beneficial owners (the employees) to pay for their new capital out of what it produces.

Since the average pre-tax yield on invested capital for U.S. corporations is, and for many years has been, 20 percent per annum and better, the potency of ESO Trust financing per dollar invested by the employer in building capital ownership in the employee is 400 percent to 600 percent greater that conversional corporate, union, or governmental retirement plans and it is not a corporate cost, for corporate

growth financed in the conventional way would cost as much or more!

Employee Stock Ownership financing can be adapted both to governmental and union use, and is currently being employed by a growing number of corporations.

LABOR-BUSINESS STRIFE OR LABOR-BUSINESS PEACE?

The employees are gradually conditioned to think like owners because they become owners. As the reality and awareness of ownership grows, the identity of interest between stockholders, management and employees grows. So does their interest in underselling competitors, domestic and foreign, their pride in quality, their resentment of waste, their solicitude for public goodwill. Pay for non-production equally hurts the property and income of the employee, the manager, and the stockholder.

CORPORATE GROWTH FINANCED IN CONVENTIONAL WAYS

CONFORMITY TO ECONOMIC REALITY

Although the objective of traditional economic policy is to solve the income distribution problem solely through full employment, every technological advance diminishes the relative input of labor and increases the relative input of capital per unit of output in all areas of economic production. Thus pure science, applied science, engineering, and management—the disciplines involved in economic production—work for disemployment, the exact opposite of the national economic policy. The concentration of ownership of capital expands the productive power of those without needs or wants. The non-ownership of capital by 95 percent of U.S. families with vast unsatisfied needs and wants prevents their legitimately (i.e., other than through coercion) increasing their productive input and thereby enlarging their incomes and their consumption of goods and services. This failure to broaden ownership of capital becomes a main cause of unemployment, which can then only be alleviated by governmental boondoggle and make-work producing non-consumer goods and services.

INFLATIONARY OR ANTI-INFLATIONARY?

Because this technique of finance leaves employees no choice but to demand more pay without more work input, it amounts to packing the wage base of every employee with personal welfare and forcing the corporation to use the price system to tax the public for the cost. Soon after, the employees rediscover that they are the public. Their gains are cancelled by their rising living costs. The process starts again. It is the engine of inflation itself.

MORE JOBS OR FEWER JOBS

Conventional corporate strategy is built upon three tenets: (1) maximizing production and sales, (2) minimizing costs, and (3) staying out of trouble (being a good corporate citizen). When this is combined with conventional finance, which builds no capital ownership into employees, the foundations for a shrinking employment base are laid. Minimization of costs is best accomplished by eliminating labor through technological innovation and capital investment. This results in shrinking consumer demand, which further diminishes labor demand.

CORPORATE GROWTH FINANCED THROUGH EMPLOYEE STOCK OWNERSHIP TRUSTS

CONFORMITY TO ECONOMIC REALITY

This financing technique provides the missing link in corporate strategy. It raises the power of corporate employees with unsatisfied needs and wants to consume as it expands the power of the corporation to produce. Its effect in raising employee purchasing power is real for the only way for a mature employee to become more productive is for him to acquire ownership of productive capital. An employee is not made more productive in any real sense by coercing higher pay for the same or less work input when there is a labor surplus. When workers legitimately acquire capital ownership as the corporation expands, their personally owned productive powergrows simultaneously with the corporation's ability to produce goods and services. Their increased incomes do not result in increased costs, but increased output. This is the reverse effect of conventional financing, which forces employees to demand more pay without more productive input—a direct source of cost-push inflation.

INFLATIONARY OR ANTI-INFLATIONARY?

Because this technique depends upon the business logic of self-liquidating investment, it is not only not inflationary; it is deflationary.

MORE JOBS OR FEWER JOBS

The U.S. economy would have to be expanded somewhere between seven and twelve times over (with further adjustment for population increase) to be capable of providing the goods and services necessary to provide comfortable lives for all U.S. citizens and residents. Accomplishing that task alone would require between 25 and 30 years of the most intensive full employment. But such employment—and such growth—can only come about if levels of consumption rise commensurately, a result only possible in a market economy if increased productive power of the vast majority with unsatisfied needs and wants is proportionately raised. This can only come about with expanding private capital ownership.

BEYOND TODAYS ESOP

As Mr. Kelson outlined in his written statements and testimony to the joint Economic Committee Hearings on Employee Stock Ownership Plans held on December 11-12, 1975, the ESOP under present laws represents only the "tip of the iceberg" of a more comprehensive strategy needed to spread capital ownership among all consumer units in the course of financing new capital formation. These new programs rest upon a radically new general theory of economics known as "two-factor theory", which, while still on the fringes of respectability within academic circles, is gradually gaining

enthusiastic acceptance in the world of practical politics and business.

There are critics who charge that the ESOP is not sufficient because it benefits only employees of well-managed businesses. We agree. And we have designed tools to build ownership into the rest of society as well. But reversing the present perilous and disorderly course of the American economy involves choosing priorities. We feel that a rapidly expanding corporate sector offers our best arena for effectively absorbing today's "surplus" pool of employable but idle Americans into the task of fabricating today's "surplus" pool of employable but idle Americans into the task of fabricating and operating the new capital formation we need over the next several decades. To attract the unemployed and other non-productive workers into the private sector, as well as for financing its growth and generating the consumer demand needed to sustain that growth, the ESOP seems to us the most logical and effective means for harnessing

our largely dormant productive capacity.

Beyond the ESOP, special stock ownership plans have been designed for public utility customers (Consumer Stock Ownership Plans or "CSOP's") and, to be activated at some future point, plans for government workers, small businessmen and professionals, teachers, the disabled and retired and others (Individual Stock Ownership Plans or "ISOP's"). Indispensable supplements for financing growth of our corporate sector (through ESOP's and ISOP's) and of our public utilities (through ESOP's and CSOP's) are Federal Reserver forms to empower banks and insurance companies to generate counter-inflationary, low-interest loans to ESOP's, CSOP's and ISOP's for funding self-liquidating new capital formation in our basic industries. To insure lenders against the risk of default on these non-recourse loans, part of the interest rates would include the cost of a premium to a self-sustaining Capital Diffusion Insurance Corporation. Thus, no taxpayer funds or direct government loans or guarantees would be necessary to introduce these reforms.

THE ACCELERATED CAPITAL FORMATION ACT (H.R. 462): A SMALL STEP FORWARD TOWARD GENERAL TAX REFORM

The most important single measure to strengthen the ESOP's capacity to solve our capital formation needs is the Accelerated Capital Formation Act, H.R. 462, now before the House Ways and Means Committee. Introduced by Rep. Bill Frenzel on January 14, 1975, its provisions attracted 92 House co-sponsors, including 10 members of Ways and Means. Here are excerpts from the Congressional Record of January 14, 1975 where Mr. Frenzel described what this bill is designed to accomplish:

In order to facilitate the use of the ESOP technique, and thus effectively link daily employee performance with the growth and operation of a business, the bill modifies

the Internal Revenue Code as follows:

First, the bill removes the present statutory limitation of 25 percent of covered compensation as the maximum amount an employer can contribute to a qualified employee stock ownership plan when such payments are used to enable the plan to repay stock acquisition debt incurred in connection with meeting the employer's capital requirements. This places the sole limitation on financing contributions on the enterprise's capacity to service the debt out of cash flow. This reform reduces the cost of capital growth and transfers in the ownership of corporate assets, while accelerating the rate at which employees as individuals and as a group can accumulate stock of their employer and other income-yielding assets as a new and noninflationary form of employee benefit. Although treated as a tax deduction, this change would have the same impact as an investment tax credit in terms of encouraging capital spending; however, the investment tax credit increases the concentration of corporate ownership while ESOP contributions correct this economic factor.

This also rechannels corporate profits that would otherwise have gone into the corpossite income tax base into productivity increases of the private sector, thus generating lower prices for consumers, expanded private payrolls, and a broadening base of taxable

personal incomes and personal estates among productive workers.

Second, the bill privides a tax deduction to corporations for the amount of dividends they distribute either directly as taxable second incomes on stock held in an employee's account or which are used to repay stock acquisition indebtedness of the employees' trust. This provision also converts taxable corporate income into either taxable dividend incomes for employees to supplement their paychecks or their retirement and social security incomes or a more rapid rate of accumulation by employees of individual

capital estates for their retirement security.

Third, the bill provides that a qualified employee stock ownership plan and trust shall have the tax characteristics of a charitable organization for purposes of estate, gift, and income taxes. This would encourage affluent taxpayers to make gifts to qualified trusts in order to reconnect the ownership of-capital with a broader base of private individuals, namely productive employees some of whom have contributed to the building of the donor's wealth. Allocations to participants of the trust would become an immediate source of taxable second incomes—to the extent dividends are passed through the trusts—and a retirement estate for the employee-beneficiaries and their heirs. On the other hand, Government would lose no tax revenues since such contributions made to charitable organizations are already exempt from taxation, and profits from donated income-producing property are frequently accumulated tax-free

within such organizations.

Fourth, the bill establishes a cutoff on further contributions in behalf of any employee when the value of the assets that employee has acquired during his working lifetime through one or more ESOP's exceeds \$500,000. Such a safeguard on excessive accumulations acquired through tax deductions would be especially important in highly capitalintensive industries and would help foster more widespread and equitable sharing of

ownership among Americans generally.

Fifth, the bill adds to the options of ESOP participants when distributions are made when they retire, die, or are otherwise separated from service. Although profit sharing plans are permitted to make distributions in many forms, the Internal Revenue Service has ruled that distribution from an ESOP must be made exclusively in company stock.

Although enabling employees to accumulate sizable holdings of employer stock has obvious motivational value, when an employee leaves the company and can no longer directly influence the yield on the company stock accumulated in his ESOP account, it is desirable to provide the departing employee and the remaining employees, through their ESOP, to arrange an exchange for his accumulated assets with other incomeyielding assets or cash of an equivalent value. This bill would provide ESOP's the same flexibility in making distributions that is now enjoyed by profit sharing plans.

Sixth, the bill permits a repurchase option for plans of enterprises that are wholly owned by their employees, so that stock of departing employees can remain exclusively

held within the employee group.

Seventh, the bill exempts lump sum distributions of income-yielding estates derived from an ESOP from any form of taxation, provided the assets are held to produce a taxable second income for the taxpayer or his beneficiaries. However, if the assets are converted into spendable income and not reinvested within 60 days, the uninvested proceeds will be taxed as ordinary income, instead of partially at the lower capital gains rate permitted under present law.

Eighth, the bill enables affected parties to seek advance IRS opinions on valuations on stock or other assets acquired by an ESOP where the parties to a financing tansaction which utilizes and ESOP would be subject to serious risks or penalties if the IRS, upon subsequent audit, disagreed with the valuations or other key features of the financing plan. This is similar to the "no action" procedures already instituted by

the FTC and SEC.

Ninth, the bill exempts payments to an ESOP made for financing purposes from treatment as a conventional employee benefit for purposes of any wage, salary, deferred compensation, or other employee benefit controls or guidelines that might be established under executive order, regulations, or future economic stablization laws at the Federal or State levels. Instead, it would be treated as any other form of capital spending that would have a counterinflationary effect. In effect, it offers labor a tradeoff for wage increases while wage cellings are established.

[From the Business Week, Mar. 1, 1976]

EMPLOYEE STOCK PLANS BEGIN TO CATCH FIRE

For many years the idea that the U.S. could be transformed into a paradise of people's capitalism through employee ownership of stock in the companies they worked for existed in an intellectual underworld whose main figure was Louis O. Kelso, a San Francisco lawyer and self-styled economic theorist.

Now, under the impact of legislation that gives new tax breaks to companies that adopt employee stock ownership plans (ESOPs), Kelso's ideas are taking on new life. By turning every worker into a capital owner, says Kelso, "we can enhance worker productivity raise the capital needed to accelerate economic growth and reduce unemployment, and defuse the conflict between management and labor that underlies the

wage-price spiral."

Many businessmen and economists still argue that ESOPs have the potential for creating more problems than they solve. But in the past year or two such companies as Mobil Oil, Hallmark Cards, E-Systems, and Atlantic Richfield have decided to take advantage of the new legislation and give their employees an equity interest in their companies. And the trend could easily accelerate. Senate Finance Committee Chairman Russell B. Long (D-La.), for one, is an enthusiastic convert and has helped push through two major bills with provisions encouraging the establishment of ESOPs, plus two minor ones, and more are in the legislative hopper.

Little interest. Employee stock ownership plans are nothing new, of course, having existed for decades in the form of stock-bonus, profit-sharing, and other so-called money-purchase benefit plans that invest a major portion of corporate contributions in employer stock. Like other benefit and pension plans, such ESOPs normally qualify for special tax treatment in the sense that the funds contributed are tax deductible and are not subject to personal income taxes until they (and investment gains) are distributed to employees—usually upon retirement.

