1048

THE 1981 ECONOMIC REPORT OF THE PRESIDENT

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE CONGRESS OF THE UNITED STATES

NINETY-SEVENTH CONGRESS

FIRST SESSION

PART 3

FEBRUARY 23, 24, 25, AND 26, 1981

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE

80-478 O WASHINGTON : 1981

For sale by the Superintendent of Documents, U.S. Government Printing Office
Washington, D.C. 20402

8P0,

JOINT ECONOMIC COMMITTEE

(Created pursuant to sec. 5(a) of Public Law 304, 79th Cong.)

HOUSE OF REPRESENTATIVES

HENRY S. REUSS, Wisconsin, *Chairman*
RICHARD BOLLING, Missouri
LEE H. HAMILTON, Indiana
GILLIS W. LONG, Louisiana
PARREN J. MITCHELL, Maryland
FREDERICK W. RICHMOND, New York
CLARENCE J. BROWN, Ohio
MARGARET M. HECKLER, Massachusetts
JOHN H. ROUSSELOT, California
CHALMERS P. WYLIE, Ohio

SENATE

ROGER W. JEPSEN, Iowa, *Vice Chairman*
WILLIAM V. ROTH, Jr., Delaware
JAMES ABDNOR, South Dakota
STEVEN D. SYMMS, Idaho
PAULA HAWKINS, Florida
MACK MATTINGLY, Georgia
LLOYD BENTSEN, Texas
WILLIAM PROXMIRE, Wisconsin
EDWARD M. KENNEDY, Massachusetts
PAUL S. SARBANES, Maryland

JAMES K. GALBRAITH, *Executive Director*
BRUCE R. BARTLETT, *Deputy Director*

CONTENTS

WITNESSES AND STATEMENTS

Monday, February 23, 1981

	Page
Reuss, Hon. Henry S., chairman of the Joint Economic Committee: Opening statement	1
Evans, Michael K., Evans Economics, Inc., Washington, D.C.	2
Musgrave, Richard A., H. H. Burbank Professor of Political Economy, Harvard University, Cambridge, Mass	13
Meiselman, David I., professor of economics and director, Graduate Economics Program in Northern Virginia, Virginia Polytechnic Institute and State University, and Oppenheimer & Co., Inc., New York, N.Y	21
Thurow, Lester C., professor of economics and management, Massachusetts Institute of Technology, Cambridge, Mass	33

Tuesday, February 24, 1981

Bentsen, Hon. Lloyd, member of the Joint Economic Committee, presiding: Opening statement	55
Hawkins, Hon. Paula, member of the Joint Economic Committee: Opening statement	56
Brock, Hon. William E., III, U.S. Trade Representative	57

Wednesday, February 25, 1981

Reuss, Hon. Henry S., chairman of the Joint Economic Committee: Opening statement	97
Jepsen, Hon. Roger W., vice chairman of the Joint Economic Committee: Opening statement	98
Brown, Hon. Clarence J., member of the Joint Economic Committee: Opening statement	99
Weidenbaum, Hon. Murray L., Chairman, Council of Economic Advisers	99

AFTERNOON SESSION

Reuss, Hon. Henry S., chairman of the Joint Economic Committee: Opening statement	129
Brunner, Karl, director, Center for Research in Government Policy and Business, Graduate School of Management, University of Rochester, Rochester, N.Y	129
Dornbusch, Rudiger, professor of economics, Massachusetts Institute of Technology, Cambridge, Mass	135
Lehrman, Lewis E., chairman of the Economic Advisory Council, New York Republican State Committee, and president and chairman, Lehrman Institute, New York, N.Y	147
Paulus, John D., vice president and economist, Goldman, Sachs & Co., New York, N.Y	178

Thursday, February 26, 1981

Kennedy, Hon. Edward M., member of the Joint Economic Committee, presiding: Opening statement	203
Edwards, Hon. James B., Secretary of Energy, accompanied by Raymond G. Romatowski, Acting Under Secretary	204

	Page
Jepsen, Hon. Roger W., vice chairman of the Joint Economic Committee: Opening statement	212
Brown, Hon. Clarence J., member of the Joint Economic Committee: Opening statement	213
Hawkins, Hon. Paula, member of the Joint Economic Committee: Opening statement	214

SUBMISSIONS FOR THE RECORD

Monday, February 23, 1981

Evans, Michael K.:
- Prepared statement 4

Meiselman, David I.:
- Prepared statement 27

Musgrave, Richard A.:
- Prepared statement 17

Tuesday, February 24, 1981

Brock, Hon. William E., III:
- Prepared statement 61
- Response to additional written questions posed by Senators Roth and Hawkins 85

Wednesday, February 25, 1981

Weidenbaum, Hon. Murray L.:
- Prepared statement 102

AFTERNOON SESSION

Brunner, Karl:
- Prepared statement 132

Dornbusch, Rudiger:
- Prepared statement 138

Lehrman, Lewis E.:
- Prepared statement, together with appendixes A to E 151

Paulus, John D.:
- Prepared statement 180

Thursday, February 26, 1981

Edwards, Hon. James B., et al.:
- Prepared statement 206
- Response to Senator Kennedy's query regarding DOE reports that make a comparative analysis of the savings that result from DOE conservation programs, voluntary conservation efforts, and pricing impacts 217
- Response to Representative Richmond's query regarding funds for weatherization of housing for low-income people 235
- Response to Representative Richmond's query regarding the ownership of the Barnwell Nuclear Fuel Plant 238
- Response to additional written questions posed by Senator Kennedy 239

Kennedy, Hon. Edward M.:
- Letter to Hon. David Stockman, Director, Office of Management and Budget, dated February 23, 1981, regarding the recent budget cut proposals for other energy programs, solar conservation, and coal, but no cuts in nuclear energy 218
- Table reflecting total oil decontrol cost 230

APPENDIX

"Statement on Economic Policy Issues of 1981," submitted by the American Council of Life Insurance, Washington, D.C 245

THE 1981 ECONOMIC REPORT OF THE PRESIDENT

MONDAY, FEBRUARY 23, 1981

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 9:40 a.m., in room 2128, Rayburn House Office Building, Hon. Henry S. Reuss (chairman of the committee) presiding.

Present: Representatives Reuss and Richmond.

Also present: James K. Galbraith, executive director; Richard F. Kaufman, assistant director-general counsel; Lloyd C. Atkinson, Keith B. Kenner, Timothy P. Roth, and Robert E. Weintraub, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE REUSS, CHAIRMAN

Representative REUSS. Good morning. The Joint Economic Committee will be in session for a continuation of its hearings on the state of the economy. This morning we have a distinguished panel of economists and tax experts to explore with us whether the proposed tax cuts now before the Congress, namely, the 30 percent cut in the individual income tax, will in fact prove inflationary.

Economists differ on this. The administration and its economists, I believe, have settled that the tax cuts they proposed will support real growth and fight inflation. In support of their view, they produced—not econometric evidence, but an economic scenario; a scenario based on psychology that assumes changes in people's behavior and expectations as a result of the announcement of the program, which in and of itself will tend to bring about the realization of their goals.

There is some empirical evidence on the question, however. The evidence suggests that personal income tax cuts add considerably more to aggregate demand than they do to aggregate supply. Because of this, tax cuts have to be used with caution, because if they cut too soon and too sharply, demand will press on supply, and inflation will result.

Our witnesses today are Mr. Michael K. Evans of Evans Economics; David Meiselman of Oppenheimer & Co., who is an old friend and alumnus of this committee, and was a coauthor of the trailblazing study of the 1960's on the Federal Reserve, which people ought to read today; Lester Thurow of the Massachusetts Institute of Technology, a distinguished economist and recently a best-selling author. And—although he is not here as yet, but I anticipate he will be—Prof. Richard Musgrave of Harvard University.

You have all supplied us with excellent and comprehensive prepared statements, which under the rule and without objection will be received in full.

And we would now like to hear from you, in order. First, Mr. Evans.

STATEMENT OF MICHAEL K. EVANS, EVANS ECONOMICS, INC., WASHINGTON, D.C.

Mr. EVANS. Thank you very much, Mr. Chairman. It is a pleasure to appear this morning before the Joint Economic Committee to discuss the new Reagan fiscal policies and particularly the 30-percent income tax cut for individuals. I will summarize my prepared statement. It is rather lengthy—with the understanding that the complete statement will be entered into the record.

At present, the economy is fairly strong, substantially stronger than many economists expected. With the strong statistics from January and February, it now appears that real GNP will grow between 3 and 4 percent during the first quarter, and that the double-dip recession, which many had accepted, will not materialize.

As a result of that, it is necessary for the Congress to exercise even greater restraint in terms of increasing aggregate demand, lest the economy overheat and the inflationary cycle accelerate. In my opinion, the best program must necessarily be a balanced one. We must have personal income tax cuts, corporate income tax cuts, and Government spending cuts, but the purpose of this morning's session is to discuss more specifically the so-called Roth-Kemp tax cut, the 10-percent across-the-board reduction in personal income tax rates for each of the next 3 years.

I think there is little controversy to be said about the cut in corporate income taxes through increased depreciation allowances. I think that is fairly well understood, that it will help investment; and the Government spending cuts, we all agree in principle, should be made, although there is obviously some differences of opinion about exactly whose ox should be gored.

But the personal income tax cut is much more controversial; however, I would argue that this tax cut will increase aggregate supply more than it will increase aggregate demand, and will thereby lower inflation, rather than raise it.

This tax cut will work to lower inflation through three separate routes: First, most of the tax cut will be saved. Second, the tax cut will give greater initiative to individuals, thereby increasing labor productivity. And third, by cutting taxes, wage rates will rise at a slower rate, and thereby resulting in slower increases in labor cost and in prices themselves.

One of the most controversial aspects of the personal income tax cut is how much of the tax cut will be saved. The average propensity to save over the long term has only been about 6½ percent, and therefore some have argued that a reduction in personal income tax rates will result in only an additional 6½ percent being saved.

Now, I find this argument unconvincing, and it varies with the previous evidence. We have had several years in which tax rates have been raised or lowered during the past 20 years. The first and most

famous example of this, of course, is the Kennedy-Johnson tax cut. When that happened, we find that the savings rate rose substantially that year, from 5.4 to 6.7 percent; that, taking the numbers at face value, virtually the entire tax cut went into savings.

We also find that when a tax surcharge was applied in 1968, far from stemming consumption growth, which was the intent, we find that consumption continued to rise—and it was the savings rate which diminished.

Subsequently, when the surcharge was removed in 1970, the savings rate returned to its former level. So in all the years in which we have had major tax changes in the rates, the effects have been reflected primarily, if not exclusively, in the savings rate. But that evidence, while helpful, is certainly not convincing.

We need to look at the distribution of savings. We will find that of the Reagan 30-percent tax cut, 84 percent of that tax cut will go to individuals who are making more than the median income. In other words, the tax cut will basically go to those that do virtually all the savings in this economy.

As a result of that, we find that these people save substantially more than do the average individuals, the average consumers.

And if we simply take the average propensity to save over the first 3 years after any tax cut, we find that approximately 30 percent of the tax cut will be saved—just by considering the fact that the taxes are going to higher income individuals. However, that is not the only factor which must be considered. We must also consider a change in the after-tax rate of return on saving. Theoretical and classical economics has always posited a relationship between the rate of return on savings and the savings rate.

Until recently, however, this relationship had not been included in macroeconomic models; had not been found to be valid; however, new research that we have done suggests that every 1-percent increase in the after-tax rate of return on savings raises personal saving by $20 billion. at today's levels of income.

The reduction in the tax rates, because it is skewed more heavily toward the higher income brackets, will result in an increase of about 1.6 percent in the average after-tax rate of return on savings. This increase, therefore, will raise personal saving by approximately $30 billion in addition to the increase in saving which occurs from the raise in income itself.

So we have two separate effects. We have the effect on higher income, raising savings; and we have the effect on after-tax rate of return increase raising savings. As a result of these two major effects, I have estimated that personal savings under the Reagan plan will increase $80 billion a year by 1983 relative to what it would otherwise have been, and as a result, the total national savings rate, including the fact that the deficit is totally increased—we will have an increase in total saving.

The increase in private-sector saving will more than offset the decrease in public sector saving. As a result, the personal tax cut will not be inflationary.

We also need to consider the effect of a slash in personal income tax rates on individual incentives, and on work effort. Again, this is a

difficult area to quantify, and many economists with excellent reputations have disagreed on this issue; however, what we did was to examine the effect on work effort around the 1964 large Kennedy-Johnson personal income tax cut.

We examined the data from the IRS and examined what had happened in 1962, and in 1966, obviously choosing those years because they bracketed the 1964 tax cut. We found that there was a significant increase in work effort at all levels; low, middle income, and even high levels—as a result of the tax cut. We have estimated that every 1-percent decline in personal income tax rates results in a 0.2 percent increase in work effort.

The final factor in which I think a tax cut will work to alleviate inflation is that it will lower wage rates, or at least lower the increase in wage rates. Wage rates are based in part on what the worker has to take home. If his paycheck has a larger number of dollars but it buys less, it logically follows that he is poorer, and he will ask for a bigger wage increase the next time.

This is one of the major factors which contributes to the wage-price spiral; however, if his taxes were to be cut so that his after-tax income rises, it would therefore not be necessary to ask for as large a wage increase the next time at the bargaining table, thereby starting the wage and price spiral in a downward direction.

Now, again what evidence do we have of this? It is a nice theory, but has it ever been proven? I refer once again to the 1964 Kennedy-Johnson tax cut. In 1964, wage rates rose only 2.7 percent. That is the lowest they have ever risen in the post-war period in any year before the tax cut or in any year after the tax cut. I don't think this is coincidence.

I think this is directly tied to the fact that tax rates were lower. Again, when the surcharge was put on, wage rates spurted up. When the surcharge was taken off, wage rates abated.

The same pattern that we have observed in personal savings rates—so I feel that the Reagan plan, including the 30-percent cut in income taxes, will lower inflation. Now, I don't agree totally with the Reagan prognostications that the inflation rate will go down to 4.2 percent by 1986. My estimates are more modest. I see the rate of inflation declining under this plan about 1 percent a year, and reaching about 8 percent in 1985.

However, I think this is a very significant improvement, because during the past 15 years the rate of inflation has risen almost steadily. from 2 percent to 12 percent. If we can reverse this increase of almost 1 percent a year, and start the rate of inflation declining 1 percent a year, we will have made a major effect on the economy.

And for that reason, I believe that the Reagan program, including the 10 percent across-the-board tax cut for 3 years, deserves to be implemented speedily. Thank you, Mr. Chairman.

[The prepared statement of Mr. Evans follows:]

PREPARED STATEMENT OF MICHAEL K. EVANS

The U.S. economy is about to enter a boom of major proportions beginning in the second half of this year if the Reagan tax and spending cut package is passed. Under this assumption, real GNP would increase at an average rate of better than 5 percent for the next eight quarters, the unemployment rate would fall

to 5½ percent by mid-1983, and the rate of inflation would decline from its present level of 12 percent to the 8 to 9 percent range.

The major factors which will propel the economy into this orbit will be supply-side oriented. While the Reagan tax cuts will stimulate the economy through raising consumption and investment, that is not the major thrust of the program. Instead, the factors that will permit this rapid rate of growth will be the expansion of the productive capacity of the economy through greater savings and productivity, rather than any increase in aggregate demand.

For lack of aggregate demand simply has not been the problem which has led to slow economic growth during the past five years. Demands for consumer goods have consistently outstripped the growth in income, as witnessed by the decline in the personal saving rate from 8.6 percent in 1975 to 5.7 percent last year. Demand-driven factors have propelled the price of housing and other assets in fixed supply well above the general rate of inflation. Plant and equipment spending, which has performed poorly in the sense that our investment ratio is well below that of other countries, nonetheless expanded at an average rate of 5.7 percent per year in real terms, some 2 percent faster than the rise in overall GNP. The demand for housing has increased steadily and is now near a peak, as shown by the continuing refusal of the industry to go down for the count in the face of 15 percent mortgage rates and almost a complete withdrawal of S&L's from the mortgage market. The trouble has not been caused by a downward drift in the propensity to consume, which we used to think caused business cycles. Instead, it has been the lack of capacity caused by a decline in productivity, which has led to high inflation and even higher interest rates.

We have become so inured to Keynesian economics that the tendency is sometimes overwhelming to sink back into the familiar and comfortable frame of reference and argue that the tax cut will spur the economy by stimulating consumption and investment, or conversely that the Fed will not permit this growth in demand to take place, thereby aborting the demand-led recovery. But neither of these approaches really comes to grips with the central tenet of what the Reagan Administration program, which is to raise real growth and lower inflation by increasing productivity.

Right now the financial markets are indicating their belief that the budget deficit is truly uncontrollable in spite of the best efforts of well-meaning elected officials, and that as a result inflation will not be curbed anytime in the near future. This is apparent in the lackluster performance of bonds and stocks since the beginning of the year. It is the same pessimism which is keeping interest rates well above the level which can be attributed to the rate of inflation and the level of economic activity.

It is fashionable to be cynical about the Reagan plan right now, and argue that supply-side economics does not wash; that it will raise consumption instead of saving and thereby lower rather than raise inflation. However, I fully expect that within the next three months this cynicism will give way to a more realistic assessment of the ability of the Reagan Administration to control the budget deficit and inflation. The detailed plan of February 18th should help, as will the explicit changes in tax rates which have now been spelled out. The odds of bringing the budget under control are much better than the financial markets presently perceive, and when this happens we will have a major change in psychology and further sharp reductions in interest rates.

HOW TAX CUTS CAN RAISE THE SAVING RATE

The latest ploy of the old-guard liberals who oppose the Roth-Kemp tax cut is to argue that it will decrease saving, thereby lowering investment, reducing productivity, raising inflation, and generally harming the economy.

Supply-side economists may be permitted a wry smile at this turn of events. For years Keynesian economists have argued that fiscal policy should be directed at increasing consumption as the proven way to better economic performance and full employment. Tax cuts that merely went into saving were "wasted." Now these same economists are mounting a rearguard attack by claiming that broad-based personal income tax cuts are counterproductive because they do not generate enough saving. Thus, it is argued, we should restrict the scope and size of personal tax cuts over the next three years until those elusive spending cuts are passed by Congress. Yet our estimates show that far from diminishing savings, the Reagan tax package which was announced on February 18th will actu-

ally raise total national saving. In other words, private sector saving will increase more than the rise in the public sector deficit.

In order to dissect the effects of the previous tax cuts, we have constructed the figures given in Table 1. For every year we have calculated what would be the 'normal" increase in saving, which is simply equal to the change in personal income multiplied by the average saving rate of 6.5 percent. The normal increase is then subtracted from the actual change in saving, and the difference is called "excess" saving, which of course can be either positive or negative and averages approximately zero over the sample period.

We have also calculated a "normal" change in personal income taxes, which is simply equal to the change in personal income multiplied by the previous year's tax rate. The actual change in taxes minus the actual change is then the amount due to changes in the tax rates. This method is not perfect, since taxes tend to slump during recessions, and it also does not reflect the lack of synchronization between income and tax payment. However, it is a good first approximation for the effect of changes in the tax rate tables.

TABLE 1.—CALCULATING THE MARGINAL PROPENSITY TO SAVE

	Average personal income tax rate	Personal saving rate	Change in personal income	Change in personal saving	Normal change in saving	Change in personal income taxes	Normal change in taxes	Excess saving	Change in taxes due to change in tax rate
1955	11.4	6.0	20.7	−0.6	1.3	2.9	2.3	−1.9	0.6
1956	11.9	7.3	22.3	4.9	1.5	4.3	2.7	3.4	1.6
1957	12.1	7.2	18.4	1.0	1.2	2.7	2.2	−.2	.5
1958	11.7	7.4	10.1	1.3	.7	−.3	1.2	.6	−1.5
1959	12.0	6.2	23.3	−2.5	1.5	3.9	2.7	−4.0	.8
1960	12.5	5.6	17.9	−1.4	1.2	4.4	2.1	−2.6	2.3
1961	12.5	6.3	15.5	3.3	1.0	1.7	1.9	2.3	−.2
1962	12.8	6.0	25.8	.3	1.7	4.7	3.2	−1.4	1.5
1963	12.9	5.4	22.6	−1.4	1.5	3.5	2.9	−2.9	.6
1964	11.7	6.7	33.0	7.7	2.1	−1.7	4.3	5.6	[1] −6.0
1965	12.0	7.1	41.5	4.1	2.7	6.3	4.9	1.4	1.4
1966	12.7	7.0	47.5	2.3	3.1	9.6	5.7	−.8	3.9
1967	13.0	8.1	41.8	7.3	2.7	7.6	5.3	4.6	2.3
1968	14.1	7.1	60.6	−2.4	3.9	15.1	7.9	−6.3	[1] 7.2
1969	15.3	6.4	64.1	−1.3	4.2	18.5	9.0	−5.5	[1] 9.5
1970	14.3	8.0	56.4	15.2	3.7	.1	8.6	11.5	[1] −8.5
1971	13.4	8.1	57.3	4.9	3.7	.9	8.2	1.2	[1] 7.3
1972	14.8	6.5	83.0	−8.1	5.4	24.3	11.1	−13.5	13.2
1973	14.1	8.6	113.8	26.4	7.4	9.7	16.8	19.0	−7.1
1974	14.6	8.5	103.4	6.1	6.7	19.5	14.6	−.6	4.9
1975	13.4	8.6	96.4	9.2	6.3	−1.3	14.1	2.9	−15.4
1976	14.1	6.9	126.2	−11.8	8.2	27.9	16.9	−20.0	11.0
1977	14.7	5.6	146.8	−8.4	9.5	29.7	20.7	−17.9	9.0
1978	15.0	5.2	183.8	2.2	11.9	32.3	27.0	−9.7	5.3
1979	15.5	5.3	222.0	9.9	14.4	43.2	33.3	−4.5	9.9
1980	15.7	5.7	216.7	18.0	14.1	36.7	33.6	3.9	3.1

[1] Years of major changes in tax rates.

The results are rather astounding, and indeed give estimates of the first year marginal propensity to save (MPS) which are higher than even I would argue are feasible. In 1964, the year of the Kennedy-Johnson tax cut when tax rates were reduced an average of 18 percent, excess savings rose $5.6 billion while the decline in taxes due to the rate cut was $6.0 billion, implying an MPS of 0.93! Presumably personal saving increased for other reasons as well that year, such as the above average growth rate of pretax income. Even with several additional adjustments, however, the first year MPS still appears to have been over one-half.

Similar results are found when we examine the effects of the 10 percent surtax near the end of the decade. This surtax was applied in the middle of 1968, was in effect for all of 1969, and was then dropped in mid-1970. Consequently the average personal income tax rate rose from 13.0 percent in 1967 to 14.1 percent in 1968 and 15.3 percent in 1969 before falling back to 14.3 percent in 1970 and 13.4 percent in 1971.

The pattern of the personal saving rate during this four-year period is almost a mirror image of the tax rate. The personal saving rate declined from 8.1 percent in 1967 to 7.1 percent and 6.4 percent in 1968 and 1969 before rising to 8.0 percent and 8.1 percent in 1970 and 1971. The 1970 saving rate is biased upward because of the severe GM strike in the fourth quarter of the year; without any adjustment for the decline in consumption which accompanied that strike, the MPS is greater than unity for 1970, which is probably a nonsensical result. Making this one adjustment yields annual MPS's of 0.88, 0.58, 0.78, and 0.85 for these four years—again figures which are surprisingly high.

It is particularly interesting to compare these results with the evidence for 1975, when the average tax rate declined from 14.6 to 13.4 percent because of the rebate. The saving rate hardly budged, rising only from 8.5 to 8.6 percent, even though taxes were $15.4 billion lower than would have been the case had the tax rate remained constant. Obviously the difference here is that the rebate was distributed primarily to lower-income groups, who do indeed spend most if not all of what they receive.

It would indeed be difficult to defend the proposition that the first-year MPS is 0.8, which is the average for the five years discussed on the previous two pages. Yet empirical evidence abounds that the first-year MPS ranges between 0.4 to 0.7; without a doubt it is significantly higher than the average propensity to save, which is 0.065. The body of empirical research which supports this conclusion has been presented by economists spanning virtually the entire spectrum of political thought, ranging from Lawrence Klein to Milton Friedman. In the original Klein-Goldberger model, the authors estimated that the first-year MPS from wage income was 0.45, from nonwage income excluding farms was 0.59, and from farm income was 0.66. In his exposition of the permanent income hypothesis, Milton Friedman estimated that the first-year MPS was 0.67, significantly higher than the K-G figures for wage income but rather similar for nonwage income.

We now discuss two additional reasons why the majority of the Roth-Kemp tax cut is likely to go into saving rather than consumption. First, most of the tax reduction will accrue to middle and upper-income families, a sharp contrast to other personal income tax cuts of the past 15 years. Second, the reduction in marginal rates at top brackets will encourage saving because of the substantial increase in the after-tax rate of return.

To examine the first point, we need a profile of who pays how much in income taxes. Unfortunately, the most recent issue of Statistics of Income is 1977, since this publication always appears with a three-year lag. However, it should be possible to obtain a reasonable approximation of the 1981 profile simply by adjusting the income classification upward by 50 percent, since taxable income will have increased that much from 1977 to 1981. The way we proceed is to present the actual 1977 figures in Table 2, and then draw conclusions based on 1981 levels of income by adjusting the income figures up by 50 percent.

The Statistics of Income does not contain figures on the average saving rates at various levels of income, but we do have independent information on that from various consumer surveys. Without trying to finesse that data too much, these surveys generally show that consumer spending units (CSU's) with income below the median income do not save, and on balance have a dissaving rate of about 5 percent. This dissaving occurs for two main reasons: stage of life cycle, and misfortune temporary declines in income. Young CSU's just starting their careers and retired people generally dissave. Someone with an average income of $20,000 per year who finds that income cut to $10,000 through job layoffs, illness, or extended vacation will undoubtedly dissave. Thus the cross-section results are consistent with everyday observation.

CSU's with income ranging from the median income to approximately twice that income—which is $15,000 to $30,000 at 1977 levels—save about 5 percent of their income on balance. Those in the so-called upper income brackets save an average of 25 percent of their income. Bear in mind that saving includes pension plans and other forms of contractual saving, and that discretionary cash saving is likely to be somewhat below this 25 percent figure. It also includes saving from realized capital gains, which often has a very high MPS.

The figures in Table 2 show that only 16 percent of the tax cut will be received by those with income at or below the median—which provides a pretty good clue to the real reason why the liberals oppose Roth-Kemp. Another 40

TABLE 2.—DISTRIBUTION OF TAX CUT AND INCREASE IN SAVING BY INCOME CLASS

Income class (thousands)	Average tax per return	Average tax rate	Marginal tax rate [1]	Total after-tax income (thousands)	Total taxes paid (thousands)	10-percent tax cut (thousands)	Marginal propensity to save	Amount saved from 10-percent tax cut (thousands) [2]	Amount saved in 1977 (thousands) [3]
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
$1 to $2	62	0.040		7,666	4	0			
$2 to $3	131	.050		11,958	17	2			
$3 to $4	67	.019	0.14	15,261	139	14			
$4 to $5	188	.042	.15	18,998	499	50			
$5 to $6	301	.055	.16	22,481	866	87			
$6 to $7	416	.064	.17	26,640	1,334	133			
$7 to $8	508	.068	.19	26,511	1,642	164			
$8 to $9	636	.075	.19	28,156	2,082	208			
$9 to $10	754	.079	.19	30,465	2,482	248			
$10 to $11	897	.085	.19	30,870	2,783	278			
$11 to $12	1,043	.091	.22	30,224	2,955	296			
$12 to $13	1,235	.099	.22	32,671	3,516	352			
$13 to $14	1,381	.102	.22	33,813	3,792	379			
$14 to $15	1,525	.105	.22	32,724	3,793	379	0	0	0
$15 to $20	2,030	.117	.26	175,056	22,964	2,297	.03	68.9	5,252
$20 to $25	2,984	.134	.30	150,122	23,055	2,306	.05	115.3	7,506
$25 to $30	4,103	.150	.34	100,984	17,781	1,778	.08	142.2	8,079
$30 to $50	6,624	.181	.44	143,211	31,530	3,153	.14	441.4	20,050
$50 to $100	17,097	.260	.55	55,540	19,391	1,939	.23	446.0	12,774
$100 to $200	45,648	.349	.64	19,206	10,254	1,025	.36	369.1	6,914
$200 to $500	116,169	.418	.70	7,497	5,382	538	.50	269.1	3,749
$500 to $1,000	309,903	.466	.70	1,857	1,620	162	.50	81.0	929
$1,000 plus	1,044,554	.515	.70	1,755	1,862	186	.50	93.1	878

[1] Married, filing jointly.

[2] Col. (9) equals col. (7) times col. (8).

[3] Col. (10) equals col. (5) times col. (8).

percent of the tax cut will be received by what we could characterize as middle-income groups; $15,000 to $30,000 in 1977 or $22,500 to $45,000 this year. The final 44 percent of the tax cut will be received by those in the upper-income brackets. Thus it is clear that most of the Roth-Kemp tax cuts are directed at those CSU's which do the great majority of personal saving in this country.

The figures in Table 2 can also be used to estimate how much the after-tax rate of return on saving will be increased by the full three-year 30 percent across-the-board cut in personal income taxes. Assuming an average interest rate of 12 percent, a reduction in the marginal tax rate from 40 to 28 percent would increase the after-tax rate of return by 1.44 percent. We have previosuly estimated that a 1 percent in the after-tax rate of return for all CSU's would increase personal saving by $20 billion.

We can now use the figures in Table 2 to estimate how much of the increase in saving from the Roth-Kemp tax cut is due to higher income, and how much is due to a higher after-tax rate of return on personal saving. For if the latter is a significant proportion of the total increase in saving, it would help bridge the gap between our relatively high estimates of saving and those lower estimates which have been circulated by those who oppose Roth-Kemp.

Column 8 of Table 2 shows the estimated MPS for each income class; negative saving rates for incomes below $15,000 are not shown explicitly, although an average value of the MPS of —0.05 is assumed for incomes below $15,000. By multiplying the MPS by the amount of the tax cut (column 7) for each income classification, we can thus calculate the MPS weighted by the amount of tax reduction instead of by income class. Performing this calculation gives the result that the average propensity to save is twice as high—12.7 percent for a weighted average of those receiving tax cuts—as the 6.5 percent average for the overall economy. In other words, on average people receiving tax cuts from Roth-Kemp are likely to save twice as much as the economy-wide average.

By 1983 the total amount of tax reduction from Roth-Kemp will be approximately $120 billion, taking into account the growth in the income base as well as the lower tax rates. Ignoring rate of return considerations entirely for the moment, the MPS stemming from income changes alone is about 0.3 for the first year, 0.2 for the second year, and 0.1 for the third year, or a weighted average of about 0.2. Doubling this figure to take into account the skewed distribution toward upper-income tax cuts yields an estimate of the MPS of about 0.4, or an increase in saving of $48 on a tax cut of $120 billion.

In addition to this figure, we must now add the increase in saving which will occur because the after-tax rate of return on saving has risen. In order to determine this, first calculate the amount that will be saved in each income class by multiplying total after-tax income (column 5) by the MPS. The result is found in column 10. These figures are then weighted by the marginal tax rate for each income class, given in column 4. Performing this calculation gives the result that the average marginal tax rate for savers will decline from 45.0 to 31.5 percent. Under the assumption of a 12 percent interest rate, the after-tax rate of return will increase by 1.62 percent, hence increasing personal saving by an additional $32 billion.

Combining these two effects produces an increase in personal saving of $79 billion by 1983, as shown in Table 3.

This rather lengthy but nonetheless important calculation can be briefly summarized as follows. If taxes were to be reduced in strict proportion to personal income without changing tax rates—a 10 percent rebate, for example—a $120 billion tax cut phased in equally over three years would generate only $24 billion in increased saving. Because Roth-Kemp is skewed toward middle and upper-income taxpayers, the increase in saving generated by higher income alone will actually be $48 billion. Furthermore, the reduction in tax rates will increase the after-tax rate of return on saving sufficiently that personal saving will rise an additional $31 billion, yielding a total increase of $79 billion in 1983.

Because of these factors, we estimate that the rise in personal and corporate saving due to the Reagan tax plan will be substantially greater than the increase in the Federal government deficit for every year except 1981, when the decline in total saving will be a minuscule $1.9 billion. In 1982, for example, the Federal government deficit will be $48 billion larger than would be the case in the absence of any tax cuts, but personal saving will be $46 billion higher and corporate saving $6 billion higher. In addition, the surplus of state and local governments will rise by $2 billion because of the higher level of economic

TABLE 3.—EFFECT OF TAX CUT ON SAVINGS

	1981	1982	1983	1984	1985
Personal savings:					
No tax cut	92.2	91.8	81.3	54.4	39.7
Reagan tax cut	104.3	137.9	160.1	166.6	182.8
Difference	12.1	46.0	78.8	112.2	143.2
Undistributed profits:					
No tax cut	98.7	125.5	156.7	181.6	202.2
Reagan tax cut	96.6	130.8	171.1	214.8	263.7
Difference	−2.1	5.3	14.4	33.1	61.5
Depreciation:					
No tax cut	322.1	361.9	408.4	463.8	525.9
Reagan tax cut	322.1	362.4	410.8	470.6	539.2
Difference	0	0.4	2.4	6.8	13.4
Federal Government surplus/deficit:					
No tax cut	−37.2	11.8	71.3	131.0	190.5
Reagan tax cut	−49.2	−35.7	−3.4	2.8	−4.2
Difference	−12.0	−47.6	−74.7	−128.2	−194.7
State and local surplus/deficit:					
No tax cut	36.7	42.6	46.1	48.2	50.6
Reagan tax cut	36.8	44.6	51.0	54.8	59.1
Difference	.1	2.0	4.8	6.5	8.5
Total savings:					
No tax cut	512.5	633.8	763.8	879.1	1,008.8
Reagan tax cut	510.6	640.0	789.5	909.6	1,040.6
Difference	−1.9	6.2	25.7	30.5	31.8

activity. Thus total saving will rise by $6 billion. In 1983 the total gain in saving is $26 billion. The complete figures for the 1981–1985 period are given in Table 3.

Thus, far from causing a decline in saving and investment, the Roth-Kemp tax cut and reduction in depreciation lives will actually stimuate private sector saving enough that it will more than offset the increase in the Federal government deficit. The forces opposing tax reduction on spurious grounds have been exposed once again, and their arguments that personal tax cuts reduce saving are based neither on theoretical reasoning nor empirical evidence.

THE OUTLOOK THROUGH 1985: DECLINING INFLATION

The latest EEI five year forecast shows the rate of inflation declining to approximately 8 percent for both the implicit GNP deflator and the CPI by the end of 1985 under the Reagan program. How much of that is due to the explicit Reagan policies and how much of it represents a slowdown in the rate of inflation from other sources?

To answer that question, we ran what might be called a "business as usual" scenario in which we assume that the overall policies of the Carter Administration were continued for the next four quarters, and the budget deficit rose to $100 billion through rebates and other demand-side tax cuts. Even with that rather pessimistic assumption, we found a slight decline in the rate of inflation for several reasons:

1. Another tripling of oil prices over the next five years would be extremely unlikely. The second oil shock has finally resulted in some meaningful conservation, and the decontrol of oil would have dampened energy usage even if Mr. Carter had been reelected.
2. The reduction in corporate income tax and capital gains tax rates two years ago has already aided the venture capital industry, and will result in substantive gains in technology by 1985 even if taxes are not cut further.
3. The decline in the population of the teenage cohort will lead to a somewhat higher level of labor productivity even if marginal tax rates continue to rise.
4. The beating that the dollar took because Mr. Carter and Secretary Blumen-

that actually believed a weak dollar would help American industry would not have been repeated in coming years under any circumstances.

Our simulations indicate that the Reagan tax package will reduce inflation about 2 percent per year by 1985; the other 2 percent decline in inflation is due to events which were underway in any case. This may be an underestimate if the rational expectations school is correct and people suddenly change their habits once they realize inflation is under control, but we expect this to happen very gradually. COLA clauses and indexing of retirement benefits to the CPI are not going to disappear overnight even if people's expectations change 180 degrees.

Summary statistics for the Reagan tax cut compared to a policy which would generate a small budget surplus by 1985 using demand-size tax cuts are given in Table 4. The real growth of the economy is not that much lower but the differences in inflation by 1985 are much more substantial.