Although such plans have not been particularly popular, recent legislation makes them far more attractive. The pension reform act of 1974 (ERISA) not only exempts ESOPs from the diversification requirement that governs the investment policies of most other benefit plans, but it also singles out certain kinds of ESOPs as the only types of plans that can be used as vehicles for corporate borrowing—thus permitting them to be used for a variety of purposes, such as raising capital for investment, restructuring existing debt, facilitating estate planning, recapturing past tax payments, and helping to finance acquisitions and divestitures.

At the same time, last year's tax reduction act offers companies a big incentive to set up ESOPs. A company can now add an extra 1 percent to the 10 percent investment tax credit available to it for 1975 and 1976 if it agrees to distribute the tax savings to employees through an ESOP. The action costs the company nothing except administrative expenses, and everyone from the top brass down to the lowest-

paid worker can share in the largesse.

A slow beginning. So far, business has been slow to respond to this incentive, partly because the concept is so new, and few concrete guidelines have been issued by the IRS. In recent weeks, however, several major corporations, including Mobil Oil, Atlantic Richfield, and Union Oil of California, have said they plan to set up tax-credit ESOPs.

Since companies can wait to adopt a tax-credit ESOP until the day their 1975 tax returns are field, the pace of announcements should speed up soon. American Telephone & Telegraph Co. and several utilities have indicated they would go ahead

if Congress approves some rule changes.

If all eligible companies were to set up such ESOPs, the cost to the U.S. Treasury could hit some \$700 million in foregone tax receipts for 1975 and 1976. But experts say the tax incentive is attractive primarily to capital-intensive industries. "In many companies with large payrolls, the benefit per employee would be negligible," says W. Gordon Binns Jr., assistant treasurer of General Motors Corp., noting that more companies would undoubtedly join ESOP parade if the tax credit is extended beyond 1976. GM itself is studying the idea.

Everyone wins. Meanwhile, interest has been growing in the so-called Kelso-type ESOP, which can be used to raise employee benefits and new capital for the company at the same time. Typically, the gambit works like this: A company that needs cash for investment sets up an ESOP that borrows, say, \$1 million from a bank or other lender and uses it to buy newly issued corporate stock. The loan is collateralized with the stock and cosigned by the company, which commits itself to make annual contributions to the ESOP sufficient to cover principal and interest repayments. As the debt is paid off, the shares are allocated to individual employee accounts for distribution upon retirement.

ESOP enthusiasts claim several advantages for this type of strategy:

For corporations, the big plus is that the loan is paid back with pretax dollars. Under conventional debt financing, only the interest payments would be deductible, and a company would have to earn.\$2 million to repay \$1 million in principal (assuming it is in a 50 percent bracket). By using an ESOP as its borrowing vehicle, it saves \$500,000 in taxes, reducing the cost of the loan and boosting cash flow. Moreover, management has given the employees a vested interest in improving corporate profita-

Lenders look as closely at ESOP financing as they do other loans. Nonetheless, as Steven Lee, a consultant with Bankers Trust Co., points out, "Lenders appreciate the fact the loan can be paid back twice as fast and that executives and other employees

have an added stake in the company's performance."

Employees gain when the ESOP is added to existing benefits or when ESOP financing permits a company to set up a benefit plan where none existed before. Even when the ESOP replaces another plan, employees often profit, says Kelso, "because contributions are usually made close to the maximum allowable rate of 15 percent or 25

percent of payroll to facilitate the loan rather than the 7 percent rate typical of regular benefit plans."

Not for all. Despite these potential advantages, experts warn that ESOP financing is far from everyone's cup of tea. "It makes no sense for a company that isn't sound, profitable, and in a high tax bracket," warns Neil Wassner of Main Lafrentz & Co. "And because of the limit on annual contributions, a company's payroll should be as then \$250,000 and ideally \$500,000 or more."

no less than \$250,000 and ideally \$500,000 or more.

Don Sullivan, vice-president of Towers, Perrin, Forster & Crosby, warns that ESOPs "can dilute the interests of present shareholders." Under a straight equity offering, he notes, cash flow, net worth, and net earnings are all higher than with an ESOP because there are no financing costs to be met and no debt to be recognized on the balance sheet. On the other hand, regular debt financing also results in higher earnings per share since the repayment of principal is not a charge against earnings. And although cash flow is initially lower, the eventual investment payoff does not have to be shared with new shareholders.

Lee of Bankers Trust, however, points out that the equity markets remain closed to most companies, and cash flow concerns can inhibit the utilization of conventional debt. "In cases where the investment promises to produce a return greater than its cost of capital and the company's traditional return on equity, ESOP financing can clearly benefit everyone," he says.

What to watch for. Experts point to other drawbacks. Private companies, for example, must establish the fair market value of their shares through an independent appraisal subject to IRS approval. But there is always a chance that the valuation will be successfully challenged later by the IRS or a dissident employee, with heavy penalities to the company. Moreover, private companies may some day be forced to buy back the shares of retiring employees, with a negative impact on future cash flow.

The biggest potential danger, according to many observers, is that some businessmen will use ESOPs to bail out of shaky enterprises. Wassner of Main Lafrentz thinks this danger is exaggerated, however. "Lenders look very closely at a company contemplating ESOP financing," he notes. "Further, everyone involved in an ESOP transaction, from corporate officials and appraisers to trustees, may be personally liable under the fiduciary rules of the pension reform law."

Even the most successful company can suffer reversals, however, and many observers

question the wisdom of putting all employees' benefit eggs in one basket. For that reason, Nathan Kolbes, a Pennsylvania consultant, advises his ESOP clients "either

to maintain existing pension programs or to plan to add them when feasible.

Frederick Teague, vice-president of Booz, Allen & Hamilton Inc., points out that the shares in an ESOP trust are normally voted by the trustee appointed by the company, "but Congress could insist on a pass-through of voting rights in the future." Leonard Yerkes III, head of Wells Fargo Bank's corporate finance department, sees dangers if the company begins to go downhill. "Under the prudent man theory, the trustee should liquidate the investment—but how?"

The vanguard. Despite these potential pitfalls, the Kelso bandwagon is rolling, and experts estimate that close to 300 ESOPs have been set up in recent years. Last year, for example, Gamble-Skogmo Inc., the big Minneapolis-based retailer, turned its thrift and profit-sharing plan into a full-fledged ESOP with a credit line of several million dollars. The object: to pick up G-S stock when it was selling on the New York Stock Exchange at under five times earnings and less than half of book. "We're not using it to raise capital for the company," says Louis E. Dolan, vice-president, "but to benefit our employees, who will get the stock at the price we paid for it."

Similarly, E-Systems Inc., another Big Board company, used an ESOP in 1974 to pick up some 500,000 shares of company stock for its employees through a \$7 million tender offer. "We wanted to increase employee motivation and productivity, and with the help of intensive communications programs, we think we are succeeding," says Harry L. Thurmon, vice-president and treasurer of the Dallas-based electronics company. Thurmon reports that turnover and absenteeism are both down sharply, and employee suggestions have more than doubled. All of the company's five unions have "cordially" accepted the ESOP, which comes on top of its regular retirement programs.

Many small, fast-growing companies with high cash needs have turned to ESOPs as the first step in providing for their workers' retirement. Two years ago, for example,

Steiger Tractor Inc. of Fargo, N.D., borrowed \$1 million for expansion through a newly established ESOP. "We're 100 percent with the idea of letting our employees share our growth," says David Koentopf, financial vice-president of the company, the sales of which have jumped from \$5.6 million in 1971 to \$82.7 million last year.

One of the main uses of ESOPs by private companies has also been to forestall a sale to outsiders by providing a market for closely held shares. Thus, Hallmark Cards Inc. converted its profit-sharing plan to an ESOP last year partly to assure its 10.000 employees, who already enjoy pension and life insurance benefits, that

its 10,000 employees, who already enjoy pension and life insurance benefits, that the company will not go the merger route after its founder, Joyce hall, and his wife die. Says Bill Johnson, director of corporate communications: "We wanted to share ownership with our employees and demonstrate that Hallmark will be staying in Kansas

A growing use of ESOPs has been to facilitate the divestiture of subsidiaries by large companies. This week, for example, the trustees of Omega-Alpha Inc., which is currently being reorganized under bankruptcy proceedings, announced that they were selling the company's Okonite Co. subsidiary to an Okonite ESOP for \$38 million.

"Make" it grow faster. To Louis Kelso, the man most responsible for the mushrooming interest in employee stock ownership plans, the ESOPs that have been springing up are only the vanguard of what he hopes will become a major movement. He has long argued that the basic cause of the nation's economic ills lies in the maldistribution of wealth, which results in a chronic gap between production and consumption and the need for ever greater government intervention to redistribute income and manage demand. He believes that using ESOPs to finance new investment would restructure both wealth and income patterns in a fairly painless way. "The point," he says

"is to make the pie grow faster and distribute the new growth more equitably."

To some observers, all of this is "pie in the sky," but Kelso's analysis has a certain pragmatic logic that many find appealing. Unlike traditional economic theory, which tends to stress labor as a major factor of production, Kelso holds that capital goods are the main producers of wealth and growth in a modern economy. Because capital ownership is already highly skewed, the common methods of financing new investment (mainly through retained earnings and debt) increases the concentration of wealth. The result is increasing efforts by labor to boost its share of national income, a quickening of inflation through the wage-price spiral, and the intervention of the government to alternately brake and accelerate the economy. "The system today aggravates the trends toward concentration and socilism," says Kelso. "The answer is a democratic capitalism."

Kelso's game plan goes beyond making ESOPs the principal source of investment financing. He would also do away with the double taxation of dividends, phase out the corporate income tax, and encourage companies to distribute most of their earnings to shareholders—thus providing a significant second income to wage earners. He would also establish special stock ownership plans for consumers and government workers, set up insurance funds to insure employee accounts, and empower banks to borrow low-interest ESOP funds directly from the Federal Reserve.

Until now, most economists have dismissed Kelso's ideas out of hand—partly because such a radical restructuring of the economy seems totally unrealistic and partly because he turns many economic concepts upside down. "Kelso really doesn't understand how the economy works," says one academic economist, "and he has compounded his

problems by launching a hysterical attack on the profession."

Nonetheless, a few economists have become intrigued with Kelso's theories. James
L. Green of the University of Alabama terms them "the only viable alternative to wage and price controls and state planning." Abel Beltran-del-Rio of Wharton EFA, Inc., the econometric research organization, acknowledges that Kelso's program is "theoretically weak and inflated in its claims," but he feels that it "contains nuggets of gold surrounded by mud."

In light of the growing interest in ESOPs, several economists have begun to look more closely into Kelso's ideas.

Whatron EPA itself is planning an econometric study testing the potential impact of Kelso's proposals and other capital diffusion schemes on the U.S. economy. And Carter Bacon of the Congressional Reference Service of the Library of Congress is at work on a background report. "There's no question that ESOP financing can help some companies," he says, "and it seems likely that investment and savings would be higher in an economy that functions that way. But implementing such a change would raise serious questions of equity and would risk unsound patterns of capital allocation.

For the moment at any rate, such questions are not fazing Kelso and his followers on Capitol Hill. Among other bills they are pushing is the so-called Accelerated Capital

Formation Act, which would remove the limit on employer contributions to an ESOP and make dividends paid on ESOP-held stock tax deductible to employers. If that passes, there may be no stopping the ESOP bandwagon.

STATEMENT OF THE AIR TRANSPORT ASSOCIATION

The Air Transport Association of America which represents virtually all of the scheduled airlines in the United States welcomes this opportunity to submit to the Subcommittee on Financial Markets a statement on the capital needs of the airline industry of the United States.

Capital formation is one of the major problems currently facing the U.S. airlines. A recent study conducted by the Air Transport Association indicates that in the years 1976 through 1980 the airline industry will require at least \$6 billion in new flight equipment and related support equipment to continue to operate the modern fleet of aircraft to provide service to the ever increasing number of passengers and shippers.

Additional capital investment is needed to provide for this expected growth in passenger and freight traffic; to acquire quieter and more fuel-efficient aircraft sized to minimize demands on the airport and airways system; and to reduce maintenance costs through increased standardization and other factors. In recent years airline industry earnings have been too low to enable the airlines to generate funds for these necessary investments from retained earnings. Financial institutions are reluctant to lend money to the airlines, and equity markets offer little promise.

The impact of the airline industry both on the quality and mode of American life, and on the U.S. economy can hardly be overstated. Mobility, economic development throughout the country (not merely in the established

commercial centers of the past), and new travel related industries--all these and more have been stimulated through the technological revolution represented by the past fifteen years of the jet age.

Underlying this revolution has been the massive capital investment that made possible the development, acquisition, and operation of the equipment on which the industry and the public it serves must depend. That investment has resulted in the creation of hundreds of thousands of jobs in the airlines and equipment manufacturers, at airports and at the many service organizations providing direct service to the airlines and their customers. Some 300,000 people are employed by the airlines alone--nearly the same number as in either the industrial chemcials or the motor vehicle assembly industry, and nearly 100,000 more than in the petroleum and coal industry. Additionally, the immense travel related industries, the hotels, restaurant and resort communities, and businesses of all types, large and small, in communities throughout the United States are dependent for their livelihood on regularly scheduled reliable public air transportation -- for sales, marketing, and shipping access to the world beyond. In addition to airline employment, the aerospace industry employs approximately 125,000 in the commercial transport manufacturing, and the tourism industry employs an additional estimated 3.5 million people whose jobs are largely dependent upon the airlines, their investments, and their product.

While the problem of capital formation is long term, legislation has been proposed that would provide for some immediate relief, namely the pro-

posal to refund as overpayment of taxes unused and expiring investment tax credits. Such a provision was recently introduced in the Senate as Senate Bill No. 3080 by Senator Stevenson (D-III.), and a similar provision was introduced in the House of Representatives in the last session (H.R. 8939). Enactment of this legislation would go far to assist the airline industry in the near term to meet some of its capital needs.

At the present time, the airline industry has some \$780 million of unused expiring credit which, at current income levels, will expire over the next five to seven years. This legislation, if enacted, would allow the airline industry to receive the benefits of the investment credit which are available to most other industries, and its effect on government revenue would be relatively small over the period of the next few years. During the three year period 1975-1977, the credits refunded to all the nation's business taxpayers under this proposal would be less than 2% of the total credits that will be allowed to profitable business tax payers over the same period, or about \$480 million as compared with \$28.4 billion. The airline portion of this total will approximate \$165 million.

In conclusion we wish to thank the Subcommittee on Financial Markets of the Senate Finance Committee for this opportunity to present our views. We hope that the proposed legislation for refunding unused and expiring investment credits is enacted in the near future to provide for a fairer and more efficient distribution of the benefits of investment credits, and help provide the necessary capital funds for the future growth of both the airline industry and the many derivative industries dependent uponit.

STATEMENT OF CHRYSLER CORPORATION THE PROBLEM

Congress is aware of the need of business for realistic provisions in the tax laws to allow capital recovery. Over the years, Congress has recognized that the depreciation deduction is the most basic of capital recovery provisions and has periodically amended the depreciation deduction provisions to increase the recovery by business of its capital investment. Thus, in 1954 accelerated depreciation was enacted and in 1971 the Class Life ADR System was adopted. Currently, there is beginning to be a recognition that depreciation based on historical cost provides less than the minimum needed capital recovery in these years of substantial inflation.

We believe that this Subcommittee should focus on an even more basic point. The depreciation deduction does not provide needed capital to companies that suffered losses during the recent recession, but still had to invest in productive equipment. These companies realized no recovery of capital through depreciation or otherwise. They were required to dig into and deplete all internal capital sources, such as

reducing inventories, in order to continue production of competitive products.

In addition to not recovering any capital from depreciation deductions, these businesses did not derive any current benefit from the new capital formation provisions of the Tax Reduction Act of 1975, such as the investment tax credit or rate reductions, because the benefits from these provisions are limited to currently profitable ocmpanies. Also, in some cases, operating losses incurred during the 1974-75 recession could not be carried back because of the brevity of the economic recovery period between the 1970-71 and the 1973-75 recessions. While existing law also provides a five-year carryforward, a business in this position should recover its capital investments currently, not in the future.

Thus, a company that was least able to afford to make needed capital investments during the 1974-75 period, and probably the least able from a competitive standpoint not to make such investments, was also the least able to recover capital funds to make these basic investments.

CAPITAL RECOVERY THROUGH DEPRECIATION
DEDUCTIONS SHOULD BE AVAILABLE TO BUSINESS
DURING BOTH RECESSIONARY AND BOOM PERIODS

We believe that any new capital recovery legislation enacted by Congress should take into account the capital recovery needs of business during unprofitable periods of oper-

ations. Such legislation is needed just as much as additional capital formation or recovery measures which generally apply only during profitable periods of operations. More specifically, the tax laws should be amended to allow a business to currently recover capital through refundable depreciation deductions to the extent it made investments during the 1974-1975 recessionary period to maintain its production facilities. Such recovery should be immediate to provide business with the necessary capital resources for continued investment to provide jobs and maintain productivity.

The 1974-1975 Recessionary Period

The recent recession, aggravated by the 1973 oil embargo, had a devastating effect on the U.S. economy during the 1973-1975 period, because it cost the country more than \$150 billion in goods and services irretrievably lost. In many industries sales, profits and employment were drastically reduced during this recession. The automobile industry was just one of many in which this occurred. Here, U.S. sales dropped 29.8% from average 1972-73 October sales to October 1974 sales, and plummeted a further 31% the following two months. Inventories sky-rocketed, thereby resulting in large-scale layoffs of employees. There were similar experiences throughout the economy.

Not only did the recession dry up the principal source of capital recovery and formation-depreciation and profits--

but the inflation during this period further dehydrated available capital funds. The pooled effect of recession and inflation severely reduced available capital resources, while drastically increasing the cost of needed equipment. The profits/price squeeze made it doubly difficult for a profitless business to maintain its productive facilities.

Investment Could Not Be Shut Off During a Recession

Although there was a profits/price squeese on capital recovery during the 1974-75 period, many businesses still had to make substantial capital investments to maintain their existing facilities. In addition, during this period important outside sources of capital funds dried up. This left the financing of much-needed investment to internal sources--traditionally, profits and depreciation. Yet neither of these sources provided any capital funds to a business which was not able to use the depreciation deduction on account of losses. For example, during that period Chrysler was required to invest over a half billion dollars in new equipment, even though it recovered no capital through depreciation deductions because of recession losses.

Large Additional Infusions of Capital Are Required

As we emerge from the worst recession since World War II,
American industry is faced with required capital expenditures

of unprecedented amounts. Capital is needed to develop new products and to retool for production. More important, however, is the need to restore full employment to our workers that comes with additional capital formation. For example, we anticipate that Chrysler's product and investment expenditures for the last half of the 1970's—to develop and produce fuel-efficient cars—will approximate \$1.5 billion.

The capital expenditure requirements for a hard-hit business are no less a problem than those for a profitable business. The profitless business must continue to make capital
expenditures during recession periods if it is to continue as
a viable competitor and a taxpayer. And the profitless business is also at a competitive disadvantage for capital recovery in the future after the economy begins to recover.

Congressional Recognition of Inadequacy of Present Law

In the past, when Congress determined that business had an urgent need for capital, it provided special assistance through, e.g., an increased investment tax credit or reduced tax rates. However, the businesses which most need capital —those which were required to continue to make large capital investments during a period of profitless operations—derive little or no current benefit from this type of legislation.

We propose that Congress act to correct this problem for those businesses that invested in productive equipment during 1974 or 1975, but which were not able to obtain the

needed capital through depreciation deductions because they incurred losses in those years.

PROPOSAL FOR A CAPITAL RECOVERY REFUND

Proposal, In General - A business which made investments during the 1974-75 recession to maintain its productive facilities and which was not able to obtain the full benefit of the depreciation deduction in order to provide funds for this investment would be allowed a current tax refund to recover capital.

The recovery refund would be subject to three basic limitations to ensure that it is available only for companies that invested to maintain productive capacity and were not able to fully recover their depreciation deductions.

The first limitation is that this refund would be available only to companies that made investments during 1974 or 1975. Qualifying investments would be the acquisition of section 1245 property used predominantly in the United States. In this way, the recovery refund would be limited to companies that contributed to checking the downslide of the U.S. economy and helped restore economic growth and increase employment during the recession.

The second limitation is that the refund would be no greater than the amount of straight-line depreciation of sec-

tion 1245 property used predominantly within the United States to which the company was otherwise entitled. In this way, the recovery refund would be limited to the minimum level of annual capital recovery the business is normally entitled to. The refund would not take into account the fact that section 1245 property actually depreciates faster than straight-line. It also would not take into account that replacement costs frequently are substantially greater than historical costs. Instead, the proposal is geared toward providing the minimum capital recovery to these companies. This limitation will ensure that the refund is only to the extent of normal annual investments needed to maintain existing productive capacity.

The third limitation is that the company has not been able to recover capital because it could not use the full amount of its depreciation deductions. Thus, the capital recovery refund could not be greater than the tax benefit which would result from utilizing any operating loss incurred by the company in the 1974 or 1975 recessionary years. The proposal would prevent the double recovery of capital by reducing the company's operating loss for the taxable year by the base on which the recovery payment is calculated.

Amount of Recovery - The capital recovery refund generally is to provide a company with the same amount of capital that would have been available if the company had been profitable and able to use the depreciation deduction. Thus,

the recovery refund is generally keyed to the tax benefit that the company would have received if it had been able to use the deduction.

The recovery refund would be calculated by applying the corporate tax rates for the relevant year to the appropriate base figure. Thus, for 1974 the refund would be calculated as 22% times the base, which is no more than \$25,000 plus 48% times the base which exceeds \$25,000. For 1975, it would be calculated as 20% of the base up to \$25,000 plus 22% of the base between \$25,000 and \$50,000, plus 48% times the base in excess of \$50,000.

Following the limitations described above, the base would be the lowest of three amounts: (1) the investment during the taxable year in section 1245 property used predominantly in the United States, (2) the taxpayer's depreciation deduction for section 1245 property, calculated on a straight-line basis, or (3) the taxpayer's net operating loss.

Election - The capital recovery refund would only be available if the taxpayer made a timely election. The election would have to be made no later than 180 days after the enactment of the proposal and in accorance with the rules and regulations of the Internal Revenue Service.

Effective Date - The recovery payment would be available to qualified taxpayers only for the 1974 and 1975 taxable years.

SUMMARY

The present capital formation rules are inadequate: because a recession-hit business frequently cannot recover capital through depreciation deductions at the time its capital
needs are most critical, i.e., when it must make large capital investments during a period of unprofitable operations.
New legislation is needed which would allow such a business
limited, but immediate, capital recovery from its depreciation deductions for the 1974-75 recession/inflation years.



March 4, 1976

The Honorable Lloyd Bentsen Chairman Subcommittee on Financial Markets Committee on Finance United States Senate Washington, D. C. 20510

Dear Senator Bentsen:

On behalf of the American Paper Institute, the national trade association representing the pulp, paper and paperboard industry, I am delighted to respond to your request for a statement on the importance of enacting tax legislation this year to help meet our nation's growing capital needs, to create new jobs, and promote non-inflationary economic growth.

The 200 member firms of the institute produce more than 90% of all pulp, paper and paperboard manufactured domestically. Net sales of the paper and allied products industry were \$32 billion in 1975. The industry normally employs more than 700 thousand people in approximately 6,000 facilities; last year its wages and salaries and benefits amounted to over \$9 billion. The industry paid approximately \$2 billion in Federal, state and local taxes last year.

As one of the ten largest industries in the country, we feel our views on this most important subject would be useful to your Committee.

As you suggested in your letter of February 17, my statement sets forth the capital needs of our industry during the next five years, and the magnitude of the possible capital shortfall. I have also briefly outlined our recommendations for tax policy which will speed up the timetable for returning to a healthy inflation-resistant economy by actions designed to encourage required capital investments.

We thank you for this opportunity to submit our views.

Sincerely,

Norma Pace

Senior Vice President

NP/ep Enc.

STATEMENT OF THE AMERICAN PAPER INSTITUTE, INC., SUBMITTED BY NORMA PACE, SENIOR VICE PRESIDENT

THE CAPITAL NEEDS OF THE PULP, PAPER AND PAPERBOARD INDUSTRY (1976-1980)

The American Paper Institute estimates that the paper industry will have to finance \$30.7 billion for both plant and equipment and working capital in 1976-1980. Retained cash flow can provide about 60% of these requirements; it will have to seek outside financing for about 40% of its needs in the next five years. Because of the industry's relatively high debt/equity ration this gap, amounting to \$12 billion for the five year period, presents significant hurdles in the investment process. Three alternatives are possible:

- Expansion needs of the industry will not be met; resulting in an estimated job loss of 245,000 by 1980 for the industry, its suppliers and its customers. The tax loss resulting from this failure to invest and generate income is estimated at least at \$1.3 billion in current dollars. These exclude the impact of a potential outlay of \$5 billion for OASHA and energy conversion requirements.
- 2. The necessary funds may be obtained from borrowing and/or from the issuance of more stock. Both of these are normal and justifiable routes for funding plant expansion projects. But at any given time borrowers may be unwilling to lend to the industry or investors may feel reluctant to risk the financing through the purchase of stock. Prudent managers may also decide that the current conditions of their financial statements do not warrant such actions and many in the paper industry feel that way at present. During the past ten years the industry has not relied on stock issues; debt expansion financed 36% of its needs. The resulting increase in the debt/equity ratios have been large enough to deter further borrowing.