TABLE 4.—COMPARISON OF DEMAND-SIDE AND SUPPLY-SIDE TAX CUTS

	1981	1982	1983	1984	1985
GNP, current dollars:					
Demand-side tax cut	2,938.8	3,368.9	3,839.3	4,335.1	4,858.2
Reagan tax cut	2,935.4	3,370.3	3,854.4	4,344.2	4,851.9
Difference (percent)	−0.1	0	0.4	0.2	−0.1
GNP, constant dollars:					
Demand-side tax cut	1,510.9	1,588.3	1,660.8	1,722.3	1,775.9
Reagan tax cut	1,509.0	1,590.3	1,669.5	1,732.0	1,789.9
Difference (percent)	−0.1	0.1	0.5	0.6	0.8
CPI, 1967=100:					
Demand-side tax cut	274.8	303.1	333.4	366.5	401.9
Reagan tax cut	274.7	302.4	331.6	362.9	394.9
Difference (percent)	0	−0.2	−0.5	−1.0	−1.7
Employment, millions:					
Demand-side tax cut	92.2	96.8	100.6	104.1	106.3
Reagan tax cut	92.4	96.9	100.6	104.4	106.9
Difference	0.2	0.1	0	0.3	0.6
Unemployment rate, percent:					
Demand-side tax cut	7.6	6.4	5.6	5.0	5.0
Reagan tax cut	7.5	6.4	5.6	5.0	5.0
Difference	−0.1	0	0	0	0
Consumption, billion 1972 dollars:					
Demand-side tax cut	955.7	989.1	1,027.7	1,070.5	1,109.8
Reagan tax cut	953.3	989.6	1,030.4	1,073.2	1,111.5
Difference (percent)	−0.3	0	0.3	0.2	0.2
Disposable income, billion 1972 dollars:					
Demand-side tax cut	1,038.5	1,075.7	1,115.7	1,154.5	1,194.9
Reagan tax cut	1,032.3	1,079.9	1,125.1	1,164.9	1,204.4
Difference (percent)	−0.6	0.4	0.8	0.9	0.8
Treasury bill rate, percent:					
Demand-side tax cut	10.82	9.94	10.02	9.40	8.48
Reagan tax cut	10.78	9.82	9.84	9.21	8.26
Difference	−0.04	−0.12	−0.18	−0.19	−0.22
Federal Government surplus/deficit, billion dollars:					
Demand-side tax cut	−62.0	−35.6	−6.9	15.0	29.7
Reagan tax cut	−49.2	−35.7	−3.4	2.8	−4.2
Difference	12.8	−0.1	3.5	−12.1	−33.9
Fixed business investment, billion 1972 dollars:					
Demand-side tax cut	154.6	170.8	192.9	210.2	223.4
Reagan tax cut	154.9	173.0	197.8	216.3	231.1
Difference (percent)	0.2	1.2	2.5	2.9	3.5

Even though the rate of inflation declines "only" to 8 percent with the Reagan fiscal policy, the outlook is very bullish for major sectors of the economy. In particular, it contains the emergence of a full-fledged investment boom which will last through 1983 and into 1984. This boom will be primarily fueled by the reduction in depreciation lives, further expected cuts in capital gains taxes, and the increase in total private sector saving which is the hallmark of the Reagan package. However, the boom in capital spending also reflects (a) the carryover effect from the 1979 tax cuts, (b) sorely-needed modernization which has been postponed for the past five years, and (c) investment in energy-saving plant and equipment, whether or not the additional investment tax credit for that purpose is passed.

Another welcome development in this forecast is an increase in new car sales to an average rate of 12 million during the 1983–85 period, even though imports probably will capture one-third of the market. Besides increasing levels of real disposable income, this optimism about car sales reflects continued interest in more fuel-efficient automobiles, corporate average fuel economy standards reach 27.5 mpg in 1985. The figure of 8 million domestic sales is less exciting, but at least represents a reasonably profitable level for the industry as a whole, if not for each individual firm in the industry.

Housing starts are expected to average 2 million units per year over the same period, based in large part on the strength in demand driven by demographic factors. With gradually decreasing inflation, interest rates fall over the forecast period, and hence availability of mortgage money becomes a much less serious problem. Summary statistics are given in Table 5.

TABLE 5.—SUMMARY OF STANDARD FORECAST, 1981–85

	1981	1982	1983	1984	1985
GNP, current dollars: Standard forecast	2,935.4	3,370.3	3,854.4	4,344.2	4,851.9
Percent change	11.7	14.8	14.4	12.7	11.7
GNP, constant dollars: Standard forecast	1,509.0	1,590.3	1,669.5	1,732.0	1,789.9
Percent change	1.8	5.4	5.0	3.7	3.3
CPI, 1967=100: Standard forecast	274.7	302.4	331.6	362.9	394.9
Percent change	11.3	10.1	9.7	9.4	8.8
Implicit GNP deflator: Standard forecast	194.5	211.9	230.8	250.8	271.0
Percent change	9.6	8.9	8.9	8.6	8.1
Employment, millions: Standard forecast	92.4	96.9	100.6	104.4	106.9
Unemployment rate, percent: Standard forecast	7.5	6.4	5.6	5.0	5.0
Consumption, billion 1972 dollars: Standard forecast	953.3	989.6	1,030.4	1,073.2	1,111.5
Percent change	2.1	3.8	4.1	4.2	3.6
Disposable income, billion 1972 dollars: Standard forecast	1,032.3	1,079.9	1,125.1	1,164.9	1,204.4
Percent change	1.3	4.6	4.2	3.5	3.4
Treasury bill rate, percent: Standard forecast	10.78	9.82	9.84	9.21	8.26
Net exports, billion 1972 dollars: Standard forecast	31.9	23.8	21.3	18.3	20.6
Federal Government surplus/deficit billion dollars: Standard forecast	−49.2	−35.7	−3.4	2.8	−4.2
Fixed business investment, billion 1972 dollars: Standard forecast	154.9	173.0	197.8	216.3	231.1
Percent change	−1.8	11.7	14.4	9.4	6.8
Housing starts, millions: Standard forecast	1.59	2.01	2.14	1.99	1.97

In summary, I think we are in the beginning stages of a major move to lower rates of inflation and an increase in productivity which will approach 2 percent per year in 1983 and later years. The rate of inflation should decline to 8 percent by 1985, with an outside chance that it will fall to 6 percent if all aspects of the Reagan program fall into place and inflationary expectations really are curbed.

Having sallied forth with this burst of optimism, however, it is once again necessary to point out that these benefits will not occur overnight and substantive results will not be noticeable until 1983. The forecast that the rate of inflation will decline to 6 percent next year because of an overnight shift in expectations is completely out of the ballpark and ignores all the institutional constraints and rigidities which cause wage and price spirals in the first place. Even more important, the clear and present danger of promising too much still remains. If the Reagan Administration does not specifically disavow such pie-in-the-sky forecasts, the American public will be led to expect far too much from supply-side economics, and as a result could quickly become disillusioned and clamor for a return to the old threadbare demand-side concepts. Barring

this perverse reaction to overstated claims of supply-side economics, however, the economy definitely seems to be heading for calmer and more productive waters over the next five years.

Representative REUSS. Thank you very much Mr. Evans. Now, Professor Musgrave.

STATEMENT OF RICHARD A. MUSGRAVE, H. H. BURBANK PROFESSOR OF POLITICAL ECONOMY, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

Mr. MUSGRAVE. Mr. Chairman, I would like to summarize my statement and submit the longer prepared statement for the record, if I may. The answer to your question, whether, in considering supply-side effects, we must not also first take account of the effect in the slack in the economy, I think comes in two parts. One is difficult and one is simple. The simple part, relates to the short run, where the demand effects dominate and supply-side effects are bound to be small. The hard part relates to the long run, where supply effects may be up, but with uncertain force.

Tax reduction, so the argument goes, more or less pays for itself. As rates go down, the base goes up, so that revenue stays put. Now, there are three ways in which recoupment may come about, and they should be distinguished. First, the resulting increase in disposable income raises expenditures, which in a stable economy and with an ample reserve of unused resources, may raise the output. Accordingly, with output rising, so does the tax base, and in this way, say 20 percent of the initial loss may be recouped.

Second, the very same initial rise in expenditures, under less favorable conditions, may add to inflation rather than to real output. The tax base, again, rises; revenue goes up; and recoupment, allowing for bracket creep, may even be higher.

Third, tax reduction may increase the supply of labor and raise capital formation, thereby adding to output. Even without the initial resource slack, the tax base rises once more, and revenue is recouped—depending on the magnitude of supply-side effect.

Of these responses, the first exhibits Keynesian economics at its best, and approximates the outcome of the Kennedy tax cut of 1964. The second response, of course, is all to the bad, with recoupment only reducing the inflation damage somewhat. Under present conditions, this would be the major outcome of a 30 percent tax cut, unless matched by expenditure reduction or offset by a large and speedy supply-side response. So far there can be no disagreement. It is just a question of how large this response will be.

To obtain a handle on the magnitudes involved, my prepared statement considers a simplified, step-by-step illustration of how a 30-percent income tax cut might work out allowing for both labor supply and capital formation effects. Based on recent estimates, it appears that a 30 percent cut might raise labor supply by perhaps as much as 4 percent; and that this might lead to revenue recoupment of about 20 percent.

I also arrive at an increase in saving due to both the resulting increase in disposable income, and in the net rate of return. The level

of household saving, I estimate, might go up by 30 percent, which is quite a bit less than was suggested in the preceding paper. I would add that while the average rates of saving differ greatly along the income scale, economists have noted that marginal rates of saving do not differ very greatly. After 3 years, the increase in saving and the resulting gain in productivity and GNP might add another 3 percent to the recoupment rate.

We thus get an overall recoupment rate of, say 30 percent—a not-insignificant amount, but of course, far less than has been suggested.

More important than recoupment, however, is what happens to the demand and supply sides of the economy. The initial outcome would involve a sharp increase in demand, say by $150 billion, with little supply-side response in real output. After 3 years, the gap, I suggest, might be reduced to, say, $75 billion, but it would still be substantial. As time goes on, supply side effects, of course, will rise further. But there can be no question that over the earlier part of the period, these effects will lag far behind, and that there will be a substantial excess of increase in demand.

Under current conditions of the economy, the tax cut would largely feed inflation. After having just taken the economy through a severe recession, with little pay off in inflation control, it would be foolish to rush back into the same dilemma.

The President, aware of this, has wisely urged that the tax and expenditure cuts be undertaken in conjunction, but to assure this outcome he should not have asked Congress to legislate a 3-year tax cut in advance. Legislation, I believe, should followthrough year by year, depending on the outlook and on what has been accomplished on the expenditure side.

Suppose now that the President's tax and expenditure recommendations are enacted, and implemented, in unison. The expansionary demand effects of tax reduction will then largely wash out the restrictive effects of expenditure cuts. The budget for fiscal 1982 will be somewhat more expansionary than for 1981, but not much. And so for the subsequent years.

The net effect will be fairly neutral, and if supply-side effects are minor in the short run—as I think they will be—the near-term inflation situation will remain pretty much as it is. The program, therefore, cannot be faulted for being excessively expansionary, but the administration's economic projections that go with it seem to me exceedingly optimistic. Real output is to rise by over 12 percent over the next 3 years. Inflation is to fall to 6 percent. And the budget is to be balanced by 1984.

The prospect, of course, is attractive, but we are not told how it will come about. Return to high employment may raise GNP by, say, 4 percentage points, but this leaves 8 percent to be accounted for. Although some of the factors which have retarded productivity growth in recent years should receed, this is highly optimistic. It is also hard to see how, with an underlying core inflation of over 10 percent, wage contracts and other adjustment will permit the projected decline in inflation. Especially so in the context of rapid rising employment and the administration's vehement rejection—unfortunately, I think—of any form of incomes policy.

For all this to come about, there would have to be a huge and rapid supply-side effect on a scale which seems quite unlikely. Yet; if the economic projections do not work out, neither will those for the budget.

In all, I can understand the administration's plan as a design for budget shrinkage, but given the built-in inflation rate which we have, I do not expect it to do much about the inflation problem. Perhaps, indeed, this reflects the underlying sense of priority.

There remains one factor to be noted: Inflation behavior is strongly affected by expectations; therefore, if people believe that the program will conquer inflation, as they may well, under the steady impact of messages and media, then they may act accordingly; they may save more, wage escalation may slow down, and pricing polices become less aggressive. The prophecy may become self-fulfilling, whether the underlying reasoning is correct or not.

Irrational, perhaps, rather than rational expectations are important. I find it difficult to judge this factor, but would rather not rely on it. Disappointed expectations, if things go less well, will make behavior revert that much more sharply. This much for the impact of the President's budget plan on inflation and the state of the economy. It is less drastic than I had expected, but I remain troubled by the context in which the program is presented.

Our economy is not at the brink, as seems to be suggested, nor are the Federal budget and the so-called bureaucrats the enemy of the people, as it is made to appear. Neither is the economy choked to death by taxation. I do not wish to sound complacent and to say that everything is fine, but I do not expect sound prescription to come from mistaken and overdrawn diagnoses.

To begin with, we are told that the budget is hemorrhaging, suggesting that we have reached the final stage of expenditure explosion. In fact, the ratio of expenditures to GNP in 1960 was 19.2 percent; and in 1979, it was 21.3 percent—hardly an explosive trend.

While the expenditure-to-GNP ratio has moved up since 1979, this increase does not reflect, as hemorrhaging would suggest, a wide and terminal orgy of new legislation and program expansion by the Congress. Very largely, it mirrors the course of inflation. While the usual argument is that the budget must be stopped to check inflation, it is equally true, or more so, that inflation must be stopped if the budget is to be checked.

Next, it is made to appear that the Federal deficit has been the decisive cause of inflation. This is just simply not so. The budget cannot be blamed for that part of the problem which has originated on the cost side, including the oil crisis, and even on the demand pull side there have been many other factors involving the private sector as well. I would note that consumer credit alone has increased by about five times as much as the demonetarization of the Federal debt.

Finally, it is asserted that the economy is choking under an excessive and ever-rising tax burden. In fact, the Federal tax-to-GNP ratio was 9.2 percent in 1960 and close to 20.7 percent in 1980. The entire increase moreover was accounted for by the payroll tax, the ratio of other taxes to GNP having declined.

Defects in the tax system there are, and they should be removed,

especially those imposed in recent years by the impact of inflation. But it is simply incorrect to assert that taxation has been the source of declining productivity growth. To be sure, the economy has serious problems, but we are not at high noon, and there is much to be destroyed as well as to be saved.

Looking at the expenditure side of the budget, voters have signaled Congress to cut waste and to remove outdated programs. As shown in the February CBO study, there are plenty of opportunities for such action. While I have not had time to study the budget proposals in detail, I make some comments in my prepared statement on the proposed pattern. Let me here leave specifics aside and simply note that the general rule should be to value programs at their merit and to repeal or revise where they do not stand up. But we should not destroy or severely dilute valuable public services and income supports simply because inflation needs to be checked. Such restraint in total demand as is needed should be spread evenly over both the private and the public sector. We should not abandon public essentials only to make room for private extravagance.

In particular, we should not cut surreptitiously by removing indexing of the social security program, thus forcing the erosion of contractual obligations. I should also note that supply-side effects apply to public services no less than to tax cuts. Inadequate support for health, education, and research, for instance, carries negative rates of return no less than those imposed by taxation. The same holds for the social tensions and costs created by insufficient concern for a cohesive society.

Turning now to the revenue side, I agree with the President's approach of an across-the-board income tax cut, rather than to undertake selective changes at this point. I do so especially since bracket creep over the years has added substantially to the share of the burden borne over the middle range. I am also in favor of bracket indexing, but care need be taken to design further incentives so as to cause the least damage to the equity of the tax structure.

Depreciation reform to allow for inflation is called for, but it should be provided properly. The 10–5–3 proposal does so in a highly inequitable and inefficient way. High priority should be given to terminating the mounting flood of tax-exempts. Housing preferences which have been a main source of capital diversion from more productive uses should be cut back. Capital gains should be adjusted for inflation, but having done so, they should be taxed as ordinary income. Raising the exclusion rate is both inefficient as a growth incentive and unacceptable on equity grounds. Further relief, if needed, should be through the extension of the investment credit. There should be no new tax expenditures which puncture the tax base without significantly aiding growth.

The President again pointed out that tax policy should not be used for regulatory purposes. He should note that one of the main ways in which tax policy has been thusly used is through the creation of tax loopholes—that is to say, through less than full taxation of the income base.

Finally, I would note that tax incentives for growth tend to focus on high income recipients, a result which can hardly be avoided since

capital incomes weigh more heavily as we move up the bracket scale. This pleases some and distresses others, but it burdens the growth issue in an unhelpful way. To neutralize it, more thought should be given to ways in which lower and middle income recipients are included.

As the Congress turns to consider the administration program, these implications for the fiscal structure should be kept in mind. Inflation and productivity are important, but they are not the only problem. If this is overlook, the fiscal system, while being billed as the villian, may well turn out the victim of the plot, and this, after the shouting is over, would prove most costly to the American people. Thank you.

[The prepared statement of Mr. Musgrave follows:]

Prepared Statement of Richard A. Musgrave

This is a critical time at which to examine the course of fiscal policy, and I am pleased that the Committee has invited me to participate in its discussion. I begin with the Chairman's question whether the demand effects of a tax cut will not run ahead of supply side responses, so that slack in the economy must be accounted for in determining policy. I then apply my conclusions to the President's fiscal plan, its effects upon the economy and the fiscal system.

Types of Recoupment

My answer to the Chairman's question comes in two parts, one easy and certain, the other difficult and uncertain. The easy part relates to the short run, where demand effects dominate and supply side effects are bound to be small. The hard part relates to the long run where supply effects may build up, but with uncertain force. Tax reduction, so the argument goes, more or less pays for itself. Even though rates are lower, revenue will not fall because the base increases. Now there are three ways in which recoupment may come about, and they should be distinguished:

1. A 30 percent income tax cut over three years would (at present levels of GNP) raise disposable income by about $90 billion. Assuming a stable economy and an ample reserve of unused resources, the multiplier effect might raise the response of private-sector expenditures to, say, $160 billion, with real output rising accordingly. With an average tax rate of 20 percent, revenue would go up by $16 billion, recouping 18 percent of the initial loss.
2. The initial rise in expenditure, under less favorable conditions, (inadequate resource slack and built-in inflation) may add to inflation, rather than to real output. But revenue again rises; and allowing for bracket creep, the recoupment rate may even be higher than under (1).
3. Tax reduction may increase the supply of labor and raise capital formation, thereby adding to output, even without initial resource slack. The tax base rises once more and revenue is recouped, with the rate of recoupment depending on the magnitude of the "supply side" effect.

Of the three responses, the first exhibits Keynesian economics at its best and approximates the setting of the Kennedy tax cut of 1964. The second response is all to the bad, with recoupment only reducing the inflation damage somewhat. Under present conditions, this would be the major outcome of a 30 percent tax cut, unless matched by expenditure reduction or offset by a large and speedy supply side response. Can we expect such a result?