3. Alternatively prices and margins could be increased to provide more internal sources of funds for expansion. Such recourse, however, will dampen the growth rate of both the industry and the economy, subject individuals to a new round of double digit inflation and invite another experiment with price controls which will prove as harmful to the nation's growth as its predecessors. For example, if the industry were to supply half of the needed cash from internally generated funds, paper prices would rise an additional 22% over the general inflation rate in the five year period. Thus if the inflation rate for the nation as a whole were 6% a year, paper prices would have to advance 10% a year to provide the needed 70% of the funds from retained profits.

Whatever the recourse, the mere existence of this large gap poses problems for the industry and slows down investment decisions. This is hardly conducive to attaining the desirable goal of a return to full employment with relatively stable prices. This committee is to be complimented for its concern with the means for reattaining a full employment economy and the role of capital formation in reaching that goal. It can speed up the timetable for returning to a healthy, inflation-resistant economy by reviewing and recommending actions that encourage investments such as:

- Liberalizing Depreciation Allowances
- Enlarging Investment Tax Credit
- Removing Double Taxation of Dividend Income Reducing Capital Gains Tax Rate

and other areas.)

- Assisting in Financing Industrial Pollution Control
- Supporting Existing Tax Treatment of Foreign Source Income (The API attaches a statement on the industry's recommendations in these

DEMAND FORECASTS

The production of paper and paperboard has advanced sharply since the Spring of 1975. In February, the operating rate exceeded 91%. Since 95% represents the practical maximum operating rate for the industry, February's performance shows that many companies were operating at their maximum. According to the latest capacity survey of the American Paper Institute, the industry plans to increase capacity 3.5% this year so that there will be no shortage of paper or paperboard. Still these statistics indicate that the industry must invest in new capacity if it is to meet the growth needs of the nation with relatively stable operations and prices. But the industry needs some help. The rising costs of capital facilities coupled with the heavy demands on cash flow resulting from EPA regulations suggest that the industry will not meet its capacity requirements.

CAPACITY REQUIREMENTS

The demand for paper and paperboard has grown at close to a 4% annual rate in the post World War II period. Some slowdown in growth for both the U.S. economy and the paper industry is expected by many analysts. On the assumption that the economy grows 5% a year (a growth that would suggest unemployment rates in excess of 5% a year through 1980), paper and paperboard demand can be expected to reach 75.7 million tons in 1980. This compares with an estimated demand of 62 million tons in 1976. If the industry were to operate at 96% of capacity during the five year period, capacity by the end of 1980 would have to be 80.4 million tons. With capacity estimated at 68.8 million tons at the end of 1975, the industry should add 11.6 million tons to capacity in the next five years. Actually the industry operated at an average rate of 93% during 1964-1974. If the industry were to return to that level of operations it would have to add 2.5 million more tons to capacity.

CAPITAL REQUIREMENTS

The pulp and paper industry estimates it will have to spend about \$27 billion on plant and equipment in the 1976-1980 period to provide the capacity needed to meet anticipated demands. The average annual outlay of \$5.3 billion compares with the peak outlays of \$2.9 billion made in 1975. In addition to the annual outlay of \$5.9 billion for plant and equipment about \$800 million a year will be needed for working capital. The requirements can be broken down as follows:

TOTAL CAPITAL REQUIREMENTS

- \$ 5.9 billion for pollution abatement 11.2 billion for primary facilities

 - 6.7 billion for converting facilities
 - 2.9 billion for timberlands
- \$26.7 billion Total for plant and equipment
- 4.0 billion for working capital
- \$30.7 billion -- Total Requirements

Figures above excluse amounts needed to meet OASHA and energy requirements which could add \$5 billion more to these requirements.

The industry invests to produce primary products such as pulp. paper and paperboard which it sells or processes into converted products such as boxes, envelopes, towelling, writing paper, etc. The capital requirements for primary product capacity of \$11.2 billion consists of \$6.3 billion for new capacity and \$4.9 billion for replacement and modernization of existing capacity.

The pollution abatement expenditures of \$5.9 billion for the five year period compares with a total of \$3 billion spent by the industry during the past 10 years. These costs are mandated by the EPA to meet ever-changing water and air quality standards. Since these regulations apply primarily to the primary sector of the industry; that is, to the

production of pulp, paper and paperboard and not to the finishing or converting operations, pollution abatement outlays in our industry in the five years ahead will practically equal the amount the industry will have to spend for new capacity.

Capital recovery allowances will fall short of needed outlays by far. In the five years ahead, heavy investments must be made to tune up and maintain the large tonnages that were added to the industry's capacity in the 1965-1969 period. These facilities are now in rapid stages of wear-out and this aging of facilities preempts an increasing proportion of the industry's cash flow. Furthermore, obsolescence of facilities is accelerating as the attached report prepared by our Association shows.

FUNDS -AVAILABLE

We estimate that existing depreciation allowances can fund about 30% of the total capital requirements; the remaining 70% or about \$21 billion will have to be supplied by retained earnings and external sources such as the stock or bond markets. While this financing is theoretically possible, its sheer size slows down the investment decision. The recourse to debt is limited by the fact that the paper industry already has a high debt burden; total long-term debt is equivalent to 49% of equity for the industry as a whole and is about 33% of total capital. The 49% average includes some companies where debt is as much as 66% of equity. The more aggressive investing companies are clearly up to and beyond their prudent debt limits. The equity market does occasionally provide opportunities but these are of relatively short duration and limited to those companies with sustained records of earnings performance. The overall financing hurdle is so large that it inhibits an orderly and sustained capital investment

program, the kind that is needed to provide more job opportunities and greater job satisfaction.

Our best forecast is that retained earnings will provide about 36% of the \$21 billion needed after depreciation allowances. The remaining 64% will have to come from the securities and credit markets.

Specific forecasts often invite criticism. To avoid these, API has based calculations on the impact of failure to invest on three assumptions as follows: that the industry obtain 40% of its financing requirements after depreciation, which would be the situation if the industry relied upon retained earnings alone and maintained a constant debt/equity ratio. API has also calculated effects on capacity and job creation if 65% and 75% were financed.

A summary of impacts follows:

Assumption	Needed Capacity Tonnage Lost	Direct and Indirect Jobs Lost	Direct and Indirect Tax Revenue Lost
40% Financing	9.2 million tons	245,000	\$1,330 million
65% Financing	4.6 million tons	123,000	700 million
75% Financing	3.2 million tons	86,000	500 million

The schedule above shows that if the industry can provide only 40% of its cash requirements after allowance for depreciation, it will not build 9.2 million tons of capacity by 1980, resulting in a loss of 245,000 potential jobs and over \$1.3 billion of tax revenue. This scenario is possible if the industry were to earn 6% after taxes on sales in the five year period and not change its debt/equity position. The other scenarios would require the industry to increase profit performance (mostly through price increases) and debt/equity financing. These figures exclude the impact of potential expenditures of \$5 billion for OASHA and energy conversion. These could increase the job impact.

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TAX POLICY RECOMMENDATIONS TO ENCOURAGE INVESTMENT

Depreciation

We urge enactment of a system of flexible, optional cost recovery deductions.

Investment Tax Credit

We recommend a permanent increase in the basic investment tax credit to 12%. We urge extension of the investment tax credit to industrial buildings, and elimination of the maximum limit on use of the credit.

Corporate Tax Rate Reduction

We support a downward adjustment in the corporate tax rate.

Corporate Surtax Exemption and Rates

We support a permanent \$50,000 surtax exemption and continuation beyond 1977 of the normal tax rate of 20% on the first \$25,000 of taxable income and 22% on the next \$25,000.

Integration of Corporate and Individual Taxes

We recommend elimination of double taxation of dividend income.

Capital Gains

We recommend reduction of the corporate capital gains rate to 25% and removal of capital gains as a tax preference item subject to the minimum tax.

Industrial Pollution Control

We recommend doubling of the investment tax credit and five year amortization for qualified pollution control facilities. We recommend elimination of the five year write-off as a tax preference item subject to the minimum tax.

Minimum Tax

We strongly oppose the minimum tax and limitation on artificial losses (IAL) provisions in H.R.10612 because of their serious negative impact on capital formation. We support, instead, Chairman Long's alternative minimum tax proposal.

Energy Conservation

We support an increased investment tax credit to provide incentives for capital investment in fuel conserving equipment, including facilities which would increase utilization of solid wastes as a source of energy.

We recommend allowing both the investment tax credit and five year amortization to apply to all energy conserving equipment.

We recommend that Treasury withdraw Revenue Procedure 74-27, which would reduce depreciation allowances on power generating systems of the pulp and paper industry.

3/4/76

PULP, PAPER AND PAPERBOARD

Averages 1964-1974

Growth rate in production	3.8% per year
Average Operating Rate	93.1%
Maximum Operating Rate	96.2% in 1973
Profits as percent of sales	4.8%
Debt as percent of total new capital	⁻ 36.5%
Growth rate in investment	10.3% per year
Productivity - Index 1967=100	3.9% per year
Prices	5.1% per year

ESTIMATED DEMAND AND CAPACITY REQUIREMENTS (millions of tons)

<u>YEAR</u>	Production	Capacity End of Year
1975	52.7 FORECAST	68.8
1976	62.0	70.2
1977	67.3	71.4
1978	70 .0	74.4
1979	72.9	77.4
1980	75.7	80.4

American Paper Institute March 5, 1976

CAPITAL REQUIREMENTS TO MEET ANTICIPATED DEMAND * (billions of dollars)

Year	Primary Facilities 1/	Converting Facilities	Pollution Abatement	Timber Lands	SUM -
1975	981	857	644	435	2,917
1976	1,194	FOR: 900	ECASTS 506	478	3,078
1977	1,300	1,000	750	526	-
13//	1,300	1,000	730	320	3,576
1978	2,615	1,369	1,200	578	5,762
1979	2,871	1,622	1,700	636	6,829
1980	3,194	1,816	1,700	- 700	7,410

^{*} Assumes a capital inflation rate of 10% a year.

NOTE: These figures are not forecasts of industry spending. They are API estimates of the cost of building the facilities needed to meet growing demand.

1/ Assumes 25% of additional capacity will come from improvements on existing machines and 75% will require new machines. The cost per ton of a new facility will be 3 to 4 times larger than an improvement.

CASH FLOW 1976-1980

Production -	347.9 million tons
Average Price	\$725 a ton1/
Industry Sales	\$253.7 billion
After-Tax Profits2/	\$15.2 billion
Retained Profits3/	\$7.6 billion

1/ Assumes 6% a year inflation rate

American Paper Institute March 5, 1976

Based on 6% after-tax return. The average in 1964-1974 was 4.8%.
Based on experience in average pay-out for the industry and for other commodity-type industries. Assumes 50% pay-out.

STATEMENT OF THE AMERICAN MINING CONGRESS, BY DENNIS P. BEDELL, CHAIRMAN OF THE AMC TAX COMMITTEE

Mr. Chairman:

My name is Dennis P. Bedell. I am appearing before you today to testify on behalf of the American Mining Congress.

The American Mining Congress is a trade association representing all segments of the mining industry. It is composed of (1) U. S. companies that produce most of the nation's metals, coal and industrial and agricultural minerals; (2) more than 240 companies that manufacture mining and mineral processing machinery, equipment and supplies, and (3) engineering and contracting companies and banks that serve the mining industry.

The U. S. Mining Industry

In the Mining and Minerals Policy Act of 1970, Congress stated it was our national policy to foster and encourage private enterprise in the development of an economically sound domestic mining industry and in the orderly and economic development of domestic mineral resources. The critical importance of this national policy becomes readily apparent when it is realized that the United States presently faces a severe shortage of minerals, which are the lifeblood of our industrial economy and our national defense and are the basic products from which substantially all other products are derived.

The mining industry has peculiarly distinctive characteristics and circumstances which not only justify its present tax treatment but in fact warrant certain liberalizing changes in that treatment if the industry's after-tax rate of return on investment is to be sufficient to provide, and allow it to attract, the capital required for a needed tremendous expansion in output and also to allow it to effectively compete abroad.

 on the present and projected supply and demand for minerals are the 1972, 1973, and 1975 Annual Reports of the Secretary of the Interior to Congress pursuant to the Mining and Minerals Policy Act of 1970. The Secretary's Annual Reports project that in the years ahead primary domestic demand for minerals will substantially exceed domestic mineral production at an ever-widening pace. The gap was \$6 billion in 1971 and is projected to increase to \$20 billion in 1985 and to \$52 billion in the year 2000.