Magnitude of Supply Response

To obtain a handle on the magnitudes involved, I consider a simplified step by step illustration of how a 30 percent income tax cut might work out. I will argue from current levels of GNP, and for the time being disregard inflation. Economists have long noted that tax reduction will encourage work by increasing its reward and discourage it by making people better off. The balance might go either way. Evidence shows that the net effect is positive, quite weak for heads of household but strong for secondary workers. Over all, it has been estimated

that a 30 percent income tax cut would raise hours by 3 to 4 percent. Assuming labor income to rise accordingly, which it may not, earnings would gain by $60 billion. Assuming this to be reflected fully in the tax base and applying an average rate of 20 percent, this suggests a recovery of about $15 billion or 13 percent of the initial loss. However, recoupment is estimated to be larger because high bracket labor will respond more strongly. Thus, an overall recoupment rate of, say 25 percent may emerge.[1] Though significant, this far from supports the expectation that all or most of the revenue loss will be recouped. Moreover, the full response may well take several years to develop, as new work arrangements must be found.

Effects on capital formation have been a concern of tax analysts for many years. While traditional emphasis has been on investment incentives, stress is now on increase in saving. Supply side reasoning builds on the assumption of a full employment economy, so that there can be no increase in investment without more saving. As taxes are cut, household saving will rise since not the entire increase in disposable income is spent on consumption. With a 30 percent income tax cut, disposable income will go up by $90 billion of which, say, two-thirds will go to the under $50,000 group. With an average savings rate of 6 percent, and allowing for a higher response at the margin, suppose that 10 percent of the income gain or $9 billion is added to household saving. A further increase in saving may come about because the tax cut raises the net return to the saver. To illustrate, suppose that the rate of return is 15 percent. With a 30 percent tax the after-tax return is 10 percent. Allowing for an inflation rate of 8 percent, the real after-tax return is 10 minus 8 or 2 percent. After a 30 percent tax cut, the after-tax return rises to 11.5 percent and the real after-tax return becomes 3.5 percent. There has been a 75 percent increase in the real after-tax return. Suppose that household savings rise one third as fast or by 25 percent. This is controversial, but a middle of the range assumption. With household savings of, say, $125 billion, the gain would equal $31 billion, giving a total increase in saving of $9 plus $31 or $40 billion. After three years, this would add $120 billion to the capital stock, with a resulting increase in GNP of, say, $15 billion. Taking $9 billion thereof to be reflected in the income tax base, another $3 billion or 3.3 percent might be added to recoupment. Combining the results of labor supply and capital growth, we might get a total recoupment rate of from 30 to 35 percent.

Combining demand and supply side effects, what do we find? For the first year or two, supply side effects are negligible, while demand goes up rapidly. With a 30 percent tax cut demand rises by, say, $160 billion, with most of the gain reached within a year. This compares with a supply side effect of, say, $60 billion for work plus $15 billion for saving or $75 billion in all, leaving a gap of $85 billion. But supply effects will be slower, and the early gap will be much larger. As time goes on the supply effect will gain further, and its magnitude is uncertain; but there can be no question that for the earlier period there will be a substantial excess of increase in demand. These, to be sure, are rough figures. They disregard inflation, argue from the current income base and overlook complex interactions. However, they suggest the orders of magnitude that can be expected; and, unlike a fifty equation model, they permit us to observe what goes on.

ADMINISTRATION PROGRAM

Moving from this picture to the President's program, a sharp distinction must be drawn between (1) the effects of the tax cut taken by itself and (2) the combined effect of the proposed tax and expenditure cuts.

The President, wisely, has urged that the tax and expenditure cuts be undertaken in conjunction. To permit the tax side to run ahead by itself would surely be highly inflationary. Having led the economy into a severe recession without significant gain inflation control, it would be folly to rush back into the same dilemma. But if the requirement for balanced adjustment on both sides of the budget is to be met, Congress should not follow the President's request for legislating a three-year tax cut in advance. Legislation should follow through year by year, depending on the economic outlook and on what has been accomplished on the expenditure side.

---

[1] See Jerry Hausman, "Income and Payroll Tax Policy and Labor Supply," National Bureau of Economic Research, Working Paper No. 610, Dec. 1980. Hausman, along with other economists, is concerned primarily with the resulting reduction in "efficiency cost," rather than the increase in output and labor supply.

Suppose now that the President's tax and expenditure recommendations are enacted and implemented in unison. In this case the expansionary demand effects of tax reduction will largely wash out the restrictive effects of expenditure cuts. The budget for Fiscal 1982 will be somewhat more expansionary than that for 1981, but the difference will be small and the shift considerably less than from 1980 to 1981. The same holds when moving from 1982 to 1983 and on to 1984. The demand impact of the net budget change will be fairly neutral; and if supply side effects are minor in the short run, the program will leave the nearer term inflation problem pretty much as it is.[1]

The program therefore cannot be faulted for being excessively expansionary, but I find the Administration's economic projections that go with it to be exceedingly optimistic. Real output is to rise by over 12 percent over the next three years, inflation is to fall to 6 percent and the budget is to be balanced by 1984. Return to high employment may make for a real GNP growth of, say 4 percentage points, but this leaves 8 percent to be accounted for. Although some of the factors which have retarded productivity growth in recent years should recede, this seems a highly optimistic figure. It is also hard to see how, with an underlying core inflation of over 10 percent, wage contracts and other adjustments will permit the projected decline in inflation, especially so in a context of rapidly rising employment, and the Administration's vehement rejection of any form of incomes policy. For all this to come about, there must be huge and rapid "supply side" effects, on a scale which to me seem quite unlikely. Yet, if the economic assumptions do not materialize, neither will the deficit projections. In all, I can understand the Administration's plan as a design for budget shrinkage; but given the built-in inflation rate and other troubles I do not expect it to do much about the inflation problem. Perhaps this reflects the underlying sense of priority.

There remains one factor to be noted. Inflation behavior is strongly affected by expectations. Therefore, if people believe that the program will conquer inflation as they may well under the steady impact of messages and media—then they may act accordingly. They may save more, wage escalation may slow down and pricing policies may become less aggressive. The prophecy may become self-fulfilling, whether the underlying reasoning is correct or not. Irrational, no less than rational, expectations are important. I find it difficult to judge this factor, but I would rather not rely on it. Disappointed expectations, if things go less well, will make behavior revert that more sharply.

ROLE OF FISCAL SYSTEM

This much for the impact of the President's budget plan on inflation and the state of the economy. Its impact is less drastic than I had expected, but I remain troubled by the context in which the program is presented. Our economy is not at the brink as seems to be suggested. It has done quite well in some respects. There has been an enormous absorption of increased labor force, and the ratio of capital formation to GNP has stood up. Nor is the Federal budget, with its so-called bureaucrats, the enemy of the people as it is made to appear. I do not wish to sound complacement but I do not expect sound prescription to come from mistaken and overdrawn diagnosis.

To begin with, we are told that the Federal budget is "hemorrhaging," suggesting that we have reached the final stage of expenditure explosion. In fact, the expenditure to GNP ratio in 1960 was 19.2 percent and by 1979 it had risen to 21.3 percent, hardly an explosive trend. Federal as percent of total employment fell. Although the expenditure to GNP ratio has moved up since 1979 and is above 23 percent this year, the increase has been in defense, interest and income support, the costs of which have risen with inflation. The recent increase does not reflect, as hemorrhaging would suggest to most people, a wild and terminal orgy of new legislation and program expansion. Very largely, it mirrors the course of inflation. While the usual argument is that the budget must be stopped to check inflation, it is equally true, or more so, that inflation must be stopped if the budget is to be checked.

Next, it is made to appear that the Federal deficit has been the decisive cause of inflation. This is simply not so. The budget cannot be blamed for that part

[1] See Jerry Hausman, "Income and Payroll Tax Policy and Labor Supply," National Bureau of Economic Research, Working Paper No. 610, December 1980. Hausman, along with other economists, is concerned primarily with the resulting reduction in "efficiency cost," rather than the increase in output and labor supply.

of the inflation problem which has originated from the cost side, including the oil crisis. Nor has it been the only contributor to demand pull. Expansion of consumer credit during the seventies alone has been five times as large as has the monetization of the Federal debt; and household deficits are no less inflationary than those of the budget. To be sure, fiscal and monetary policy, over the last decade, have been mostly supportive of inflation. But this is not to say that only they have caused inflation, as if the private sector had been altogether passive.

Finally, it is asserted that the economy is choking under an excessive and ever rising tax burden. In fact, the Federal tax to GNP ratio was 19.2 percent in 1960 and rose to 20.7 percent in 1980. The entire increase, moreover, was accounted for by the payroll tax, the ratio of other taxes to GNP having declined. Defects in the tax system there are and they should be removed, especially those imposed in recent years by the impact of inflation. It is popular to assert that taxation has been the source of declining productivity growth, but there are many other reasons as well, such as changes in labor force composition and consumption patterns. Most industrial countries still have higher tax to GNP ratios than we do, and some have done quite well. Declining productivity growth has not been a U.S. phenomena only. It has been wide spread. In brief, our economy has serious problems, but we are not at high noon, and there remains much to be destroyed as well as to be improved.

Beginning with the expenditure side of the budget, voters have signalled Congress to cut waste and to remove outdated programs. As shown in the February CBO study, there are plenty of opportunities for such action. While I have not been able to study the proposed list of budget cuts closely, I note that some prime candidates are included, such as rural electrification and removal of subsidies to airports and to inland water ways. I also note that there is little attention to the traditional pork barrel items such as flood control and power projects. Some of the cuts, such as the sharp reduction in foreign aid, seem unwise to me and I am bothered by the anti-conservation stance of various proposals. Nor do I agree that culture should be left to philanthropy (especially since a large part thereof is paid for by the Treasury anyhow) or that national programming in public television is dispensable. The President is to be commended for his intent to protect safety nets, but a substantial part of the cuts comes from programs directed at the poor, and the net appears to be torn in some places. Such programs need be improved where defective, but that means curtailing abuse and closer targeting at the truly needy. It also means work requirements, especially for young recipients, together with provision of available jobs. These objectives are not readily achieved by overall program cuts or elimination, as suggested for parts of CETA. They require more rather than less specific legislation, and unhappily, involve more interference with the affairs of those who qualify. Moreover, poverty is not a problem that can be passed on to the states. It has to be accepted as a national responsibility.

Specifics aside, the general rule should be to value programs at their merit, and to repeal or revise where they do not stand up. But beyond this, we should not destroy or severely dilute valuable public services and income supports simply because inflation need be checked. Such restraint in total demand as is needed to check inflation should be spread evenly over both the public and the private sectors. We should not abandon public essentials, only to make room for private extravagance. Private demand needs retarding as well. In particular we should not cut surrepticiously by removing indexing, thus forcing erosion of contractual obligations acquired under the Social Security program. Finally, we should note that supply side effects may apply to public services no less than to tax reduction. Inadequate support for health, education and research, for instance, may carry negative rates of return no less than those imposed by taxation. The same holds for social tensions and costs created by insufficient concern for a cohesive society.

Turning to the revenue side, I agree with the President's approach of an across-the-board income tax cut, especially since budget creep over the years has added substantially to the share of the burden borne over the middle range. But care need be taken to design growth incentives so as to support, or do least damage to the equity of the tax structure. Depreciation reform to allow for inflation is called for on both grounds, but it is distressing that after so much discussion the Administration has fallen back on the 10–5–3 proposal. This proposal provides the adjustment in a highly inequitable way, including even negative rates of tax in some sectors. A better procedure should be chosen.

High priority should be given to terminating the mounting flood of tax exempts. Housing preferences have been a main source of capital diversion from more productive uses and should be cut back. Capital gains should be adjusted for inflation but, having done so, they should be taxed as ordinary income. Raising the exclusion rate is both inefficient as a growth incentive and unacceptable on equity grounds. Further relief if needed should be through extension of the investment credit. There should be no new tax expenditures which puncture the tax base without significantly aiding growth. As shown in a recent Treasury study, only one-third of capital income now enters the individual income tax.[2] I should like to see it included fully, while withdrawing the corporation tax in return. In short, our traditional objectives of tax reform still stand, and should not be surrendered to wrong arguments about the source of inflation and reduced productivity growth.

Note also that tax incentives for growth tend to focus on high income recipients, a result which can hardly be avoided since capital income weighs more heavily as we move up the bracket scale. This side effect pleases some and distresses others, but it burdens the growth issue in an unhelpful way. To neutralize it, and to secure growth with equity, as I called it 20 years ago, more thought should be given to ways in which lower and middle recipients are included.

As the Congress turns to consider the Administration program, these implications for the fiscal structure should be kept in mind. Inflation and productivity are important but they are not the only problem. If this is overlooked, the fiscal system, while being billed as the villian, may well turn out the victim of the plot. And this, after the shouting is over, would prove most costly to the American people.

Representative REUSS. Thank you very much, Professor Musgrave. Professor Meiselman.

STATEMENT OF DAVID I. MEISELMAN, PROFESSOR OF ECONOMICS AND DIRECTOR, GRADUATE ECONOMICS PROGRAM IN NORTHERN VIRGINIA, VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY, AND OPPENHEIMER & CO., INC., NEW YORK, N.Y.

Mr. MEISELMAN. The Joint Economic Committee is to be commended for conducting these hearings on the question of whether tax cuts are inflationary. It seems to me that this is in the best Joint Economic Committee tradition of trying to bring the best of vigorous, nonpartisan technical analysis to bear on important public policy issues. I am grateful for and welcome the opportunity to present my views and hope that they will help to dispel some of the current confusion on the relationship of tax cuts to inflation and interest rates.

The relationship between tax cuts and inflation appears to be one of the most misunderstood in current public policy discussion. The connections between tax cuts and inflation and tax cuts and interest rates also seems to be misunderstood and misinterpreted by financial markets. Most of what we hear about the presumed connections between reducing tax rates and the effects of the rate reductions on inflation and on interest rates is simply wrong. In many respects, the flawed analysis stem from applying an invalid Keynesian theory which overlooks both the central role of monetary policy in the inflation drama as well as the impact of taxes on output.

I will present several related propositions about inflation, fiscal

---

[2] Eugne Stuerle. "Is Income from Capital Subject to Individual Income Taxation?", Dept. of the Treasury, OTA Paper 42, Oct. 1980.

policy, and interest rates. Where possible I will also present some of the evidence supporting these propositions. I will then summarize some of their implications for current issues, especially the impact of tax cuts and budget cuts on inflation, interest rates, and economic growth. I regret that I cannot go into greater detail in this brief presentation, but I will be pleased to make my statistical analysis available to this committee.

I deal first with inflation. Inflation occurs when the quantity of moneys expands faster than output. This relationship may well be the most extensively tested proposition in all of economics with few, if any, exceptions. The quantity of money controls aggregate demand, and there is a close connection between the nominal stock of money and nominal gross national product, which is the best measure of total spending. Output, which is to say aggregate supply, depends on other factors, such as available inputs of labor, capital, raw materials, and the state of technology, as well as the incentives to put them to efficient use.

To see this relationship, I turn to chart 1, which is in my prepared statement. Chart 1 shows the level of prices, here the GNP deflator, and the relationship of prices to the ratio of money to output. I use the old M2 measure of money, which unfortunately has not been published by the Federal Reserve for the past year. Thus, the chart which covers the period since 1960 ends in 1979, not 1980.

The chart shows clearly that both money and output affect prices. The relationship between prices and the ratio of money to output is very close indeed. When money increases faster than output, prices rise and proportionately so. The close relationship between prices and the ratio of money to output does not mean that in principle tax policy has no bearing on the level of prices. Given this dependable relationship, it is important in analyzing the impact of public policy proposals on inflation that we ask how the proposed change will affect either, No. 1, the stock of money or, 2, output. Ignoring either the monetary or the output consequences means that we are likely to be in serious error.

I regret that the two previous speakers focused entirely on output, and nobody mentioned monetary policy. I deal first with output, the supply side of the central relationship explaining inflation. Changes in tax rates or other provisions of the Tax Code will affect inflation if these changes alter output. Tax increases that penalize savings and investment or discourage work will result in lower output and thereby in higher prices. It makes no difference whether such tax increases are explicitly legislated by Congress or whether effective tax rates are implicitly enacted by money-induced inflation which pushes individuals into higher tax brackets or causes businesses to pay taxes on fictitious profits that result from the requirements of mandated historic cost accounting.

Because different tax changes may have different impacts on output, one should not lump together all tax increases or decreases. Instead, careful analysis of the effects of proposed tax changes on output is essential. I may add that in the past and to this day, most tax analysis is flawed because it focuses only on presumed aggregate demand effects and largely ignores supply. Tax rate reductions that lessen

the disincentive effects of the tax system will cause output to increase. For a given stock of money, more output results in lower prices. Thus, supply enhancing tax cuts lead to lower prices. In turn, lower prices lead to lower market interest rates.

For example, consider what would follow from adoption of faster depreciation. Initially, some businesses may pay less tax to the Federal Government. Business cash flow rises, and before anything else takes place, Treasury receipts fall. Treasury borrowings rise, but these are fully offset by reduced business borrowings. Business interest rates stay the same.

But because there is now more incentive for capital formation, business will invest more and produce more. Increased output will make prices lower than they would otherwise be. The inflation premium component of market interest rates will decline, causing interest rates to fall. The increased post-tax rate of return on business investment will lead to an increase in real or inflation-adjusted interest rates. Because the inflation premium is by far the major factor in the current record high interest rates, it is likely that market rates would end up lower and real rates would end up higher as a result of the faster capital recovery provisions.

Increased output and increased real income will provide some of the saving to finance the capital expansion. In addition and perhaps no less important, higher post-tax returns will also induce more saving.

Of course, another way of increasing post-tax returns on saving further is to reduce marginal income tax rates. At the present time, the post-tax return on savings for many, if not most of us, is negative. Little wonder we save and invest so little and why most families have abandoned financial markets for rug dealers and diamond merchants to provide for their futures or to protect capital. Lower nominal interest rates and higher post-tax real rates would not only involve more saving, but more saving would be channeled into financial markets and thereby the private capital formation.

This is also the prescription for battered financial markets and for so many of our endangered financial institutions. This is also why I support tax reduction on personal as well as business income and assets.