To meet this gap, we have been and will continue to be increasingly relying on foreign sources. In 1972, our mineral imports were valued at approximately \$9 billion. Attached as Exhibit 1 is Figure 4 from the Secretary's 1975 Annual Report which shows for a number of minerals the percentage of U. S. 1974 demand which was supplied by imports.

Moreover, the Secretary's 1973 Annual Report points out (at page 25) that although "U. S. production has increased in quantitative terms, its relative role as a world consumer of mineral raw materials and as a world manufacturer of products of mineral origin has shrunk." The result is that "the United States is encountering steadily increasing competition in the acquisition of non-domestic mineral raw materials as

other industrialized countries also seek reliable sources of reasonably-priced mineral raw materials."

Thus, at the same time as our needs are increasing and the gap between domestic production and domestic demand is widening, there is likely to be increased world-wide competition for minerals which will make it increasingly difficult for us to fill the gap. In other words, we are facing a minerals crisis.

An extremely important characteristic of the mining industry is the fact that in the case of a number of minerals we physically do not have additional resources in this country. Moreover, in the case of a number of other minerals almost all of the high grade deposits have been discovered. The ones left generally are deep, low-grade deposits which either are not exploitable under present economic conditions or because of a lack of the necessary technology. There are on the other hand foreign mineral deposits of a higher grade than domestic deposits which accordingly may be developed at a relatively lower cost. As indicated before, however, there is also likely to be increased competition from other countries for these supplies of natural resources.

- It is important for a number of reasons that the United States mining industry be able to effectively

participate in the discovery and development of foreign mineral reserves. It is obvious that for some time to come the United States will be in need of significant and increasing amounts of foreign minerals if domestic demand is to be met. The mining of foreign reserves by U. S. companies provides a greater assurance that these foreign minerals will be available to us, although there are, of course, risks arising from the uncertainty of the political environment in some foreign countries. Moreover, because of economic conditions, the state of the technology and the lead time required for the development of new deposits, increased production of domestic minerals is simply not a viable means of meeting projected domestic demand.

This is not to say that the significantly increased efforts which are necessary for further exploration and development of those minerals which exist in the United States should not be undertaken from a long-run standpoint. These efforts should be pursued, but they should be pursued hand in hand with those efforts necessary to continue to assure ourselves of needed supplies of foreign minerals. The size of the projected gap between domestic demand and domestic supply of minerals is so great that in the long run

very substantial increases in domestic production -even a doubling of production -- will still leave a gap which must be filled by substantial imports of foreignminerals. It is in our national interest that the U S. mining industry be allowed to effectively participate in the development of these foreign minerals. If these foreign mineral sources are not developed by American mining companies, they will be developed by mining companies of other major industrialized nations of the world. This would make the availability to us of needed foreign minerals even more dependent on, and subject to variations in, the economic and political climates of other countries. It is also important to note that the availability of needed raw materials to American industry means that mineral processing and the fabrication of many products may be done in the United States by U. S. employees rather than abroad.

In addition to providing us with additional assurance that the minerals will be available to us, the development of foreign mineral deposits by the U.S. mining industry will also tend to mitigate the balance of payments effect of imports since the profits arising on the foreign operations of U.S. mining companies will be at least in part repatriated to the United States.

The United States mining industry has already made very substantial investments abroad for mineral exploration and development and for the very substantial capital investments for facilities which are required for the processing and transportation of minerals. Obviously, substantial additional capital investments will be required to find and develop additional supplies of foreign minerals.

The Tax Treatment of Foreign Income

In attempting to carry on these activities, American mining companies must compete with mining companies from other capital exporting nations, such as the United Kingdom, France, Japan and Germany. To the extent American mining companies receive less favorable tax treatment from the United States than companies of other capital exporting countries receive from their countries, the U. S companies are placed at a competitive disadvantage.

Coopers & Lybrand Comparative Study

As a means of comparing, in fairly precise terms, the relative tax treatment applied by capital exporting countries to the foreign activities of their mining companies, the American Mining Congress had a comparative study made for it in 1973 by the international accounting firm of Coopers & Lybrand. This study focused on the effect which the tax systems of important capital exporting countries in conjunction with the tax systems of a varied range of capital importing countries have on after-tax rates of return of mining companies. The objective of this study was to apply a common measurement standard (i.e., after-tax rate of return) to the tax systems of the United States and its principal capital exporting competitors.

We believe this type of study is of substantial help to the Committee in considering the question of the proper tax treatment of U S. mining companies' foreign mineral operations. Accordingly, the American Mining Congress had Coopers & Lybrand prepare a new study for it, which was recently completed, to reflect changes in the tax systems of the capital exporting and capital importing countries involved. In addition, the new study analyzes the effect on after-tax rate of return of various tax proposals that have been made which would affect U. S mining companies operating abroad. Copies of this study have been made available to the Committee members and I will submit a copy for inclusion in the record.

In general this study demonstrates that our present tax system places U. S mining companies at a competitive disadvantage -- often a substantial one -- vis-a-vis mining companies of other major industrialized nations of the world.

In the study both the return on equity investment (after subtraction of the interest cost of borrowed money) and the return on total investment have been computed. The comparisons have primarily been made, however, on the basis of return on equity investment because as the study points out it is believed that this basis. which assumes a debt and equity capital structure, is more representative of typical mining investments and consequently is more illustrative of the effect of tax systems on mining companies in the U.S. and other capital exporting countries. After-tax rate of return was chosen as the standard of comparison because it is a reasonable measure of an investor's capacity to make concessions to the host country and thereby outbid other potential investors who have significantly lower rates of after-tax return, and because it serves as a measure of a company's ability to borrow funds, or to allocate internally generated funds, for the needed capital investments.

The after-tax rates of return of United States mining companies have been compared with those of eight other capital-exporting countries: Belgium, Canada, France, Germany, Japan, the Netherlands, Switzerland, and the United Kingdom. The rates of return have been computed on hypothetical models of mining ventures involving four minerals: iron ore, copper, nickel, and manganese.

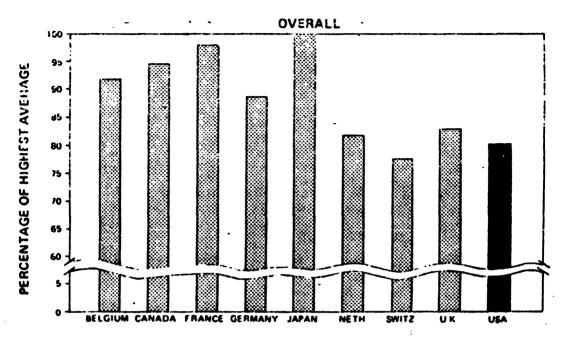
Twelve capital-importing countries were chosen for the study. They are Australia, Brazil, Canada, Indonesia, Iran, Ireland, Liberia, Mexico, New Caledonia, New Zealand, the Phillipines, and South Africa. It was not reasonable to expect that all four of the minerals chosen for the study would be found in each of the 12 capital-importing countries, so the computations were made for each mineral only in those countries where it is reasonable to anticipate that commercial deposits of the mineral are located. Consequently, the study computes rates of return on an iron ore mine in each of seven countries, a copper mine in each of eight countries, a nickel mine in each of seven countries, and a manganese mine in each of six countries. In summary, 28 investment possibilities were considered.

It would be impossible for the study to cover all potential capital-importing countries. It is believed, however, that the countries selected cover a

representative range of taxing systems, varying from New Caledonia, which has no income tax, to countries such as Canada, which has an income tax system similar in many respects to our own. Since the mine models utilized in this study were standard in all instances, the rates of return for each investment by each company were affected solely by the respective tax systems of the investor countries and the country in which the investment is made. Therefore, rates of return express the relative effect of each country's tax system.

The Coopers & Lybrand study shows that the U.S. tax treatment of U.S. mining companies operating abroad generally is significantly less favorable than that of most other major capital exporting countries. On an overall average basis for all 28 situations for which rates of return on equity were compared, the United States ranked next to last of the capital exporting countries in the study. Furthermore, the overall average U.S. rate of return was significantly lower — more than 20 percent — than the country — Japan — with the highest overall average rate of return. The following graph from the study shows the comparative position of the United States on an overall basis.

PERCENTAGE RELATIONSHIP OF RETURA ON EQUITY

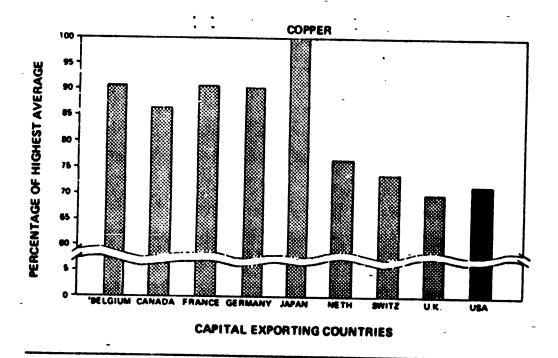


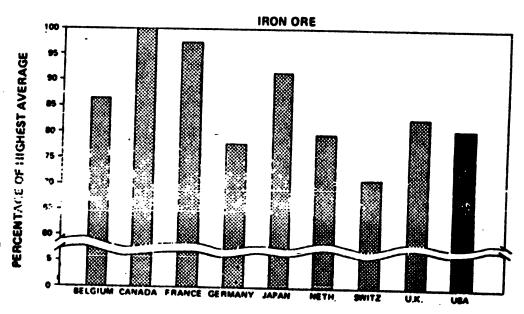
CAPITAL EXPORTING COUNTRIES

In terms of the four specific mine models utilized, the United States on an average rate of return on equity basis ranked eighth in the case of copper, sixth in the case of iron ore, fifth in the case of nickel, and was tied for last in the case of manganese. Moreover, the magnitude of the disparity between the U.S. rate of return and the rate of return for the highest country for each mineral was substantial. In

the case of nickel, where the United States ranked highest of the four minerals studied, the U. S. rate of return was only 85 percent of that of the highest country, Canada. In the case of iron ore, the U. S rate of return was 80 percent of that of the highest country. In the case of copper and manganese — the two situations in which the United States would be in the worst competitive position — the U. S. rate of return was 71 percent and 72 percent, respectively, of that of the highest country. The graphs on the following pages, which are from the Coopers & Lybrand study, show the comparative position of the United States for each of these situations.

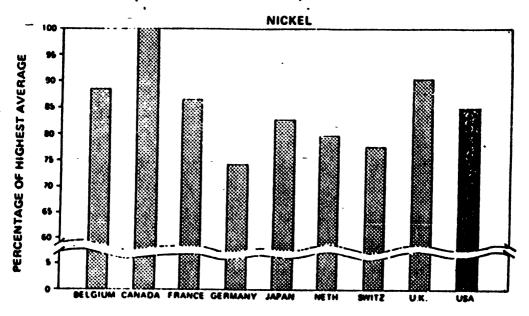
PERCENTAGE RELATIONSHIP OF RETURN ON EQUITY



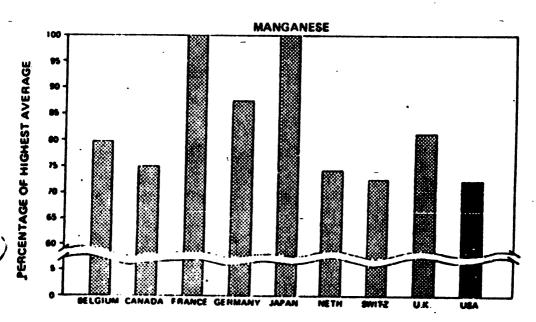


CAPITAL EXPORTING COUNTRIES

PERCENTAGE RELATIONSHIP OF RIJURN ON EQUITY



CAPITAL EXPORTING COUNTRIES



CAPITAL EXPORTING COUNTRIES

Another basis for comparing the capital exporting countries tax systems is the frequency with which a given capital exporting country obtains the highest or next highest rate of return in a capital importing country. Of the 28 situations compared in the study on a rate of return on equity basis, the United States never attained the highest rate of return and attained the second and third highest rate of return only once each. By comparison, most of the other major capital exporting countries achieved the highest, or next highest, rate of return a number of times, which is shown as follows:

Number of times country achieved

	Highest rate of return	Next highest rate of return
Canada	8	
Japan	. 6	6
Germany	5	
Belgium	4	
France	3	12
United Kingdom	3	

NOTE: Number of instances in the above table of highest rate of return totals 29, because Japan and France tied for first in one situation.