The invalid Keynesian theory predicts the exact opposite effects. Essentially ignoring the supply consequences of tax changes, it associates tax increases with reduced aggregate demand and thereby lower prices. Similarly, Keynesian analysis associates tax reductions with increased aggregate demand and thereby higher prices. Despite the seeming plausibility of these Keynesian assertions and the widespread belief in their validity, there is essentially no evidence to support these assertions, especially when the effects of money and output are taken into account.

I have run a series of statistical tests to see if, after making allowances for money and output, there was any discernible or dependable relationships between changes in tax rates and inflation. I found little. To the best of my knowledge, many other researchers have come to similar conclusions. This should not be surprising. Given the close relationship of money per unit of output and the price level, there is little left for other factors to explain.

I will spare you the agonies of facing correlation and regression statistics at this point, but I will submit them for the record. Suffice to note for now that in examining the relationship between prices on the one hand and essentially the ratio of real high employment revenues to potential real GNP as a measure of tax rate shifts, I found a weak but positive connection between tax rates and inflation. Higher tax rates seem to be weakly associated with higher prices.

I may add that there is some evidence that Federal Government expenditures have an independent impact on inflation. Thus, budget reduction would help to slow inflation.

Along the same lines, I also examined whether the size of the deficit itself affected inflation. It turns out that again money and output explain almost all of the price level experience since at least 1960. When debt in the hands of the public is introduced as a separate variable, it does show a small and statistically significant impact on the price level. However, the effects are so small that it is clear that the deficit is a minor actor in the inflation drama.

For given money and output, the main determinants of inflation, it takes about a 10-percent change in the national debt in the hands of the public to change the price level by 1 percent. Thus, with about $700 billion of the national debt held by the public outside Government trust accounts and the Federal Reserve, a $70 billion deficit in 1 year, none of which ends up in Government accounts, would contribute about 1 month's inflation at current rates. Clearly, although the effects of the deficit are not trivial, the size of the deficit is not the major factor in the inflation scenario.

I did similar calculations using the MIB measure of money and the results are essentially the same as those I have just described for the M2 measure of money.

Even though the deficit per se may not be the crucial factor in inflation, the way the deficit is financed is central to any understanding of the inflation process. If a deficit is financed by selling Government bonds to the Federal Reserve, the resulting increase in the supply of money reduces the value of money, which is to say, inflation results.

Alternatively, if the deficit is financed by selling bonds to the public, no such inflationary increase in money takes place. To be sure, real interest rates may rise in order to induce the public to buy the additional bonds, but unless there is an increase in inflation, this rise in interest rates is bound to be small.

The major factor in high and rising interest rates is the large inflation premium which is built into all interest rates at the present time. Thus, any attempt to lower interest rates by simply printing new money to buy additions to the national debt ends up by causing interest rates to rise even more.

It is widely believed that deficits somehow cause the Federal Reserve to increase the money supply. Deficits are seen as placing some great "burden" on the Federal Reserve. To lighten this "burden," the Federal Rreserve creates some money and buys bonds.

The Federal Reserve is not required by law to monetize the deficit. Indeed, the spirit of the law explicitly prohibits the Federal Reserve from doing so. Witness the restrictions on direct sales of debt by the Treasury to the Federal Reserve.

Of course, the loophole is that the Federal Reserve can buy outstanding debt rather than new debt. Because there is essentially no difference between new bonds and old bonds, the results of buying old debt are the same as monetizing new debt. Bank reserves and the monetary base increase. Money expands. Inflation results. Instead of interest rates being lower, interest rates end up higher. Indeed, this suggests that the congressional mandate to the Federal Reserve should essentially be, "Just don't do something. Stand there."

Although this hypothetical mechanism potentially connecting deficits and inflation is well known, the existence of a possible link between deficits and the money supply does not settle the empirical question, whether, in fact, the Federal Reserve and the monetary mechanism do systematically respond this way to budget deficits.

It turns out that there is little, if any, connection between budget deficits or changes in the Federal debt and changes in the money supply; still another emperor with no clothes.

Chart 2 is a scatter diagram showing percent changes in the M1B measures of money from 1960 to 1980 and corresponding annual changes in—percentage changes—the Federal debt outside Federal trust accounts. The results are essentially the same if the gross Federal debt is used or if the data are adjusted to exclude holdings of the Federal Reserve itself. It also makes little difference if the old M2 measure of money is used.

If the Federal Reserve has created too much money, as it certainly has for at least the past 15 years, the Federal Reserve cannot legitimately blame poor fiscal policy for the shortcomings of monetary policy. Not only is there no legal or practical need to monetize public debt, the Federal Reserve has not systematically done so. Apparently, the Fed monetizes private as well as public debt.

Even if Federal deficits have not been primarily responsible for our inflation or for poor monetary policies, many people, including many financial experts, believe that deficits are a major factor causing high interest rates. Their reasoning is that deficits drive up interest rates because the Treasury adds to the supply of debt instruments, thereby decreasing prices of bonds and driving up interest rates.

Again, it turns out that there is no connection between changes in interest rates and changes in the national debt. It makes no difference whether we use gross debt or debt adjusted to exclude debt held in trust funds or by the Federal Reserve.

Now this may seem to fly in the face of economic laws of supply and demand. How can it be that an increased supply of bonds doesn't lead to a fall in bond prices, higher interest rates, tight credit, and so forth?

The answer to this apparent paradox is found in two places. The first is the distinction between nominal and real interest rates. To be sure, if everything else is held constant, increased Treasury borrowing would cause interest rates to rise. This would be an increase in real or inflation-adjusted interest rates. However, the major factor shaping interest rates, especially in recent years, is the inflation premium, not real interest rates. Thus, rapid, unpredictable, and erratic changes in money are the chief factors driving up market rates, not increases in the public debt. Everything else is not held constant.

To be sure, more public debt does tend to drive up real rates, but real long-term rates are now in the area of 2 to 3 percentage points of the long bond yield of close to 13 percent. The remaining 10 or 11 percent is the inflation premium.

The second factor is that the U.S. Treasury is only one of many factors in the supply and demand for funds. Although the U.S. Treasury is often the largest single borrower, Treasury operations alone cannot explain the entire supply and demand picture. I may add that the mortgage market is bigger than the market for U.S. Treasury securities. This is why interest rates fell in 1975 and 1976 at the very time that the Federal Government ran record budget deficits and the U.S. Treasury sold even more bonds than at the height of World War II.

My analysis also explains why countries such as Japan and Germany where deficits are a significantly higher fraction of GNP than in the United States, why these countries have slow inflation, more growth, more saving, lower interest rates, and higher real interest rates than in the United States. Money has increased more slowly and smoothly in those two countries than in the United States, and neither Japan or Germany penalize their saving and investment as severely as we do.

It should be noted that the effects of taxes and expenditures are not symmetrical. Increased Government expenditures usually use up resources and typically leave fewer resources for the private sector. If resources are used less efficiently in the public sector than in the private sector, overall efficiency falls. Even if the same number of people are at work, total output is less useful or less valuable. This is the equivalent of a fall-in output.

I believe that we are well past this point at the present time in most areas of Government expenditures. This is the major reason for shrinking the public sector, in order to make possible a larger pie for U.S. citizens. This may be why in my statistical analysis, higher expenditures tend to be associated with more inflation.

Regarding taxes, there is certainly an important and legitimate role for taxes in the financing of needed Government services. If more resources are to be channeled into the public sector, higher taxes depress private sector activity, thereby freeing resources and making them available for the public sector. However, it would seem that tax rates have already become so high, largely because the effective rates have been driven up by money-induced inflation, rather than being explicitly legislated by Congress, that the private sector is already too depressed for our own good. Moreover, the depressive effects of high and rising tax rates have deferentially depressed capital formation and risk taking more than consumption, and reduced work effort more than leisure. High taxes have worked all too well in curtailing private sector activity. Instead, we need a reduction in taxes, especially those taxes that discourage investment, saving, risk taking and work.

High taxes do not reduce prices and do not fight inflation. High taxes do reduce output, employment, and economic growth. It is time to stop punishing ourselves, in the hope that pain itself will cure our problems. Masochism is not the remedy. Budget cuts, tax cuts that lessen disincentives, regulatory reform and, above all, a slow and stable rate of growth of money, are the necessary components and the cure for our serious inflation and high interest rate ills.

Finally, the desirable effects of well-designed tax cuts and budget restraint, however beneficial in themselves, can easily be nullified by monetary growth that is fast rather than slow, and erratic rather than stable. The best possible monetary policy cannot undo the waste and unemployment caused by excessively burdensome taxes, bloated Federal budgets, and regulation gone wild.

In this sense, monetary policy or the Federal Reserve alone cannot do the whole job by itself, but unless the Federal Reserve pursues a noninflationary monetary policy of slow, stable, and predictable growth of money, inflation will follow. Inflation-caused waste and distortions will remain with us. Legislated tax rates and budget reductions will be undone again. Interest rates will remain high or go higher. Promised growth will falter. The program will fail.

I fear to think where some of our citizens will venture to turn next. I trust that the Congress will meet its responsibilities to help get the country moving ahead once more. Thank you.

[The prepared statement of Mr. Meiselman follows:]

PREPARED STATEMENT OF DAVID I. MEISELMAN

Tax Cuts, Inflation, and Interest Rates

There is widespread agreement on the desirability, indeed, necessity for reduced inflation, lower interest rates and more economic growth. Moreover, there is also a growing consensus that taxes are too high and that many federal government spending programs either return too little for the costs involved or are altogether inappropriate.

Despite general agreement that slowing inflation is crucial to improve equity and economic performance, there is still much disagreement among informed public spirited citizens and public officials of good will how to slow inflation, and similarly, what effects tax and budget cuts will have on inflation, interest rates and economic growth.

The Joint Economic Committee is to be commended for conducting these Hearings on the question whether tax cuts are inflationary. This is in the best J.E.C. tradition of trying to bring the best of rigorous, non-partisan technical analysis to bear on important public policy issues. I am grateful for and welcome the opportunity to present my views and hope that they will help to dispel some of the current confusion on the relationship of tax cuts to inflation and interest rates.

The relationship between tax cuts and inflation appears to be one of the most misunderstood in current public policy discussions. The connections between tax cuts and inflation, and tax cuts and interest rates, also seem to be misunderstood and misinterpreted by financial markets. Most of what we hear about the presumed connections between reducing tax rates and the effects of the rate reductions on inflation and on interest rates is simply wrong. In many respects, the flawed analyses stem from applying an invalid Keynesian theory which overlooks both the central rule of monetary policy in the inflation drama as well as the impact of taxes on output.

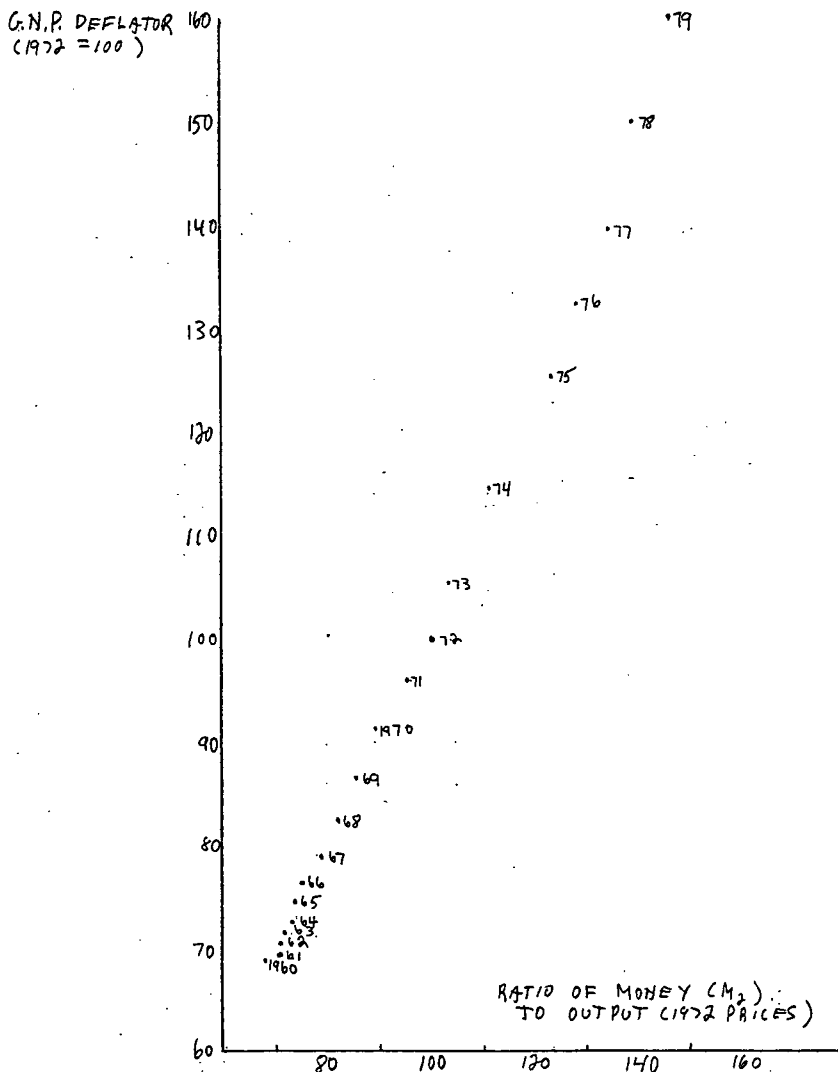
I will present several related propositions about inflation, fiscal policy and interest rates. Where possible I will also present some of the evidence supporting these propositions. I will then summarize some of their implications for current issues, especially the impact of tax cuts and budget cuts on inflation, interest rates and economic growth. I regret that I cannot go into great detail in this brief presentation, but I will be pleased to make them available to this Committee.

I deal first with inflation. Inflation occurs when the quantity of money expands faster than output. This relationship may well be the most extensively tested proposition in all of economics, with few, if any, exceptions. The quantity of money controls aggregate demand, and there is a close connection between the nominal stock of money and nominal gross national product, which is the best measure of total spending. Output, aggregate supply, depends on other factors, such as available inputs of labor, capital, raw materials, and the state of technology as well as the incentives to put them to efficient use.

To see this relationship, I turn to Chart 1. Chart 1 shows the level of prices, here the G.N.P. deflator, and the relationship of prices (1972=100) to the ratio of money to output (real G.N.P. in 1972 dollars). I use the old M_2 measure of money, which unfortunately, has not been published by the Federal Reserve for the past year. Thus, the chart, which covers the period since 1960, ends in 1979, not 1980.

The chart shows clearly that both money and output affect prices. The relationship between prices and the ratio of money to outputs is very close. The close relationship between prices and the ratio of money to output does not mean that, in principle, tax policy has no bearing on the level of prices. Given this dependable relationship, it is important, in analyzing the impact of public policy proposals on inflation, that we ask how the proposed change will affect either (1) the stock of money, or (2) output. Ignoring either the monetary or the output consequences means that we are likely to be in serious error.

CHART 1.—Inflation results when money increases faster than output



Let me first deal with output, the supply side of the central relationship explaining inflation. Changes in tax rates, or other provisions of the tax code, will affect inflation if these changes alter output. Tax increases that penalize saving and investment or discourage work result in lower output and thereby in higher prices. It makes no difference whether such tax increases are explicitly legislated by Congress or whether effective tax rates are implicitly enacted by money-induced inflation which pushes individuals into higher tax brackets or causes businesses to pay taxes on fictitious profits that result from the requirements of mandated historic cost accounting.

Because different tax changes may have different impacts on output, one should not lump together all tax increases or decreases. Instead, careful analysis of the effects of proposed tax changes on output is essential. (In the past, and to this day, most tax analysis is flawed because it focuses on presumed aggregate demand effects and largely ignores supply.) Tax rate reductions that lessen the disincentive effects of the tax system will cause output to increase. For a given stock of money, more output results in lower prices. Thus, supply enhancing tax cuts lead to lower prices. In turn, lower prices lead to lower market interest rates.

For example, consider some of what follows from adoption of faster depreciation. Initially, some businesses may pay less tax to the Federal government. Business cash flow rises, and before anything else takes place, Treasury receipts fall. Treasury borrowings rise, but these are fully offset by reduced business borrowing. Interest rates stay the same.

But, because there is now more incentive for capital formation, business will invest more and produce more. Increased output will make prices lower than they would otherwise be, the inflation premium component of market interest rates will decline, causing interest rates to fall. The increased post-tax rate of return on business investment will lead to an increase in real or inflation-adjusted interest rates. Because the inflation premium is by far the major factor in current record-high interest rates, it is likely that market rates would end up lower and real rates would end up higher as a result of the faster capital recovery provisions.

Increased output and increased real income will provide some of the saving to finance the capital expansion. In addition, and perhaps no less important, higher post-tax returns will also induce more saving.

Of course, another way of increasing post-tax returns on saving further is to reduce marginal tax rates. At the present time, the post-tax return on saving for many, if not most, of us is negative. Little wonder we save and invest so little and why most families have abandoned financial markets for rug dealers and diamond merchants to provide for their futures or to protect capital. Lower nominal interest rates and higher post-tax real rates would not only involve more saving, but more saving would be channeled into financial markets and thereby to private capital formation. This is also the prescription for battered financial markets, and for so many of our endangered financial institutions. This is also why I support tax reduction on personal as well as business income and assets.

The invalid Keynesian theory predicts the exact opposite effects. Essentially ignoring the supply consequences of tax changes, it associates tax increases with reduced aggregate demand, and thereby lower prices. Similarly, Keynesian analysis associates tax reduction with increased aggregate demand, and thereby higher prices. Despite the seeming plausibility of these Keynesian assertions, and the widespread belief in their validity, there is essentially no evidence to support these assertions, especially when the effects of money and output are taken into account.

I have run a series of statistical tests to see if, after making allowances for money and output, there was any discernable or dependable relationship between changes in tax rates and inflation. I found little. To the best of my knowledge, many other researchers have come to similar conclusions. This should not be surprising. Given the close relationship of money per unit of output and the price level, there is little left for other factors to explain.

I will spare you the agonies of facing correlation and regression statistics at this point, but I will submit them for the record. Suffice to note for now that in examining the relationship between prices on the one hand and essentially the ratio of real high employment revenues to potential real G.N.P. as a measure of tax rate shifts, I found a weak but positive connection between tax

rates and inflation. Higher tax rates seem to be associated with higher prices! The multiple regression is

$$\log \text{prices} = 5.39 + 1.07 \ (\log M_2 - \log \text{output})$$
$$(10.29) \ (60.13)$$
$$+.17 \ (\log \text{high empl. rev.} - \log \text{prices} - \log \text{real potential G.N.P.}) \ (1.44)$$
$$R^2 = .9956$$

(T values in parenthesis)

I may add that there is some evidence that Federal government expenditures have an independent impact on inflation. Thus, budget reductions would help to slow inflation.