It is clear that no matter which method of comparison is utilized, the present U. S. tax system treats U. S. mining companies considerably less favorably than the tax systems of the other major capital exporting countries treat the mining companies based in those countries. Thus, our present tax system hinders the ability of American mining companies to compete with mining companies for the supplies of foreign minerals which this country needs.

It is important to emphasize that a frequent pattern of having United States mining companies fall significantly below the highest after-tax rate of return in competing with investors from other countries is extremely serious even if the United States investor's rate of return is comparable to the average for other potential investors. The reason is that the investor with the highest after-tax rate of return with comparable terms in the host country, will be able to concede more to the host country and thus outbid any other potential investors who have significantly lower rates of return after tax.

Local Incorporation Requirement

at the most serious disadvantage in those capital importing countries that, either directly or indirectly, require mining activities in that country to be carried on by a corporation organized under the local law.

United States companies that are, thus, effectively obliged to operate through such a locally incorporated subsidiary are at a particular disadvantage because mine development and other start-up expenditures by these foreign subsidiaries cannot be deducted and these foreign subsidiaries are not eligible for percentage depletion deductions when the mines reach the producing stage.

Several of the capital exporting countries provide a means whereby their mining companies may obtain a current deduction for mine development expenditures and therefore not be penalized by an external requirement to conduct operations through a foreign subsidiary. For example, France permits its companies to consolidate, for fixed periods of time, foreign subsidiaries with domestic activities for purposes of computing taxable income. This consolidation election is for a ten-year period after which the foreign subsidiary need not be consolidated. Thus, preproduction

tax losses produce a current tax benefit. Dividends from a foreign subsidiary, if not included in a subsequent consolidation after the ten-year period has lapsed, are eligible for further preferential tax treatment. Germany also provides a method to obtain a tax benefit for preproduction losses realized by a foreign subsidiary of a German company. Germany allows its companies to claim a tax-deductible reserve against investments in foreign subsidiaries in amounts equivalent to preproduction losses, subject to certain limitations. Such reserves are restored to income as the venture generates income or after a specified period of time has lapsed.

Of the capital importing countries included in the Coopers & Lybrand study, Brazil, The Phillipines, Mexico, Indonesia, and Iran require a local corporation to conduct mining ventures in their countries. The following table from the study shows the rate of return on equity of U. S. mining companies from investments in these countries, expressed as a percentage of the highest rate of return for a capital exporting country company's investment in that country, both with the foreign subsidiary treatment to which U. S. mining companies are limited under present law and as if they could be treated as branches.

Comparison of U. S. Return on Equity Expressed as a Percent of Highest Return on Equity in Countries Requiring Local Incorporations

% of Highest

	Subsidiary	If Branch Treatment Were Allowed
Copper: -		
Indonesia	56.4	80.0
Iran	40.7	59.3
Mexico	52.2	71.8
Phillipines	55.2	79.0
Iron Ore:		
Brazil	56.8	96.0
Phillipines	60.6	93.9
Nickel:		
Indonesia	67.7	100.0
Phillipines	75.8	100.0
Manganese:		
Brazil	58.9	77.6
Iran	58.0	78.6
Mexico	53.3	75.1
Phillipines	66.0	87.3

As can be easily seen, if these investors could qualify for branch treatment under United States tax law, the rate of return on equity investment would be increased sharply in every case.

Recommendation

The failure of the United States tax system to keep United States mining companies competitive in those countries where local corporations must be used is serious. Furthermore, the problem is likely to grow as other capital-importing countries adopt the requirement of local incorporation. To solve this problem and to avoid a further deterioration of the competitive position of the United States mining companies, we recommend that in those situations where the use of a local corporation is directly or indirectly required by the host country. United States mining companies be permitted, at their option, to treat stock ownership in the foreign corporation that is engaged in mining operations as though the mining operations were conducted by a branch of the United States company or by a partnership in which the United States company owns a partnership interest. Thus, this option would be . available whether the host country directly required. the use of a local corporation or indirectly did so by a requirement of local participation in the mining activity which effectively required the use of a local corporation.

Section 901(e)

The Tax Reform Act of 1969 enacted a new section 901(e). It requires that the amount of foreign taxes paid on "foreign mineral income" from sources within any foreign country or possession that is otherwise available for foreign tax credit, be reduced by the amount by which the foreign taxes paid exceed the United States tax on the same income, due to the allowance of a percentage depletion deduction by the United States. oppose subjecting the mining industry to more restrictive rules than other industries in computing the foreign tax credit. Consequently, we recommend that section 901(e) be repealed. In the absence of repeal, we recommend that 901(e) be amended to allow carrybacks and carryovers of the portion of the foreign tax credit that has been denied under this section since inequities can arise as a result of timing differences in the United States and the foreign country. We think the failure to allow carrybacks and carryovers may have been inadvertent in the 1969 Act. We specifically recommend that section 901(e) be amended to provide for a two-year carryback and a five-year carryover for amounts of foreign income tax for which a credit is denied under the "foreign mineral income" limitation in those years, and thus would grant the mining industry the same carrybacks and

carryovers of unused foreign income taxes on "foreign mineral income" that are available for foreign taxes on nonmineral income. This recommendation was embodied in H.R. 10412, which this Committee favorably reported during the 92nd Congress.

Other recommendations

In its Declaration of Policy, the American Mining Congress has adopted three other proposals that would improve the competitive position of U.S. mining companies operating abroad. First, we recommend that the tax treatment of foreign expropriation losses be revised to provide a more realistic definition of expropriation, to assure that business losses will always qualify as ordinary losses, and to extend the carryforward period for the use of such losses. the Asset Depreciation Range System should be extended to foreign assets. Finally, we recommend that a foreign tax credit be allowed for taxes that are excused by developing countries that are seeking to attract capital so the incentives allowed by those countries can have a meaningful effect. This treatment is already accorded by a number of other major industrialized countries, such as Canada, France, Germany, and Japan. We urge the Committee to adopt these recommendations.

1

Proposals to Increase Taxes on Foreign Mineral Operations

A number of changes have been discussed in the tax treatment of foreign income that would further worsen the competitive position of American mining companies operating abroad. We oppose any change in the tax treatment of foreign income that would increase the tax burden of U. S. mining companies operating abroad. Changes of this type would further hinder the ability of U. S. mining companies to secure the resources which this country vitally needs.

The Coopers & Lybrand study computed the effect which various proposals would have on U. S. mining companies operating abroad. These include repeal of the foreign tax credit with allowance of foreign income taxes as a deduction, repeal of the per country limitation on the foreign tax credit, and the proposal to recapture foreign losses which were deducted from U. S. source income by disallowing a portion of the foreign tax credit when operations in the foreign country in question become profitable. The study shows that any one of these proposals would place U. S. mining companies in last place among the capital exporting countries in terms of overall average return on equity. Furthermore, in a number of cases, the present discrepancy between the United States and the

capital exporting country with the highest overall average return on equity would be very significantly widened.

If the foreign tax credit were repealed and instead a deduction was allowed for foreign income taxes, the U. S overall return on equity as a percentage of the highest capital exporting country would fall, according to the study, from 80 percent to 62 percent. Similarly, if the per country foreign tax credit limitation were eliminated, the United States would fall from 80 percent to 67 percent. In the case of the loss recapture proposal, the drop would be from 80 percent to 76 percent. Although this is a smaller decrease, what is significant is that a U. S. mining company would be 24 percent below a company from the capital exporting country with the highest return. Accordingly, we oppose proposals of this type.

Proposals also have been made for a minimum tax on foreign source income, either directly by an additional tax on foreign income or indirectly by making the foreign tax credit a tax preference item subject to the present 10-percent minimum income tax. It should be recognized that proposals of this type are simply complex backdoor methods of repealing a portion of the foreign tax credit. Accordingly, we oppose any proposals of this type which would result in additional tax on foreign income and thereby through the imposition of double tax burdens further worsen our competitive position abroad.

Other proposals which would also have a deleterious effect on American mining companies operating abroad include repeal of Western Hemisphere Trade Corporation treatment, repeal or restriction of the exclusion allowed possessions corporations under section 931 of the Code, and elimination of less developed country treatment under the foreign tax credit (i.e., requiring dividends from these countries to be grossed-up) and under section 1248 which treats a portion of the gain realized on the sale of stock of a foreign subsidiary as ordinary income rather than as a capital gain. Increasing the tax burden of the American mining industry by proposals of this type is not a wise course of action. It would only hurt the industry's ability to supply the minerals this country needs now and will increasingly need in future years.

We also do not believe that the present deferral treatment-accorded foreign source income of foreign subsidiaries should be eliminated so that such income would be subject arbitrarily to United States taxation as earned because this would further aggravate the competitive position of United States investors compared with investors of other capital-exporting countries.

Exemption for Income Earned Abroad

present law provides a limited \$20,000 per year exemption (\$25,000 in certain cases) for income earned abroad by U. S. citizens who reside abroad for substantial continuous periods -- 17 out of 18 months. Even with the tax exemption provided under present law for income earned abroad, the mining industry finds it difficult to induce qualified executive and technical personnel to go abroad. It is to the advantage of the United States as well as the business involved to have competent personnel in charge of the operations abroad, and the Mining Congress believes if it were eliminated, it would increase the cost and lower the efficiency of operations abroad. This exemption should be retained.

Dividend and Interest Withholding Taxes

Secretary Simon, in his statement before this Committee during these hearings, urged the abolition of the 30-percent withholding tax imposed under present law on dividends and interest paid to foreign persons. He stated that such taxes "primarily represent not a burden on the foreign investor but simply an additional cost of needed capital for American business." We agree with Secretary Simon's statement and support his recommendation that the present withholding taxes on all dividends and interest be eliminated.

Need for Capital

To meet the challenge of obtaining the minerals we will need in the years to come will require the expenditure of tremendous amounts of capital.

Existing facilities must be expanded and modernized to more effectively exploit known mineral deposits. New deposits must be discovered and developed.

The discovery and development of minerals in the United States is becoming more and more costly. Most of the high grade mineral beds have already been discovered, and low grade deposits are the only ones left. Today, the mining industry must expend great sums of money on exploration and development in the United States. This exploration requires sophisticated and expensive geological, goechemical, and geophysical equipment. Exploring underground is particularly costly. Moreover, in many cases, the deposits that are discovered are of such a low grade that the technology required to make it economically feasible to mine and process them must first be developed. Also, to process low grade ores at an economically attractive cost requires tremendous capital investment in facilities for large scale operations.

In addition to these expenditures, the American mining industry is faced with large increases

in required capital expenditures as a result of the great amount of environmental and health and safety legislation affecting the industry which has been enacted in recent years. These expenditures, which do not add to productive capacity, further increase the mining industry's capital needs.

Where will the enormous amount of capital required to meet these needs come from? In recent years the industry has been required to turn increasingly to debt financing, thereby significantly increasing the industry's debt burden and its debt/ equity ratio. The industry's ability to generate capital internally and to attract outside capital is dependent on its profitability for that determines its cash flow and return on investment. The lower the industry's profits are, the less funds are generated internally to meet capital needs. Moreover, inadequate profitability seriously impairs the industry's ability to obtain external financing. Even if the industry is able to attract the needed funds in the first instance, inadequate profits impairs its ability to service new debt burdens.

The heavy inflation of recent years has placed substantial additional burdens on the mining industry. As a result of inflation, the industry is

encountering substantially higher replacement costs. Moreover, it is faced with rapidly escalating costs on uncompleted mine development projects. The discovery of an ore body and the development of a mine is a long-term, 5 to 10 year project. The inflation induced escalation of costs of mining projects has imposed substantial new and uncontemplated capital expenditure burdens on the mining industry. Our tax laws must provide adequate incentives to allow the mining industry to obtain the capital it needs if we are to have the needed modernization and expansion of productive capacity.

Capital Recovery

we strongly believe that new initiatives must be undertaken in our tax system to allow much more rapid capital cost recovery. 'Accordingly, we endorse the Capital Recovery Act of 1975 (H.R. 7543) which has been introduced by Congressmen Waggonner and Archer. This bill would provide for a system of flexible cost recovery allowances based on a period of 5 years for machinery and equipment and 10 years for industrial plants and the use of accelerated methods of depreciation. The bill wisely recognizes that the positive stimulative effect of such a capital

recovery system should not be diluted and impaired either through a reduction in the amount of the otherwise allowable investment credit or through the treatment of capital recovery allowances as tax preference items for purposes of the 10-percent minimum tax. H.R. 7543 would substantially improve the present tax climate for the mining industry and we urge the Committee to adopt the provisions of this bill.