Along the same lines, I also examined whether the size of the deficit affected inflation. It turns out that, again, money and output explain almost all of the price level experience since at least 1960. When debt in the hands of the public is introduced as a separate variable it does show a small and statistically significant impact on the price level. However, the effects are so small that it is clear that the deficit is a minor actor in the inflation drama. For given money and output, the main determinants of inflation, it takes about a 10 percent change in the national debt in the hands of the public to change the price level by 1 percent. Thus, with about 700 billion dollars of the national debt held by the public outside government trust accounts and the Federal Reserve, a 70 billion dollar deficit in one year, none of which ends up in government accounts, would contribute about one month's inflation at current rates! Clearly, although the effects of the deficit are not trivial, the size of the deficit is not the major factor in the inflation scenario.

I did similar calculations using the M_{1B} measure of money, and the results are essentially the same as those I have just described for the M_2 measure of money.

Even though the deficit per se may not be the crucial factor in inflation, the way the deficit is financed is central to any understanding of the inflation process. If a deficit is financed by selling government bonds to the Federal Reserve, the resulting increase in the supply of money reduces the value of money, which is to say, inflation results. Alternatively, if the deficit is financed by selling bonds to the public, no such inflationary increase in money takes place. To be sure, real interest rates may rise in order to induce the public to buy the additional bonds, but unless there is an increase in inflation this rise in interest rates is bound to be small. The major factor in high and rising interest rates is the large inflation premium which is built into all interest rates at the present time. Thus, any attempt to lower interest rates by simply printing new money to buy additions to the national debt ends up by causing interest rates to rise, not fall.

It is widely believed that deficits somehow cause the Federal Reserve to increase the money supply. Deficits are seen as placing some great "burden" on the Federal Reserve. To lighten this "burden," the Federal Reserve creates some money and buys bonds.

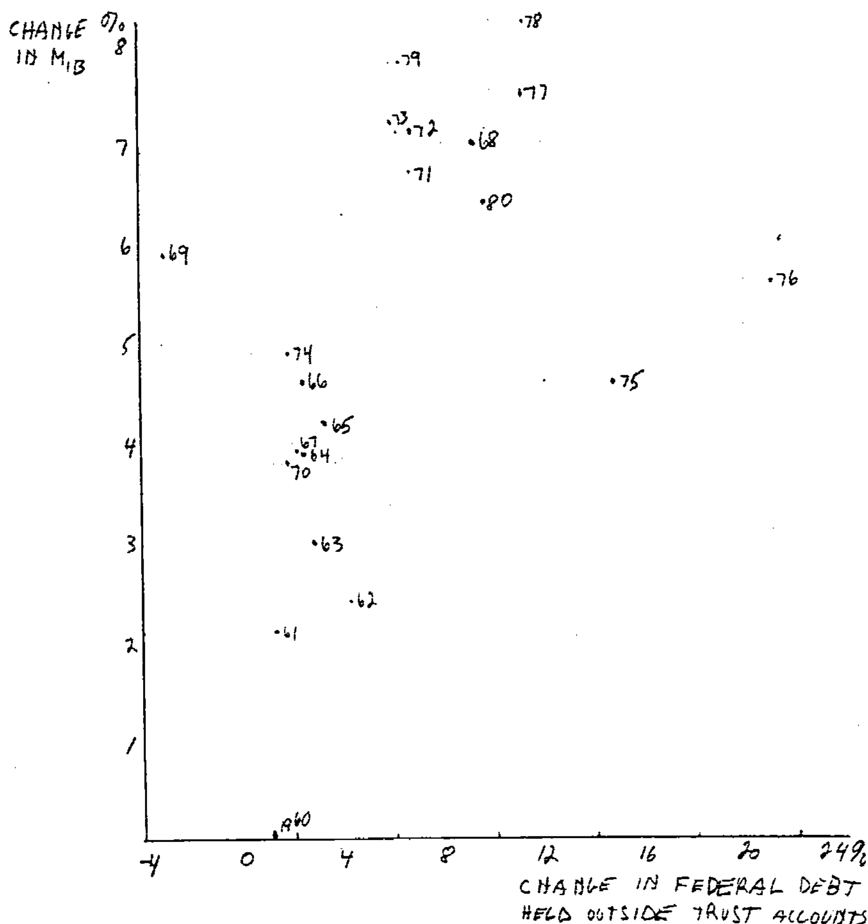
The Federal Reserve is not required by law to monetize the deficit. Indeed, the spirit of the law explicitly prohibits the Federal Reserve from doing so; witness the restrictions on direct sales of debt by the Treasury to the Federal Reserve. Of course, the loophole is that the Federal Reserve can buy outstanding debt rather than new debt. Because there is essentially no difference between new bonds and old bonds, the results of buying old debt are the same as monetizing new debt. Bank reserves and the monetary base increase. Money expands. Inflation results. Instead of interest rates being lower, interest rates end up higher. Indeed, this suggests that the Congressional mandate to the Federal Reserve should essentially be, "Just don't do something. Stand there!"

Although the hypothetical mechanism potentially connecting deficits and inflation is well known, the existence of a possible link between deficits and the money supply does not settle the empirical question, whether, in fact, the Federal Reserve and the monetary mechanism do systematically respond this way to budget deficits.

It turns out that there is little if any connection between budget deficits, or changes in the federal debt, and changes in the money supply! Still another Emperor with no clothes.

Chart 2 is a scatter diagram showing percent changes in the M_{1B} measure of money from 1960 to 1980 and corresponding annual changes in the federal debt outside federal trust accounts. The results are essentially the same if the

CHART 2.—Changes in money and deficits



gross federal debt is used or if the data are adjusted to exclude holdings of the Federal Reserve itself. It also makes little difference if the old M_2 measure of money is used. If the Federal Reserve has created too much money, as it certainly has for at least the past 15 years, the Federal Reserve cannot legitimately blame poor fiscal policy for the shortcomings of monetary policy. Not only is there no legal or practical need to monetize public debt, the Federal Reserve has not systematically done so. Apparently the Fed monetizes private as well as public debt.

Even if federal deficits have not been primarily responsible for our inflation or for poor monetary policies, many people, including many financial experts, believe that deficits are a major factor causing high interest rates. Their reasoning is that deficits drive up interest rates because the Treasury adds to the supply of debt instruments, thereby decreasing prices of bonds, and driving up interest rates.

Again, it turns out that there is no connection between changes in interest rates and changes in the national debt. It makes no difference whether we use

gross debt or debt adjusted to exclude debt held in trust funds or by the Federal Reserve.

This may seem to fly in the face of fundamental economic laws of supply and demand. How can it be that an increased supply of bonds doesn't lead to a fall in bond prices, higher interest rates, tight credit and so forth?

The answer to this apparent paradox is found in two places. The first is the distinction between nominal and real interest rates. To be sure, if everything else is held constant, increased Treasury borrowing would cause interest rates to rise. This would be an increase in real, or inflation-adjusted, interest rates. However, the major factor shaping interest rates, especially in recent years, is the inflation premium, not real interest rates. Thus, rapid, unpredictable and erratic changes in money are the chief factors driving up market rates, not increases in the public debt. Everything else is not held constant. To be sure, more public debt does tend to drive up real rates, but real long-term rates are now in the area of 2 to 3 percentage points of the long bond yield of close to 13 percent. The remaining 10 percent or so is the inflation premium.

The second factor is that the U.S. Treasury is only one among many factors in the supply and demand for funds. Although the U.S. Treasury is often the largest single borrower. Treasury operations alone cannot explain the entire supply and demand picture. This is why interest rates fell in 1975 and 1976 at the very time that the Federal government ran record budget deficits and the U.S. Treasury sold even more bonds than at the height of World War II.

My analysis also explains why countries such as Japan and Germany, where deficits are a significantly higher fraction of G.N.P. than the United States, have slow inflation, more growth, more saving, lower interest rates and higher real interest rates than in the United States. Money has increased more slowly and smoothly in those two countries than in the U.S., and neither country penalizes savings and investment as severely as we do.

It should be noted that the effects of taxes and expenditures are not symmetrical. Increased governmental expenditures usually use up resources and typically leave fewer resources for the private sector. If resources are used less efficiently in the public sector than in the private sector, overall efficiency falls. Even if the same number of people are at work, total output is less useful, less valuable. This is the equivalent of a fall in output. I believe that we are well past this point at the present time in most areas of government expenditures. This is the major reason for shrinking the public sector in order to make possible a larger pie for U.S. citizens. This may be why, in my regressions, higher expenditures tend to be associated with more inflation.

Regarding taxes, there is certainly an important and legitimate role for taxes in the financing of needed government services. If more resources are to be channeled into the public sector, higher taxes depress private sector activity, thereby freeing resources and making them available for the public sector. However, it would seem that tax rates have already become so high—largely because effective rates have been driven up by money-induced inflation rather than being explicitly legislated by Congress—that the private sector is already too depressed for our own good. Moreover, the depressive effects of high and rising tax rates have differentially depressed capital formation and risk taking more than consumption and reduced work effort more than leisure.

High taxes have worked all too well in curtailing private sector activity. Instead, we need a reduction in taxes, especially those taxes that discourage investment, saving, risk taking and work.

High taxes do not reduce prices and do not fight inflation. High taxes do reduce output, employment and economic growth. It is time to stop punishing ourselves in the hope that pain itself will cure our problems. Masochism is not the remedy. Budget cuts, tax cuts that lessen disincentives, regulatory reform, and above all, a slow and stable rate of growth of money are the necessary components and the cure for our serious inflation and high interest rate ills.

Finally, the desirable effects of well designed tax cuts and budget restraint, however beneficial in themselves, can easily be nullified by monetary growth that is fast, rather than slow, and erratic rather than stable. The best possible monetary policy cannot undo the waste and unemployment caused by excessively burdensome taxes, bloated federal budgets, and regulation gone wild. In this sense, monetary policy, or the Federal Reserve alone, cannot do the whole job by itself. But unless the Federal Reserve pursues a non-inflationary monetary policy of slow, stable and predictable growth of money, inflation will follow.

Inflation-caused waste and distortions will remain with us. Legislated tax rate and budget reductions will be undone again. Interest rates will remain high or go higher. Promised growth will falter. The program will fail. I fear to think where some of our citizens will venture to turn next.

I trust that the Congress will meet its responsibilities to help get the country moving ahead once more.

Representative REUSS. Thank you Professor Meiselman. Mr. Thurow.

STATEMENT OF LESTER C. THUROW, PROFESSOR OF ECONOMICS AND MANAGEMENT, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS.

Mr. THUROW. The United States needs a dose of real supply side economics. Productivity has been falling since the third quarter of 1977. The OECD now places America 10th among industrial countries in per capita GNP. Just 1 year ago we were fifth.

While there are many things that will have to be done to restore healthy productivity growth. America needs to invest more than it is now investing. Investment has risen—over the last 3 years 11.3 percent of our GNP has gone to plant and equipment investment—but 11.3 of the GNP is not enough to keep pace with the baby boom that is now entering the labor force. Over those same 3 years the amount of plant and equipment per worker—the capital-labor ratio—has fallen. With capital per worker falling, it is not surprising that output per hour of work is also falling.

It takes $50,000 in plant and equipment to equip the average American worker. America would have to invest almost 13 percent of its GNP just to equip the new workers who are entering the labor force.

Last year 115 million Japanese invested more than 226 million Americans. Two-thirds of all of the industrial robots in the world are in Japan. If America were to keep pace with the Japanese in terms of capital per worker, it would need to invest almost 30 percent of its GNP.

Yet we must keep pace with our competitors. Massive shifts will have to be made from consumption. both public and private, to investment, both public and private. Public consumption will have to fall, but so will private consumption. The needed increase in investment is too large to be financed entirely with cuts in public consumption. Private investment will have to rise, but so will public investment. To export the extra coal that our allies want to buy and our balance of payments will require, for example, America will have to construct a new coal port on the east coast.

Viewed as supply side economics, there is a simple problem with the 30-percent across-the-board Kemp-Roth income tax cut. While the average Japanese family saves 20 percent of its income and the average German family saves 14 percent of its income, the average American family saves only 5½ percent of its income. Something drastic has to done to increase American savings.

Unfortunately, Kemp-Roth is not a drastic remedy.

If the average American family is given a $100 tax cut, it is true that it will increase savings and investment. Savings will rise by $5.50, but consumption will rise by $94.50. Unfortunately, Americans can-

not afford to allocate 94½ cents out of every dollar in tax cuts to consumption.

There is not one shred of evidence that an across-the-board income tax cut will raise savings by a large amount. Americans saved 5.9 percent of their income in the 5 years prior to the 1964–65 income tax cut. Be optimistic and assume that the savings rate would rise the same 1.4 percentage points from 5.5 percent to 6.9 percent. Does anyone think that America could compete with Japan or Germany with a 6.9 percent personal savings rate?

There is a similar problem in the proposed cuts in the capital gains tax. If lower capital gains taxes were limited to plant and equipment investment in new, high-risk, venture capital situations, one could understand the proposal even if one did not agree with it. But the lower capital gains tax rates will also apply to antiques, paintings by old masters, land, first homes, second homes, and a wide variety of assets that have nothing to do with reindustrialization.

For every dollar's worth of reindustrialization incentives offered, several dollars worth of incentives will be provided for nonproductive investments. Since speculative investments usually pay off more quickly than productive investments, the net result of the capital gains tax cut may even be to increase the diversion of funds from productive to nonproductive investment. If America is serious about stimulating productive investment, it will have to take actions to discourage nonproductive investment.

Real supply side economics is realtively simple. It is the art of reducing taxes on savings, investments, and work effort while raising taxes on consumption. Why is it that Americans save less than the citizens of any other industrial country in the world? We are well down, 16th when I last checked the data, the list of industrial countries in terms of the percent of GNP collected in taxes.

There is a simple explanation. Foreign governments have taken active steps to reduce consumption. Most of our industrial competitors impose a value added tax. Swedens is now 25 percent. A VAT is a tax designed to discourage consumption. You do not pay it if you do not consume. It also has the advantage of being one of the ways that government can tax the illegal underground economy. Those who earn their living in the underground economy may be able to escape the income tax, but they must pay the VAT when they buy goods and service. The larger the underground economy, the more vital a VAT becomes.

Suppose that America were to adopt a 10-percent value added tax. What could be done in terms of real supply side economics? A 10-percent value added tax would have yielded about $235 billion in revenue in 1980. This would have been more than enough to replace both the corporate income tax—$85 billion if there had been no recession—and the social security tax, $150 billion. If this had been done, it would have been a model of real supply side economics, since America would have been taking taxes off investment, the corporate income tax, and work effort, the social security law, and replacing them with a tax on consumption, the value added tax.

Such a tax cut would also be equitable, since America would have been reducing a tax that mostly affects high income groups, the corpo-

rate income tax, and a tax that mostly affects low- and middle-income workers, the social security tax. The system would not end up more regressive than it now is. If America were interested in more progressiveness, an income tax credit could have been used to make the value added tax as progressive as it desired.

If such a shift in the tax structure were combined with tax integration, the personal income tax would yield an extra $50 billion in revenue. This revenue could then have been used to equalize the maximum tax rates on earned and unearned income and to generate a surplus in the social security trust funds. The latter would be a source of savings to expand productivity, so that the economy and the social security trust funds would be in a position to handle the baby boom when it begins to retire in 2012.

But other actions will also be necessary to raise the American savings rate. There are three reasons for saving. A small number of people are misers. A slightly larger number want to die rich. But most humans save because they want to consume. And it is here that we Americans have been geniuses. We have designed an economic system where it is possible to consume without saving. Nowhere else in the world can you buy large consumer durables with no down payment and houses with 10- to 20-percent down payments.

Suppose that you could not borrow to buy a car. That would do two things for plant and equipment investment. Someone else's savings would not be needed to finance your car, and your car savings could be used for plant and equipment investment until you had accumulated enough to buy the car. A sudden end to consumer credit for large durables would be too great a shock to the affected industries, but the Nation should start moving in this direction with gradual reductions in the availability of consumer and mortgage credit.

It is easy to conclude that real supply side economics is "politically infeasible." But to accept that conclusion is to accept the idea that America is through as a world economic power. We have to change.

Representative REUSS. Thank you, Mr. Thurow. We will inquire under the 10-minute rule. And we start with Mr. Evans.

Mr. Evans, you make very clear in your prepared statement what is indeed true, that the 30-percent income tax reduction component of the administration's program will accrue mostly to middle and upper income people. You point out that 44 percent of the tax reduction, which would amount to about $65 billion when the tax is fully effected, goes to the upper income brackets, those making more than $45,000 a year. You also point out that this kind of a tax reduction which gives a lion's share of its reduction to upper income people—who do save more, and that is your point—is in sharp contrast to other personal income taxes. In fact, don't you have to go back to 1923 and Andy Mellon's tax cut to find another tax cut where the lion's share went to upper income people?

Mr. EVANS. Well, a fair proportion.

Representative REUSS. You pointed out that this did jigger the exemptions and so on.

Mr. EVANS. The 1964 tax cut also had a substantial effect on upper income tax brackets, particularly in the reduction from 91 to 70 per-

cent, which actually resulted in an increase in tax revenues, because people switched their money out of tax-free loopholes and into taxable income.

Representative REUSS. Yes. But overall, its effect was not to give the lion's share of its benefit to the upper income people; is that not so? At least that is what you say, and I think you're right, and I want you to reconfirm that your statement is correct.

Mr. EVANS. It wasn't as skewed as this one, but it did give a substantial proportion of the tax cuts to the upper income people. It wasn't quite as this one.

Representative REUSS. My point is, is it not a fact that one has to go back to Andy Mellon in 1923 to find a tax cut where the lion's share of the benefits went to upper income people. Isn't that so?

Mr. EVANS. I believe that's correct; yes.

Representative REUSS. Let me now turn to another aspect of this in your very helpful and comprehensive testimony. You talked a great deal about savings, and I want to perhaps later on ask you and Les Thurow to have at each other, because you seem to have different views. But at any rate, you don't tell us what happens to the savings. Savings by themselves are not necessarily glorious. The saver, for instance, might decide to put them into what he now puts so much of his savings: bidding up the price of land, real estate, antiques, art, coins, silver, commodities, you name it.

Have you estimated the shrinkage that occurs on income's way from being saved to the time it actually shows up in business fixed investment plant and equipment, which, I take it, is what you are after, in your effort to increase productivity and thus combat inflation?