Investment Tax Credit

Over the years, it has been well demonstrated that the investment tax credit is an important incentive to encourage capital investment and to assist industry in meeting its capital needs. We believe the strengths of this incentive should be continued and improved. Specifically, we recommend the following with respect to the investment tax credit:

- -- The investment credit should be increased to 12 percent on a permanent basis.
- -- The full investment credit should be allowed, regardless of whether the equipment in question is subject to depreciation or rapid amortization.
- -- The depreciable or amortizable basis of equipment should not be reduced by the amount of the investment credit.

-- Progress payment treatment, which allows the investment credit to be claimed as expenditures are incurred, should be available without regard to whether it takes two years or more to construct the property and without any phase-in period.

Pollution Control

The mining industry has been faced with increasingly heavy capital expenditures to meet the many new environmental requirements being imposed on it. Moreover, in future years the mining industry will be required to spend staggering amounts of capital for pollution control facilities. The present section 169 of the Code allowing the writeoff of pollution control facilities over a five-year period is so limited and restricted that it has not been effective in easing the financial burden of meeting pollution control standards.

we recommend that, to increase the effectiveness of the tax laws in combating air and water pollution,
the deduction for the cost of pollution control facilities
be liberalized and many of the restrictions in the present
law be removed. The most significant change we recommend
is that taxpayers should be allowed to elect to deduct
currently the cost of pollution control facilities,
rather than over a five-year period as under present law.

At the very least, the following modifications to existing law are essential if the writeoff allowed for pollution control facilities is to be of meaningful assistance to the mining industry.

Taxpayers should be permitted to use accelerated methods in computing their pollution control facility amortization deductions over a five-year period and should be allowed the maximum investment credit on these facilities.

The existing 60-month amortization rule applied only to facilities to control pollution in plants that were in operation before January 1, 1969. The definition of qualified pollution control facilities should be extended to include the cost of pollution control facilities used in connection with new as well as old plants.

We recommend removal of the restriction under existing law that makes the five-year amortization inapplicable if it appears that by reason of additional receipts derived through recovery of waste the cost of the pollution control facility will be recovered over its life.

The requirement that pollution control facilities must have Federal and state certifications to qualify for five-year amortization should be removed. Under existing law a pollution control facility must be placed in service by the taxpayer before January 1, 1976 to qualify for 60-month amortization. We recommend that the definition of qualified facilities be extended to include facilities placed in service on or after January 1, 1976.

The restriction of five-year amortization to a fifteen-year portion of the actual life of a pollution control facility which has a useful life of over fifteen years should be removed.

Under existing law a deduction for amortization of a pollution control facility that is part of mining operations will reduce the taxpayer's taxable income from the mining property, and this reduction may result in a lower percentage depletion deduction for the mine -- thus offsetting, in part, the effect of the amortization provision. We recommend that any increase in deductions for pollution control not be offset by applying the increased deductions to reduce the 50 percent of taxable income limitation on percentage depletion deductions.

Under existing law the excess of deductions for amortization of pollution control facilities over ordinary depreciation deductions is included in the

tax base for the 10-percent "minimum" tax as an item of tax preference, thus diminishing the effect of section 169 in many cases. We recommend that pollution control facilities be deleted from the base of the 10-percent minimum tax.

The 10-percent Minimum Tax

The 10-percent minimum tax imposed under present law is in reality an additional tax, not a minimum tax. Moreover, for the mining industry and corporations generally, it is essentially an additional tax on percentage depletion deductions and capital gains. Its effect, thus, is in large part to reduce through an indirect approach the incentive effect of a specific provision in the tax law which is of substantial assistance to the mining industry. The imposition of the minimum tax on corporations is not a sound policy. This is especially true at a time like this when it is clear that sound policy requires greater, not reduced, tax incentives to assist industry in meeting its capital requirements.

when this Committee originally considered the issue of a minimum tax in 1969, it wisely confined the application of its proposals for a limit on tax preferences and for the allocation of nonbusiness

deductions between tax preference income and other income to individuals. Again, in 1974 when this Committee considered a number of modifications to the present 10-percent minimum tax, it confined the application of those modifications to individuals.

The time has come when the inappropriateness of the imposition of the minimum tax on corporations should be fully recognized and the tax made inapplicable to corporations.

Respectfully submitted,

AMERICAN MINING CONGRESS

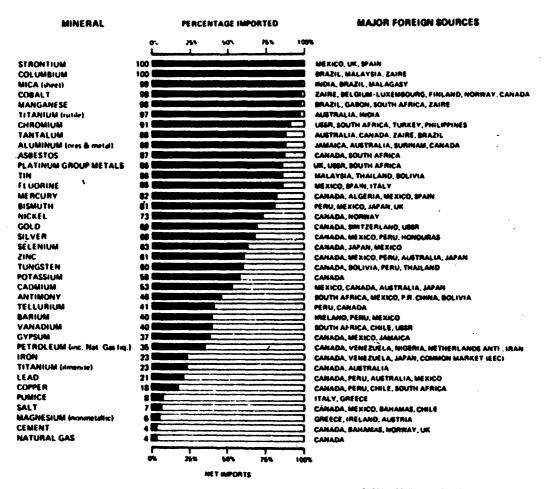
Dennis P. Bedell

Chairman, Tax Committee

Exhibit 1

Figure 4

IMPORTS SUPPLIED SIGNIFICANT PERCENTAGE OF TOTAL U.S. DEMAND IN 1974



SUREAU OF MINES, U.S. DEPARTMENT OF THE INTERIOR (import-expert date from Bureau of the Consul

STATEMENT OF THE MANUFACTURED HOUSING INSTITUTE, JOHN M. MARTIN, PRESIDENT

The mobile home industry, like most of the housing industry, has experienced a severe depression since reaching its peak production level in 1972. Two major factors have contributed to the disastrous decline in shipments of mobile home units in 1973-75; the generally depressed economic conditions during this period and the lack of availability of financing for mobile homes at reasonable terms for low income buyers. As a result, many manufacturing plants and retail firms have been forced out of business, while existing plants have operated at considerably less than full production capacity.

Job Loss

In 1972 there were 685 mobile home manufacturing plants in operation. These plants employed over 72,200 people and provided payrolls of approximately \$549 million. Manufacturers' shipments to dealers in that year totaled 575,940 mobile home units representing materials worth \$3,252 million.²

In 1975 there were 525 manufacturing plants in operation, down 23.3% from 1972.³ The number of plants that have closed down since 1972, however, does not accurately reflect the full economic impact in terms of actual job

^{1.} Depressed economic conditions have not only affected industry production levels directly but also indirectly in two very important areas: (1) During peak production years the industry maintained very high inventory levels. With the decline in sales, production was cut back even further to clear the large inventories that had accumulated. (2) High unemployment rates for purchasers of low income housing has resulted in a large number of repossessions during this period. As a result for the last two years, the industry has been competing with financing institutions who have been forced to enter the market to sell repossessed mobile homes.

^{2.} U. S. Bureau of Census, Census of Manufacturers; 1972 Industry Series: Wood Buildings and Mobile Homes, N.C. 72(2)-24D U.S. Government Printing Office, Washington, D. C., 1974.

^{3.} This is a preliminary end of year figure (FY '75) prepared by the marketing research firm of Elrick and Lavidge, Inc., 10 South Riverside Plaza, Chicago, Illinois 60606. More recent data being compiled by the Forest Science Laboratory, Carlton Street, Athens, Georgia 30601, indicates that the number of manufacturing housing plants currently operating is closer to 465.

loss in the manufactured housing industry. Shipments of mobile homes have dropped to 215,000 units in 1975, indicating that existing plants are operating at an average of 48.9% of the production capacity experienced in 1972.

Although employment figures at the manufacturing level are not available for 1975, on the basis of the 1972 industry avarage of one person employed to produce 7.9 mobile home units, it is estimated that 27,000 people were employed in 1975 to produce 215,000 units. These figures suggest an employment loss of over 45,000⁴ jobs and wage losses of close to \$315 million.⁵

At the retail level, Dun and Bradstreet reported approximately 18,000 retail lots in the United States at the end of 1973; at the end of 1975 they reported approximately 9,500 lots in business. Assuming an average of five employees per lot, that would represent a loss of 42,500 jobs.

The economic impact for suppliers to the manufactured housing industry, resulting from increasingly lower production levels, is more difficult to estimate. However, assuming a zero growth rate in the industry from 1972 through 1975, and an average cost of material increase of 5% a year, close to \$688 million of materials were not ordered from suppliers due to production cut backs during that period.

Projected Sales - FY 1976 - FY 1980

Forecasts were made in mid-November 1975, by mobile home industry suppliers and manufacturers; manufacturers estimated 1976 shipments would

^{4.} In 1975 Fuqua Homes, 7100 South Cooper, Arlington, Texas 76015, accounted for approximately 1.9% of all wholesale shipments. As one of the largest manufacturers of mobile homes, they are considered to be fairly representative of the industry as a whole. The employment level at Fuqua Homes has dropped by 520 people in the past 18 months, suggesting an industry loss of over 27,000 people since mid 1974.

^{5.} Based on the 1972 average industry annual salary of \$7,000.

reach 270,000 units; mobile home suppliers forecast 305,000 units. The average forecast is 290,000 units, a gain of 35% from the 215,000 units shipped in 1975. Assuming the industry will then revert to a more normal growth rate of 14%, projected annual unit sales in FY 1980 should reach an output of nearly half a million mobile homes.

	Manufacturers' Shipments to Dealers in US**	Product Nix***				Total***
Year*			ngle Wide Average Retail Price/ Unit (\$)	Units Do	Note Wide Average Retail Price/ Unit (\$)	Retail Sales (\$ Mil.)
1972	575,940	475,150	6,000	100,789	10,280	4,003
1973	566,920	454,669	6,900	112,250	11,300	4,406
1974	329,300	252,243	8,640	74,092	13,560	3,214
,1975	215,000	156,735	10,150	56,760	16,460	2,518
1976	290,700	203,490	11,165	87,210	18,106	3,829
1977	331,398	218,722	12,281	112,675	19,916	4,878
1978	377,793	234,231	13,509	143,561	21,908	6,306
1979	430,684	249,796	14,860	180,887	24,009	8,081
1980	490,979	265,128	16,346	225,850	26,508	10,307

^{* 1976-80} figures estimated

^{**} Estimated increase in production of 35% in 1976, and a 14% annual industry growth rate from 1977 - 1980.

^{***} The market for these homes has continued to shift toward higher quality and larger mobile homes, particularly in the double wide category. Since 1971 the proportion of double wides has increased at an annual rate of approximately 4%; it is estimated that 30% of all mobile homes sold will be double wides by 1976 growing to 46% by 1980. 1976-80 figures assume a constant annual growth rate of 4% in the proportion of double wides versus single wides produced and an average increase in production costs at 10% per year.

^{****} The categories of "others" and expendable mobile homes representing less than 1% of total shipments in 1975 are included with single wides.

^{6.} Although a 14% annual growth rate is optimistic, it demonstrates the growth production necessary to reach the 1972 production level by 1980. Unless measures are taken which increase the availability of consumer financing

Job Creation

A projected production level of 491,000 units by 1980 would bring industry production up to 85% of the peak level reached in 1972. The impact of this on job creation in the manufactured housing industry would be to effectively negate the proportionate number of job losses incurred between 1973 and 1975, creating an estimated 87,000 jobs.

Capital Requirements

The manufactured housing industry has traditionally been a very capital light industry. Manufacturing plants have continued to produce mobile home units using an assembly line operation, which relies heavily on labor and very little on automated equipment. This, in addition to the fact that existing plants are presently operating at less than 50% of production capacity, suggests that capital requirements for plant and equipment should be minimal through 1980.

The most crucial capital requirements at this point, necessary to stimulate industry growth, are at the consumer level. Purchasers of wobile homes have generally represented a market segment comprised largely of the less affluent blue collar workers. These people have been the hardest hit by the recession; disproportionate employment loss, their inability to build capital as a result of higher costs of living and the reluctance of financial institutions to extend financing to these people have precluded a large number of them from entering the low-cost housing market.

Although unemployment is now declining and financial institutions are beginning to look more favorably on mobile home paper, additional tax incentives are necessary if the manufactured housing industry is to reach the production level achieved in 1972 by 1980.

and which provide incentive for the purchase of new low cost housing, the manufactured housing industry will not reach the production levels projected through 1980.

Consumer Tempeyer Incentives

Approximately one-half of the families in the United States earn \$12,800 a year or less which, according to the most recently used benker's rule of thumb means that they could afford housing costing up to \$26,000. Yet, less then 20% of the new housing built today falls in that price range. From 1950 to 1974 the median priced new single family site-built home increased from \$8,900 to \$32,000. In 1975 that cost increased to over \$40,000.8 Housing costs have risen so high that the majority of American families have been priced out of the housing market.