Mr. EVANS. Absolutely.

Representative REUSS. We have to look at leakage. What does it amount to right now, for instance?

Mr. EVANS. I actually have run the results of that through the model. They are not reported in this testimony, but I did find that $1 increase in savings from this tax cut does result in about a $1 increase in investment. It is very close. Now this doesn't happen immediately. It takes 2 or 3 years before the linkages are complete, but that the money does not go off into assets which are in fixed supply. It does go directly into investment or through financial intermediaries, bank savings, loans, and so forth.

Representative REUSS. What is your evidence, and why should that be so immediately, for instance? Why shouldn't high-bracket people with more left in their pockets as a result of the tax cut, what with inflation otherwise unchanged, show the same lamentable tendencies as at present to spend it on, or invest it, depending on how you want to classify these expenditures, on commodities and land and real estate and antiques, and silver and coins and stamps, and diamonds, and you name it?

Mr. EVANS. I think the reason that there has been this great switch into these areas in the last few years has been the fact that the rate of return on savings as we define it, in terms of productive assets, has been sharply negative. And the 30-percent tax cut, plus lower inflation, will move the rate of return back into the positive sector for many of these investments, and so people will switch back. They moved into com-

modities, land, your long list, as a refuge, because they did not want to see their capital erode in real terms. Now we are giving them a chance to make a positive rate of return on productive assets, and I believe they will move back into these areas.

Representative REUSS. This is an important question, and does your evidence support that? Is it that upper income people will suddenly say:

> Ah, now we have in place a marvelous program which is going to stop inflation in its tracks, and that being so, I will be most delighted to buy equities or to invest directly in new plant and equipment myself?

Mr. EVANS. I think it is just looking at the aftertax rate of returns. For example, one of the better pieces of evidence we have, I believe, is what happened when the capital gains tax rate was cut from a maximum of 49.1 percent to 28 percent a little more than 2 years ago. There was a rebirth of the venture capital industry. There was a very sharp increase in the stock market, as people moved back in. I believe the reasons they did, we have the evidence that they did.

Representative REUSS. Thou saith. The stock market is where it was then, unfortunately, and the demand for all of this schlock we're talking about. I won't go through the list again, is at record heights. So I would suggest your capital gains exercise, unaccompanied as it was by anything meaningful about getting a handle on inflation, just resulted in more funds being diverted from the savings stream, out of productive investment in plant and equipment into the schlock categories.

Mr. EVANS. Well, I think some of the schlock categories eventually diminished in price. The gold prices, for example, are way down from their peaks a year ago. And silver prices, of course, are also down. Real estate prices are not down, but they show some signs of leveling off. We have had some reversals in these highly speculative areas in the last year. I think that is a healthy sign.

Representative REUSS. You mentioned silver. Just take our friend, Bunker Hunt. He had his tango with silver prices, years after the capital gains increase. Now why didn't he borrow $1 billion from the American banking system, which he did, to invest in productive high-technology common stocks? Just to the contrary, he borrowed the $1 billion to attempt to corner the silver market, and caused a lot of trouble for his fellow citizens by so doing.

So I find, very frankly, your assertion not quite proved that further tax cuts for rich people are going to, in and of themselves, so inspire them with zeal to invest in productive high-technology plant and equipment.

But we will return to that. Let's get over that first hurdle of what the individual with more money left in its pocket from the tax cut does. Let's assume he actually does the right thing, the only thing really that individuals inspired by zeal to increase productivity can do. He invests in common stocks or conceivably in corporate bonds, but probably common stocks. That's what we'd like him to do.

Mr. EVANS. Yes.

Representative REUSS. What assurance is there that the corporation in whose common stock he invests, either as an original issue or in the secondary market, isn't going to use this new money either

for corporate takeovers and acquisitions which may contribute nothing to new productivity but just bid up the price of existing corporate assets; or for that matter, to foreign investments which may be great for Chile, but it doesn't help the people in Peoria very much?

Mr. EVANS. Well, there has been a large body of work done on when corporations take over other corporations. That appears in the Economic Report of the President. I say it's a bipartisan report, because it appeared both under Mr. Greenspan and under Mr. Schultze, basically, the same table. And what they showed was that the decision of the corporation to expand, as opposed to the takeover, was very closely correlated with the ratio between stock prices and the cost of construction. When stock prices were low, then the evidence showed unequivocally that when the takeover rate rose, and when the stock prices soared, that is when they went out and expanded.

And as I said, this has a bipartisan backing. It is not my particular finding, also I certainly agree with it. And I believe that that tendency which has been noted in the past, will continue, and as a result, higher stock prices will, indeed, cause firms to expand, as it has in the past.

Representative REUSS. And how do you get higher stock prices?

Mr. EVANS. Well, we are making the assumption. We cleared the first hurdle, and we're going with the assumption that, indeed, these people would do the right things that we both want them to do with their savings, which is, they would put it into corporate stock issues, either new or existing. Given that we crossed that hurdle, then the increase in demand for stock would, indeed, raise the prices, as it has in the last 2 years, which, at least based on historical evidence, would lead to higher investment.

Representative REUSS. I see. That would return, of course, to my first hurdle, which is a big one.

Thank you. My first round time is up. I will return to this.

Mr. Richmond.

Representative RICHMOND. Thank you, Mr. Chairman.

Mr. Evans, your testimony is actually, totally incomprehensible. Everything you say is untrue, you know. It is mind-boggling, how you can put this many facts and figures on a piece of paper, which absolutely have no elements to anything in actuality. I ought to know. I'm a businessman. He makes statements, "The economy is about to enter a boom with major proportions." You must be out of your mind. The economy isn't going to enter a boom with major proportions, unless we actually do something major, which we are not doing. All we're doing is making a small tax cut for upper income people, which will actually lead to no good whatever for the economy. Demands for consumer goods have consistently outstripped their growth and income.

Mr. Evans, I don't know where you've been lately. I manufacture motors. My motors go into every single type of consumer goods known to man: refrigerators, microwave ovens, automobiles, and I can tell you my motor business is off something like 75 percent. Now you can't have a large demand for consumer goods without using a fractional

horsepower motor. There are only four manufacturers in the United States of these motors. So I think we are probably a better economic indicator than most. Arthur Burns used to use the monthly figures from my company as one of his major economic indicators.

I mean, where do you get these figures? God only knows.

Now, I've listened to everyone's remarks here, and the only one that makes any sense at all is Mr. Thurow, who says there is not one shred of evidence that an across-the-board income tax cut will raise savings by a large amount.

Now what about the rest of you, gentlemen? Do you feel that an across-the-board income tax cut will raise savings? As Mr. Thurow says, it hasn't in the past, why should it in the future?

Mr. MUSGRAVE. It will do so a little.

Representative RICHMOND. But not enough to cure this malaise we have in the United States today, Professor Musgrave; right?

Mr. MUSGRAVE. Much less than he suggests.

Mr. MEISELMAN. I believe that by increasing the post-tax rate of return on savings you will get more savings. If you pay people more, you give them a chance to earn something on their money, people will save more.

When the chairman asked about using savings for takeovers, you forget that the company being taken over then has the savings. The funds don't evaporate when the corporation is acquired. It means that ownership of the funds merely changes hands. The savings don't fall off the edge of a cliff and disappear. I think that this is a false issue.

Representative RICHMOND. Mr. Meiselman, what it does mean, and take it again from a businessman, it just means that we keep our cash in treasuries, and we earn much, much more on our treasuries.

Mr. MEISELMAN. If you do that then you pass the cash to somebody else.

Representative RICHMOND. No, we are passing it to pay the Government's deficit; that's all. We're not passing it anywhere else. Nothing else is happening in the United States. Where can you pass it? There is no movement to improve the infrastructure of the United States. There is no movement to make major modernization in our factories. Where can you pass it? Right now our company is putting all of its surplus money into treasury bonds.

Mr. MEISELMAN. The reason it does that is because the rate of return on treasury bonds is higher than the alternative rate of return. That is precisely the point that all of us have emphasized; that the rate of return on real assets is low compared to the alternatives. And the point of effective tax reform is tax reduction on real assets, on the use of income and assets, so we can produce something. That is the point.

Representative RICHMOND. Let me give you a little formula, and let me have your comments. No. 1, I believe that with the current sickness we have, and when Mr. Thurow says the Japanese are investing twice as much as we are——

Mr. MEISELMAN. They save because the real return is so high.

Representative RICHMOND. I think we all know that America is in really sad condition at the moment. First of all, it seems to me, we ought to stop everything and put in wage and price controls. That is one way of getting ourselves straightened out. No. 1, I would like to see

wage and price controls, thus letting us all set the stage and catch our breath.

No. 2, I would like to see the tax cut hit more low-income people so they would actually spend the money, rather than middle-income people who would be less likely to actually spend the money.

Third, I would like to see a much, much larger tax credit for savings. That is one way to encourage savings. Your $200 tax credit now is clearly insufficient in these days. It should be at least $1,000 per capita.

Four, I would like to see an RFC, because only with an RFC, properly financed, can we actually get to the real cancer of the United States, which is the need for many, many billions upon billions of dollars to improve our major industries and the national infrastructure which is quietly falling apart before our very eyes.

That, I would say, would be a sensible program for economic recovery. Now, nobody except Mr. Thurow has even alluded to any of these things. What do some of the rest of you people feel?

Just a little Kemp-Roth tax cut and a $41 billion cut of the budget with the burden falling on the backs of poor people is going to turn the United States around? It's not going to turn the United States around one bit.

You made that silly statement about the stock market having improved when we changed capital gains. The fact is the stock market hasn't improved by $1 bill since we changed the capital gains formula. You ought to know that as well as I.

The Dow Jones right now is at the same identical number that it was then. Then Dow Jones hasn't gone over 1,000, really, in 15 years. Nothing has been done to make it worthwhile to anybody to buy common stocks in the last 15 years.

Mr. EVANS. On the contrary, the atmosphere for common stocks has improved. Dow Jones, which is by the way a very badly flawed index, is up about 40 percent from where it was when the capital gains tax cut was put into effect in November.

Representative RICHMOND. Mr. Evans, the Dow Jones, as I said, over the period of the last 15 years hasn't gone over 1,000, and you know that as well as I. It has varied between 700 and 1,000 for the last 15 years. I don't really call that great progress. Perhaps you do, but I don't.

Mr. EVANS. No, but it's made great progress in the last 2 years.

Representative RICHMOND. And it's about ready now to sink back, because there is no economic stimulus. There is no real reason why.

Mr. EVANS. Well, that is your forecast. It is not mine.

Representative RICHMOND. We're doing nothing with President Reagan's "unique tax plan" to stimulate industry.

Mr. EVANS. We're doing quite a bit. I think the stock market is poised for a major takeoff, and if you want to forecast that it's going to go down, go ahead. But it is not my forecast. I wouldn't call the Kemp-Roth tax cut a little tax. I think it is very significant. In fact, most of the people who have criticized it to me have said it is too large.

Representative RICHMOND. It is not too large. It is just hitting the wrong people; that's all.

Mr. EVANS. They're the right people in my book. Maybe they're the wrong people in your book.

Representative RICHMOND. What do the rest of you feel about wage and price controls?

Mr. MEISELMAN. That's taking the problem and making it worse. Instead of having an illness, the cure would be lethal. Wage and price controls have never worked. They merely cover up some of the symptoms temporarily and make inflation much worse.

Representative RICHMOND. Later on.

Mr. MEISELMAN. Later on could only be 1 week, or even 2 minutes.

Representative RICHMOND. At least it would allow us to set the stage.

Mr. MEISELMAN. People have been trying this for thousands of years. It has never worked once. I defy you to give me one example where it has ever worked.

Representative RICHMOND. Mr. Thurow knows.

Mr. THUROW. When you come to wage and price controls, they obviously worked in World War II. They handled a very difficult situation. Every country used them. Every country was not stupid in World War II.

Mr. MEISELMAN. I don't believe that we are ready to have direct allocation and rationing, more controls, and black markets merely to cover up the signs of inflation temporarily.

Mr. THUROW. There are a lot of things that have to go with the wage and price controls. The objections to them at the moment are two, and they have nothing to do with ideology, in my mind. One is it does not make any sense to give wage and price controls to an administration that doesn't want them. They won't use them sensibly even if they got them.

Second, you want to save wage and price controls. Imagine that you cured the fundamentals in this society. You restarted rising productivity. You had gotten command of the situation with imported oil, so you were not going to get another oil shock. It seems to me if there is ever a time for wage and price controls, that's the time to do it, because you say: Look, we've cured the fundamentals, falling productivity and the energy shocks, and now we are going to have a brief period of time when we have to more or less stop the economy and start over. We will have wage and price controls; we will move to much lower rates of growth in the money supply.

If you are thinking about wage and price controls, you will want to save it for that period of time. And if you use it earlier, especially with an administration that doesn't want it, you are apt to discredit the whole idea, and then the instrument won't be there when you really want to use it, when you have put these fundamentals in place.

Now, in terms of savings, I agree with you entirely. Everybody has talked about how we want to raise the relative return of real investments. I think that's absolutely right. But an across-the-board tax cut doesn't do the job because it lowers the taxes on nonproductive investment just as much as it lowers the taxes on productive investment. I think we ought to be raising taxes.

For example, if you think of a capital gains tax, we ought to be lowering the capital gains tax on productive investment and raising it on nonproductive investment, to force people into productive investment. That is why I emphasized a consumption tax that would then

be used to replace both the corporate income tax and the social security tax. What you're doing there is changing the relevant prices.

Representative RICHMOND. How many countries have this value added tax?

Mr. THUROW. Essentially every other industrial country in the world except ourselves.

Representative RICHMOND. What about Germany and Japan?

Mr. THUROW. They have them; yes. It is one of the things that curtails consumption. You can't escape from the fact that we had no American savings even when we had no inflation in the early sixties, Americans still saved less than 6 percent of their income. There just isn't any magic way to get savings up without major changes.

I have a simple objection to Kemp-Roth. What is Keynesian economics? Keynesian economics is regulating the economy with across-the-board tax cuts and tax increases. What is Kemp-Roth? Well, it's an across-the-board tax cut. That is just simple Keynesian economics. If Keynesian economics is what is going to cure our problem, we wouldn't have had a problem. It is a triumph of packaging, as opposed to a new policy.

Representative RICHMOND. Thank you. My time is up.

Representative REUSS. The time of the panel to examine Mr. Richmond has expired. But we will return.

Mr. Musgrave, did you want to add something?

Mr. MUSGRAVE. Yes. I would like to take issue with Lester Thurow's position, which seems to me to be mistaken.

Granted that we need the magnitude of the increase in savings which he suggests. Let's assume that, for argument's sake. I cannot see how his tax package, which he describes, will in any way do that. In fact, I think it would add very little to savings, and I am really surprised to have him come out with this.

He suggests that we cut the payroll tax, introduce a value added tax, integrate the corporation income tax with the individual income tax. And that would be, essentially, the package.

I do not see how there would be any significant savings effect. Integrating the corporation tax with the individual income tax, which I am for, from the point of view of tax structure design, would clearly reduce savings. It would reduce corporate savings by more than it would increase individual savings; and substitution of a value added tax for the payroll tax would do practically nothing to saving.

He is also wrong in saying that we are the only country which does not have consumption taxes. We do have substantial consumption taxes, at the State level, and you can't simply draw a comparison between central governments, when other countries do not have the lower levels.

If one were to use the tax system to increase savings by anywhere near the magnitude which he suggests, the only way to do it would be to have a big government surplus; that is to say, not to cut taxes at all. There can be saving in the public sector as well as in the private sector. And this saving through government surplus does not have to be used for public investment, because it can be used to relieve monetary policy and thereby to feed increased private investment.

So it seems to me that any massive increase in the savings rate does

not begin with tax reduction of any kind. It begins with a government surplus involving either expenditure reduction and/or tax increases.

The other way of doing it might be by moving from the income tax to an expenditure tax, which by having progressive rates, would have a much stronger marginal effect on savings. But the package which he suggests would greatly reduce the progressivity of the tax structure and do very little for savings——

Mr. THUROW. May I respond to that?

Representative REUSS. Yes.

Mr. THUROW. Two things. One, I carefully pointed out that the system was designed to run a large government surplus. I talked in my statement about $50 billion worth of government surplus, because I am not reducing taxes. I am, in fact, raising taxes.

Second, part of the program was a reduction in consumer credit designed to raise savings.

Mr. MUSGRAVE. This, I might say, I totally agree with——

Mr. THUROW. Third, I also pointed out that you can put progressive rates into a value added tax to stimulate savings. All of the things you mentioned were in the package. I grant you, a value added tax by itself will not have a huge effect on savings.

Representative RICHMOND. Mr. Thurow, the chairman pointed out that effectively in many, many governmental entities in the United States, we already have a value added tax. In New York City, for example, you pay 7 or 8 percent for everything you buy. So that, in effect, is a value added tax; isn't it?

Would you raise that to 17 percent?

Mr. THUROW. Well, we do have a sales tax, in some States, although not all States. You can tell me: look, I don't want to do your package. And that is fine. But then you've got to have an alternative package for raising savings rates and for forcing the savings into productive investment. And I am not particularly wedded to my package. I will talk to you sympathetically about any package that will really do that.

My problem is I just don't think Kemp-Roth is the vehicle that is going to do that. And I just gave this as an alternative, not saying its the only alternative or even that it is the best alternative. It is just an example of what real supply-side economics would be all about. You would have an integrated package of things, credit, et cetera, government surpluses, tax systems designed to be equitable but stimulate savings all the way up and down the board, by middle-income people as well as high-income people.

That is basically what you need, not a tinkering with the tax system. A fundamental overhaul that forces the whole society in the direction of savings and investing more in productive assets, as opposed to either consumption or nonproductive investments is what is needed.

Representative REUSS. Well, of course, Mr. Thurow, I have always been intrigued by your refurbishing an espousal of the value added tax proposal. However, as you well know, that is a proposition which, after the unhappy demise of Mr. Al Ullman in Oregon, is not widely favored.

Mr. THUROW. Yes, I understand that. But we haven't portrayed it in a positive way. You put it right out there as a package where on a dollar-for-dollar basis you are going to eliminate some other tax. You

combine the value added tax in one bill which says if you are willing to pay this tax, both the social security tax and the corporate income tax disappear.

I understand the problem even given that, but that is much more persuasive than simply saying well, I am going to add a little value added tax to the system, which everybody thinks you are going to use to make expenditures go up.

Mr. MUSGRAVE. But you said you want to increase taxes. You can't now say you want to substitute taxes.