Although the existing federal tax credit for purchasers of new principal residences has helped stimulate the housing industry as a whole, it has provided only a minimum incentive for purchasers of low cost housing. While we strongly recommend extension of the tax credit provision beyond January 1, 1977, we also recommend that the credit limits be increased at the lower purchase levels allowing the maximum benefits to reach a larger segment of the low income purchasers of new homes. These people need financial assistance the most and should be given the opportunity to realize a larger proportion of the \$2,000 benefit available under the federal tax credit provision.

This could be effectively accomplished by either: (1) structuring the tax condit on a graduated scale, starting with a higher percentage at the lower priced home level and scaled downward as the purchase price goes up

^{7.} Traditionally, bankers have provided financing for homes at a selling price of approximately 24 times the annual salary of the loan applicant. Most financial institutions today have lowered the amount financed to two times the annual salary of the applicant.

^{8.} The average price for all sizes of mobile homes was approximately \$11,750 in 1975.

or by (2) increasing the present 5% to 7½%, allowing the maximum benefit to purchasers of homes priced at \$26,000, rather than \$40,000.

	Dumples:				
ı.	Tax Credit	Wages/Year (\$)	Housing Cost (\$)	Amount of Tax Credit (\$)	
	7.564	6,000	12,000	900	
	6.79%	10,000	20,000	1,358	
	6.25%	13,000	26,000	1,625	
	5.894	15,000	30,000	1,767	
	5.00%	20,000	40,000	2,000	
II.	Mages/Year	Housing Cost	Amount of	Amount of Tax Credit	
	(\$)	(4)	Present @ 5%	(\$) <u>Proposed @ 71/18</u>	
<i>:</i>	6,000	12,000	600	900	
	10,000	20,000	1,000	1,500	
	•				
	13,000	26,000	1,300	1,950	
	·	•	1,300 1,500	1,950 2,000	

Under either approach, low income buyers who have tax liabilities in the year of the purchase which are less than the tax credit allowed, should be permitted to file for a rebate matching the difference or be given the option of applying the difference to back and future tax liabilities. If a direct rebate was allowed, it might include a restriction that all or a percentage of it be applied directly to the principal of the mortgage loan. The amount of the tax credit and the estimated tax rebate could be calculated during the original financing period, and at the option of the lender, a proportionately lower down payment might be required. This would provide a very real stimulus for low income purchasers of new homes.

Institutional Tempayer Incentives

The Pinancial Institutions Bill passed in the Senate — 8. 1256 — incorporated a tax credit provision intended to expand and stabilize sources of mortgage funds. Section 707 allows a credit of 3.5% against federal taxes paid on interest received or accrued from a qualifying residential mortgage losm, if at least 70% of the taxpayer's total assets are qualifying residential mortgage losms. If the percentage of assets held in such losms is less than 70 percent, the 3.5% credit is reduced by 1/30 of 1 percentage point for each 1 percentage point (or fraction thereof) of the difference; if less than 10% of the total assets are qualifying residential mortgage losms, the allowable percentage credit is zero.

This section defines "Qualifying Residential Mortgage Loan" as:

(A) a loan . . . secured by an interest in real property which is . . . residential real property, or a loan made for the improvement of residential real property, provided that for purposes of this clause, residential real property shall include single or multifeatly dwellings, facilities in residential developments dedicated to public use or property used on a nonprofit basis for residents, and mobile homes not used on a transient basis. . . . (emphasis added)

The House version of the Financial Institions Act, "Financial Reform Act of 1976," rejected the mortgage interest tax credit proposed in the Administration's reform bill.

We recommend that the tax credit provision be considered as a crucial part of proposed financial reforms. It would make mortgages a more attractive investment, hiking after-tax income for mortgages already in portfolios holding 10-70% of assets in mortgages, and would provide an incentive to increase such holdings. For purchasers of manufactured housing, it would increase the supply of mortgage credit, at perhaps lower rates, providing the additional consumer capital necessary to support projected industry growth in the coming years.

STATEMENT OF STUART G. TIPTON, SENIOR VICE PRESIDENT, FEDERAL AFFAIRS, PAN AMERICAN WORLD AIRWAYS, BEFORE THE SENATE FINANCE COMMITTEE ON CAPITAL FORMATION AND THE INVESTMENT CREDIT

Mr. Chairman, members of the committee, my name is Stuart G. Tipton, senior vice president, Federal affairs for Pan American World Airways. I strongly endorse the comments made by Mr. Ignatius and underscore Pan American's support for S. 3080. This bill would constitute a significant step forward in expanding the current investment credit to those companies, including Pan American, which have been unable to utilize the credits under current law.

The proposal will directly stimulate a business sector of our economy which is in serious need and will assist those companies which have been severely disturbed by the reverse of our economy in process were the 1960's and early 1970's

by the ravages of our economy in recent years. The late 1960's and early 1970's were characterized by extraordinary economic turbulence with adverse effects on many businesses. Pan American has received little benefit from the investment credit under current law. Pan American has had little or no income tax liability against which to apply the credit. Nevertheless, even while Pan American has reduced its fleet size in recent years in an effort to improve its financial condition, it has continued to have large capital expenditures in an attempt to improve the efficiency of its operations. These past capital expenditures and future capital needs have, and will continue to, result in more jobs and will assist in sustaining a continued upturn in our economy. Additional capital investments continue to be essential if our Nation's airline system is to continue its record of excellence.

Mr. Chairman, I would also like to comment on a recent legislative proposal which will substantially affect Pan American's international operations. This proposal would

place restrictions on the deductibility of expenses attributable to attending conventions, educational seminars or similar meetings outside the United States.

Indeed, it would drastically curtail Pan American's overseas activities and could result in a revenue loss of \$15 million with respect to our convention-oriented business. Similarly. Pan American could lose foreign-origin convention travel to the United States

in the amount of \$17 million as a result of foreign retaliatory action.

In 1975, the House of Representatives passed H.R. 10612, which included a proposal which would limit the deductions allowable for taxpayers attending conventions, educational seminars or similar meetings outside the United States, its possessions and the Trust Territory of the Pacific Islands. Deductions would be allowed only for expenses incurred in attending not more than two foreign conventions and transportation expenses would not be permitted to exceed coach air fare. Moreover, transportation expenses would be deductible in full only if over one-half of the trip were devoted to business. If less than half of the trip were devoted to business, no deduction would be permitted for that portion of the trap were devoted to beariness, no deduction would be permitted for that portion of the transportation expenses related to nonbusiness activities. Meals, lodging, and other similar expenses would be limited to the maximum per diem allowed to Government employees, but only if the business-related activities comprised more than 6 hours per day, and if the taxpayer attended two-thirds of such activities.

The Internal Revenue Service has been faced with administrative problems resulting

from attempts by some individuals to deduct personal vacations as business trips in those situations where a compelling reason cannot be shown for meeting outside the United States. While abuses undoubtedly occur from time to time, the legislative approach suggested and similar alternatives would deal a severe blow to ligitimate and proper overseas business activities, when these activities can be effectively restricted under present law. Severely restricting foreign travel in an attempt to curb these

abuses would be both unnecessary and unwise.

Under current law, travel expenses may be deducted only when they constitute "ordinary and necessary" expenses in carrying on a trade or business, or are for the production of income. Current Treasury regulations deal specifically with this problem involving business meetings by prohibiting the deduction of expenses unless "there is a sufficient relationship between the taxpayer's trade or business and his

"there is a sufficient relationship between the taxpayer's trade or business and his attendance at the convention or other meeting so that he is benefiting or advancing the interests of his trade or business." Even more specifically, deduction of expenses is prohibited "if the convention is for political, social, or other purposes unrelated to the taxpayer's trade or business."

These Treasury regulations enunciate a sound and proper rule which is very clear in its meaning. There is no doubt in the minds of taxpayers or the Internal Revenue Service as to what rules apply. The critical problem is one of enforcement rather than in legislative revision. Indeed, in 1974, the Internal Revenue Service announced (T.I.R. 1275, February 14, 1974) that it had instructed revenue agents and tax auditors

to scrutinize deductions for business trips, conventions, and cruises which appear to be vacations in disguise. This abuse must be resolved in such situations only, and should not inhibit those normal and customary business activities in which generally taxpayers engage. The Service in its announcement recognized that there are many different factual situations to which the rule may apply, but the test is the same—where the "primary purpose" of the trip is "personal in nature," no deduction will be permitted. Whether a trip "is primarily personal depends on the facts in each case." Therefore, "Where there are indications of abuse, the IRS will request lists of the names and addresses of participants," and "taxpayers will be required to substantiate the amount of time spent on business activities." Where the taxpayer cannot substantiate the business nature of the trip, no deduction will be allowed. the business nature of the trip, no deduction will be allowed.

Legislative restrictions on foreign travel are not needed to correct abuses, any more than restrictions on domestic travel are needed. The price of travel from New York to Hawaii flight, or Miami to Anchorage, particularly considering that foreign travel more often occurs on charter flights. In this light, a Florida vacation is more susceptible

to abuse than a business trip to iceland.

Travel abroad may have equally sound business reasons as does domestic travel. U.S. exports require meetings abroad, as does maintenance of the billions of dollars of U.S. investments abroad. Independent technological advances may become available through foreign meetings. In order to continue to maintain a healthy surplus in our balance of payments, it is essential that we maintain overseas contact with foreign businessmen.

These conventions and seminars directly benefit U.S. companies. American hotel chains abroad (including Hilton International, ITT-Sheraton, Western International, Holiday Inn, Hyatt, Loewes, Marriott and Ramada Inn) would suffer from any curtailment of foreign travel. Many of these facilities were specially built to accommodate meetings and conventions. The aircraft used are predominantly of U.S. manufacture, whether flown by American flag carriers or others. It is more certainly true that American flag carriers have and will benefit particularly. Pan American estimates that in addition to their potential air traffic revenue loss from the proposal, Intercontinental Hotel Corp., Pan Am's wholly owned subsidiary, could lose an additional revenue of \$12 to \$13 million. Intercontinental's 1975 net profit was only \$2,800,000.

Foreign travel is not a one-way street. Increasingly, meetings and conventions are being scheduled in the United States by foreign visitors, a trend which is expected to accelerate in our Bicentennial Year. The British-American Chamber of Commerce has noted that the proposed "restrictions on U.S. organizations meeting abroad are

has noted that the proposed "restrictions on U.S. organizations meeting abroad are likely, in the way of things, to engender an equivalent discouragement of overseas organizations visiting America" with a consequent effect on domestic business.

The proposed restrictions would confuse, rather than enlighten, U.S. taxpayers. Taxpayers know now that travel, whether foreign or domestic, is not deductible unless it is undertaken for business rather than personal reasons. This would continue to be the case. Conscientious taxpayers, aware that Congress had passed a law with respect to foreign travel only, would tend to stay in the United States. But those taxpayers who now deduct personal travel as "business expenses" would still be able to invent spurious business reasons for their trips. The Treasury has stated that in determining whether travel is personal or business "depends upon the facts in each case," and this would still be the case.

The solution is not to change the language of the rule, thereby discouraging legitimate

The solution is not to change the language of the rule, thereby discouraging legitimate foreign travel with its benefits for U.S. exports, U.S. investments abroad, U.S. flag carriers, and the ability of the United States to obtain reciprocal travel by foreigners. The solution is vigorous enforcement of existing law in factual situations where abuse is real. The Internal Revenue Service should continue to effectively enforce, through its audit program, current limitations on such travel. Moreover, examination of returns is not the only remedy. In the past, tax forms have been revised requiring taxpayers to answer pertinent questions before an exemption or other deduction could be claimed. This step could be utilized in this area and bring home to taxpayers the requirements for claiming the deduction. This would be a more effective way of uncovering abuses

in foreign travel than a legislative approach.

Finally, any proposal which would limit the deductibility of air fares to a coach rate and subsistence payments to Government per diem levels represents a substantial departure from past tradition. An expense is deductible only if it is an ordinary and necessary business expense. It must be reasonable under the circumstances. It is either a proper and reasonable business deduction or it is not. That is the true test which ought to be applied. On foreign trips, businessmen may need first-class accommodations in order to facilitate their work during the flight. The added space and comfort in first-class facilitates this function. Any dollar limit would merely produce a morass of administrative complexity which ought to be avoided.

In summary, any legislative proposal would discourage legitimate foreign travel and reciprocal travel to the United States by foreigners. Present law establishes a clear and proper rule prohibiting the deduction of personal travel as a business expense and will continue to encourage U.S. exports, maintain U.S. investment abroad, and the survival of our sorely pressed U.S. flag carriers in competition with subsidized foreign lines.

[Whereupon, at 11:15, the subcommittee adjourned, subject to call of the Chair.]

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