Mr. THUROW. A 10-percent value added tax raise is more money than both the corporate income tax and the social security tax does at the moment.

Representative REUSS. Could I pursue one thought? I think certainly there should be agreement of the whole panel on the proposition that our tax system should not be one which gives great disincentives for savings and investment, and which gives great artificial incentives for consumption. And specifically, since we are now trying to have some money in the budget, so as to get the deficit under control, should we not give some immediate attention to two anomalies of our tax structure?

No. 1 is that, included in the $25 billion a year tax expenditures for the home mortgage interest deduction, is at least $5 billion for second and third homes, vacation homes, and for first homes in the hundreds of thousands of dollars. You could put a cap on that tax which would restrict the deduction to one's principal home, and save $4 or $5 billion a year.

Equally we spend in a tax expenditure close to $7 billion on the so-called consumer expenditure interest deduction. In fact, because only the upper quarter of income is itemized to any extent, that deduction benefits largely people at the top of the income scale and induces them to overconsume by overborrowing. By doing away with that tax expenditure you could save about $5 billion, a total of $9 billion, which is almost one-fourth of the administration's whole budget-balancing operation.

I point out that many other countries, Germany and Canada, have long ago, by surgery, eliminated these disincentives to saving and investment, and found it very successful.

Would you, Mr. Thurow, have some immediate objective national policy in this year's budget reconciliation, and in this year's tax bill recommend the diminution of the deficit by an additional $8 or $9 billion by plugging these two loopholes?

Mr. THUROW. Those two things are perfectly good examples of real supply-side economics. They are the kind of things that ought to be done. We may have a national interest in getting Americans into homes that they own, but we certainly don't have a national interest in getting them into second homes, and we certainly don't have a national interest into getting them into million dollar homes.

Representative REUSS. Mr. Musgrave, what would be your view on the proposition?

Mr. MUSGRAVE. This would be a very desirable thing to do, because it is one of the prime illustrations where the tax system discourages productive investment by not taxing. We should certainly take that step.

Representative REUSS. Mr. Meiselman, in addition, of course, to the other supply-side incentives which you've recommended.

Mr. MEISELMAN. Well, I think we are falling back into the trap of looking for little ways to tinker with the tax system while we overlook the major problem. The major problem here is that the tax system is severely biased against saving and investment. And you are just proposing to patch up a little part of a terrible structure. If you really want to do something about reducing the bias, then we should eliminate the tax on capital gains, for example, which is not a tax on income, but is a terrible transactions tax on capital.

At the very least, we should permit rollovers so that people can shift from one asset to another. We should move toward a reduction or the elimination of the corporate income tax, and a number of similar measures. It is the present tax structure plus inflation that is driving people into debt as they attempt to conserve their assets. The ordinary family cannot even hold on to their assets because almost all posttax rates of return are negative. The deductibility of interest expense generally moderates these losses.

There is plenty of room to argue about various details of moving toward eliminating the bias against savings and investment, and I think that there would be a high degree of consensus once we resolve to do that.

Let me point out one other thing, which is this: We are not talking about a classroom exercise where the Federal Government has the option of running a surplus, where the point of the surplus is to depress private consumption to enhance total saving. As a practical matter, and you Congressmen know better than I, it is essentially impossible for the Federal Government to run any surplus because Congress will simply spend the surplus. The best way to forecast the budget of the United States is, first, to forecast the revenues and then add an extra amount, and that is where we get total expenditures.

There is no way, under the present system, that we can have the Federal Government run a deliberate, explicit surplus because too many of your colleagues will just go out and spend it. And I think that one of the important virtues of having an across-the-board tax cut is to leave more income in the hands of people.

Many people are convinced that they can do a better job of spending what they earn than the Federal Government can, and I quite agree with them.

Representative REUSS. Let me restate my question, because you were really talking about something else.

Let's assume that you get your Kemp-Roth $140 billion a year tax reduction. Let's assume further that you wipe out capital gains taxation entirely, and that you have the full panoply of other benefits for that class of our society which saves most because they make more money so that your cup runneth over on all of your supply-side tax measures.

Do you object to somebody like me, who comes along and says:

> Look, you still have an inordinate incentive for people to borrow for consumer goods, because they can get a tax reduction. You still have an inordinate incentive for people to refrain from investing, because they can have the Federal Government pay for a large part of their very enjoyable ski resorts and lake homes, and other vacation homes.

Do you object to that?

Mr. MEISELMAN. If you completely remove the bias against savings and investment, I would have no objection to severely limiting the deductibility of interest.

Representative REUSS. I will put you down as sympathetic.

Mr. MEISELMAN. No. No.

It would depend upon the rest of the package. Of course, now that's the only way I can build up assets, whether it's a refrigerator, home, automobile, or something else. Because if I put it to some financial use, I fall behind, because the rate of return on everything is substantially negative.

So, what you propose would deprive me of one of the few opportunities where I can hold onto the assets that I earn, even after I pay my current income tax. So you wouldn't even let me have that. Do you really want me to lose on everything?

Representative REUSS. You are assuming things about my views on tax reduction generally that go farther than the state of my mind, at the moment.

Mr. MEISELMAN. If you are pressing for this, that would be the effective result.

People are filling up their homes with all kinds of stuff, even though they would rather buy stocks and bonds, and have savings accounts, and make funds available to others for productive investment and capital formation. Because when they have financial saving, they are sure to lose. They are sure to lose.

Representative REUSS. Well, I don't want to continue this endlessly, but——

Mr. MEISELMAN. Well, I wish you wouldn't continue it endlessly, and vote to cut the taxes on savings.

Representative REUSS. If one did nothing else—and I'm not advocating doing nothing else—except these measures, you would get more into savings and investment, quite obviously. And I don't know why you are willing to swallow the——

Mr. MEISELMAN. It depends upon how you define savings and investment.

It's true that I might not buy a refrigerator if I could not have the interest deducted. But then, if I go and put the money in a bank, I get a negative return. If I buy a Treasury bill or a bond, I get a negative return.

Whereas, I might get a positive return on a refrigerator.

So, what you would say—you would push me out of a positive return into a negative return—where I would fall behind.

Representative REUSS. Why don't you buy common stocks with it, as Mr. Evans has pointed out?

Mr. MEISELMAN. Common stocks are a better buy than they were before the capital gains tax was reduced. And at that time, the Dow Jones, I believe, was about 700 to 750. Now it's 950. And, even so, if I earn $100 of income and I pay tax, and then I buy common stock, it is taxed over and over again before I can get to spend it, because of the corporate tax, the capital gains tax, and everything else.

You won't even let me switch between one corporation and another. You're going to tax that transfer. You do tax the transfer.

Representative REUSS. At 28 percent.
Mr. MEISELMAN. Well, it should be zero.
Representative REUSS. I think we've said enough on this.
Mr. Evans.
Mr. EVANS. Well, very briefly, I would be sympathetic to your point of view only if it were coupled with additional tax measures to reduce the tax that we now pay on interest and dividend income.
I would like to see this $14 billion that you mentioned taken, and apply it to having a lower tax rate on interest and dividend income. If you can put that package together, I will support it.
Representative REUSS. All right. We may do a little business.
How about your little French plan, sort of a Keogh plan, where everybody gets it, and it's focused on stocks with no tax on either the dividends or the capital gains, as long as you keep the corporate chips on the table.
Mr. EVANS. I've testified in favor of that before. I would go along with something like that.
Mr. THUROW. Mr. Chairman, could I say one thing?
I think there is one thing in the tax law that is unfair on the rich. And I know of no economic justification for having the 70-percent rate on unearned income, and the 50-percent rate on earned income.
Whatever the right rate is, it should be the same on both, because both savings and work effort are important in our society.
Representative REUSS. You favor restoring the earned income figure to the 70 percent?
Mr. THUROW. I think they should be equal. I'm not in favor of putting it up at 70 percent. I think it would be nicer if you could put it at some—I'm in favor of putting it equal. You can put it equal at 65, or equal at 50, or equal at 70.
I think the key thing is it ought to be equal. Because the important thing is you tax human beings equally if they have an equal income. You don't make distinctions on where they got that income.
It is terribly important in the long run to have an equal rate. If you equalize down to 50, I don't find that terribly objectionable. If you find something else—like the two proposals you mentioned—to pay for it, so you are not making the total tax system more regressive as you do it.
Because the two proposals you mentioned would hit the upper income groups the most. The equalization downward of earned and unearned income would hit the upper income groups the most.
Representative REUSS. Very good.
Mr. Richmond.
Representative RICHMOND. I think one thing we can all agree on is that capital and investment is deficient in the United States. That we do seriously require modernization of our basic industries, along with modernization of our national infrastructure.
I hope you are all as worried as I am about the condition of our national infrastructure, which has got terrible problems. Because I just know metal structures don't last unless they're maintained. And we know, right across the United States, nothing has been maintained for the last generation.
Now, how do you all feel about an RFC financed with tax-exempt bonds, to encourage savings; which then would be used for those pur-

poses that have to do with the strengthening of the basic economy of the United States?

Mr. MEISELMAN. I would like to comment on that.

We have a very efficient private capital market.

Representative RICHMOND. No, we don't, Mr. Meiselman.

If we had, we wouldn't be in the miserable shape we're in today.

Mr. MEISELMAN. The market itself is efficient. It accurately reflects what the Government has done to it.

Representative RICHMOND. We all agree that the American rate of savings is abysmally low.

Mr. MEISELMAN. That's right. That is why all of us agree that the bias against an investment should be lowered or eliminated. The results in the market reflect the combination of the tax structure and the inflation. The market is poor because the economy is poor.

Now, the market mechanism is there. And, coming from New York City, you certainly know about that. The market mechanism is there for channeling savings into investment. If you permit it.

Now, if you keep the same disabilities in the system, but add still another gimmick about the RFC, that doesn't change the fundamental situation. In fact, what you do is that you again introduce the government into a process where the government is not efficient. Government is efficient at certain things; it is not very efficient at allocating capital.

Representative RICHMOND. The original RFC was certainly efficient.

Mr. MEISELMAN. There are debates about that. I don't agree that the original RFC was efficient.

Mr. MUSGRAVE. May I just come back to your immediate question, whether this kind of investment should be financed by issue of tax-exempts? I think that is a very bad way of doing it. On the contrary, one of the most urgent things the Congress should do is to think of ways of cutting back the flood of issue of tax-exempts which we have experienced.

It used to be that tax-exempts were issued to support State and local government. It is now that they are issued for all sorts of things: housing and industrial development. The point is that the financing through tax-exempts has a very detrimental effect on the equity of the income tax structure. And, while people these days pay little attention to that, it is still a very important factor. The raising of capital, through tax-exempts, means that you subsidize high-bracket investors into providing the savings. It is a very inequitable way of doing it, and I think it should be stopped entirely.

Representative RICHMOND. Mr. Thurow, where are these other governments getting the money?

I just read in the Sunday "Times" about the French people building a super-high speed railroad between Paris and Lyon? Where are they getting the money for all of that?

Mr. THUROW. Let me back up on two things.

First, there is a major problem in the United States with social-industrial infrastructure: Ports, bridges, those kinds of things.

A friend recently came and visited me, from Germany. And he said: "Why is everything in the United States rusty?"

Well, it is true. Everything in the United States is rusty. And a lot of those are Government things. And it is important to do a certain

amount of Government investment. In the next 10 years—no matter how much private investment we do—you can't build private coal mines unless somebody builds a port to export that coal.

Representative RICHMOND. Which could be handled by an RFC.

Mr. THUROW. It could be. I'm going to back you up on that next. Because I think there is a role for it.

The danger, obviously, is that it ends up bailing out the losers.

But let me give you a real illustration. It's fine to talk about efficient capital markets: and it's fine to talk about playing the laissez faire game. But the fact of the matter is, the United States is now in the real world, with some competitors that don't play that game.

You have to be able to compete with those competitors.

Think, for a moment, about the semiconductor industry, which everybody says, that's the leading industry of the 1980's. We are now the leaders in it, and that's great.

That industry currently, as they will tell you, is in the process of shifting from low-capital intensive technologies to high-capital manufacturing operations. The traditional American way to do that is: You borrow 20 or 30 percent of the income; you raise the rest out of retained earnings; and you slowly build those factories and compete.

The Japanese have publicly announced a better idea. The Government—the Bank of Japan—is going to loan those industries in Japan $10 billion: built the factories first: go down the learning curves; and drive the rest of the world out of the business.

Representative RICHMOND. So, in effect, they have an RFC. And Germany has one.

Mr. THUROW. They have one. They did that in steel. They did that in automobiles.

And my question, Mr. Meiselman, is, What makes you think they're not going to run us out of the semiconductor business?

Now, if the market kills the losers, and the Japanese kill the winners, then you don't have an economy; no matter how efficient that private capital market is.

Representative RICHMOND. We become an agrarian economy, all over again.

It's a great disgrace that everything we've invented, they're now making a lot better and a lot more efficiently than we can ever do. I believe that is why we need an RFC so badly, to quickly monitor American industry and American infrastructure.

You know, I'm sitting here really, seriously worried about the condition of the four bridges that cross into my district. They haven't been maintained in modern memory.

Mr. MEISELMAN. What is New York City doing with its money? Instead of fixing up the roads, they are doing God knows what with it.

Representative RICHMOND. Mr. Meiselman, we have a serious problem in New York City, because we are the major port of entry of every poor person in the world. And the Federal Government refuses to recognize the fact. That is our biggest cost, right there, taking care of the poor people.

Mr. MEISELMAN. That's been true for hundreds of years. And 30 and 40 years ago, the bridges were not falling down. That is when most of the bridges were built.

Representative RICHMOND. No; a lot of them were built during the Roosevelt era, with the WPA.. Most of the bridges in the United States were built by the WPA; most of the small bridges, particulary. Thousands of them. And they're all going to fall apart, right now, because it's 45 years later. And we know for a fact that a metal structure won't last.

I think this country desperately needs some type of bank which will loan money to cities for their infrastructure, which will loan money to corporations for their major modernization, in order to get our economy started again.

Mr. MEISELMAN. But, Congressman Richmond, we already have banks. We already have financial markets.

And the point of most of what happens in Wall Street is to gather savings from all over the country, and put them into growing industries.

Representative RICHMOND. Except we don't have the savings. Do we?

Mr. MEISELMAN. That's the problem.

And if, in fact—if we don't do anything on the savings side, and we have still another Government bank, that doesn't create any more savings. But what it does guarantee is that the use of that savings will not be efficient.

The Government is just not good at it. The Government is good at certain things. A government is not a good banker. There is nothing in American history which says the Government is a good banker.

And you know what would happen if there were billions of dollars at the disposal of the Federal Government? It would not be used on the basis of where the funds could be most efficient.

Representative RICHMOND. You say the Government is not a good banker. And yet, those two economies that are outstripping ours by leaps and bounds are controlled by the Government banks: Germany and Japan.

Mr. MEISELMAN. I don't believe that that's true.

I think that the stories about Japan, Incorporated, are far overstated. The bankruptcy rate in Japan is far higher than in the United States. What you have in Japan is a different sense of contract, because people in Japan have general understandings with each other. They don't have a bunch of lawyers telling them how to beat a contract.

So that, if a customer has some temporary problems, then other businesses will just carry them along for a little while. Because there is a presumption of a long-term contract.

We don't have that in this country.

I don't believe that there is any important evidence that the Government of Japan has long-term permanent involvement in any of these industries, if, in fact——

Representative RICHMOND. Both Germany and Japan, there's no question their industries are basically financed by Government entities.

Mr. MEISELMAN. I beg to differ with you.

And if, in fact, semiconductors are the great industry of today, that is precisely what a financial market is there for: To raise the funds

privately for growth industry. That is the biggest game in town: To raise money for growth industry.

There is no Government agency that knows that. And even if they did, they don't have the proper incentives to put their money where their mouth is.

Representative RICHMOND. Nobody has said anything about my RFC yet.

Mr. EVANS. I don't think it's a very good idea.

There. I said something about it. It is a silly idea.

Now, let me go to my point. And that is: That if we have Government intervention—you keep talking about Germany and Japan. How do you know we aren't going to turn out like Britain? Look what Britain does: Money for the auto industry, money for the steel industry, money for the coal industry. That's what's going to happen in this country, because the Government doesn't know how to channel funds efficiently into high-growth industries; and it wants to bail out the losers.

Were you in favor of bailing out Chrysler, Mr. Richmond?

Representative RICHMOND. Of course, I was in favor of bailing out Chrysler.

We know for a fact that Chrysler is a tremendously important part of our defense establishment. I think it would have been very, very unwise for us not to bail out Chrysler.

Mr. EVANS. Well, I am glad you said that. Because that is exactly what happens in the RFC. It would go to bail out Chrysler; and all the other losers would line up. And I don't think that is a good use of our scarce capital resources.

Representative RICHMOND. At no time did I say that the RFC would bail out losers.

I said the RFC would help refinance corporations that were sadly in need of modernization, such as our basic steel mills, which are not losers. They are just sadly in need of modernization. And our railroads. And our highways.

Mr. EVANS. You can do that through capital markets, and you can do that through investment tax credits. You don't need another RFC.

Representative RICHMOND. We're not doing it.

Mr. EVANS. That is because the tax laws are not proper. We're trying to change them, this very morning.

Representative RICHMOND. That is why I said our RFC should have tax-exempt bonds. In one fell swoop, that would make that investment a very attractive investment.

Mr. EVANS. Well, I could put all my money in that and not pay any taxes. But that's not a good idea for the economy.

Mr. MEISELMAN. Why not have all bonds tax exempt?

Representative REUSS. I think Mr. Richmond's time has elapsed.

Let me turn to monetary policy.

Mr. Meiselman, you say that your studies indicate that deficits don't really have much to do with inflation; and that the Federal Reserve is in error when it points to deficits as making its monetary role difficult or impossible.

Is that a fair statement?

Mr. MEISELMAN. That's true. There are the great anthropomorphic

illusions that are made, that the Federal Reserve somehow has this awful burden. I see them hunched over with pain, carrying all of the new bonds on their backs.

Representative REUSS. Now, the last two Chairmen of the Fed, Arthur Burns and Paul Volcker, have indeed called "foul" repeatedly on the fiscal authorities for putting too much burden on monetary policy.

Your feeling is that that complaint, that bellyaching, if you will, is unjustified, and that fiscal policy may have been wrong—and it may be wrong again in the future; and that this misguided fiscal policy is an evil in itself, and it doesn't really affect what the monetary authorities ought to be doing?

Let me be sure I understand you.

Mr. MEISELMAN. That's right.

Except, if the Federal Reserve has certain operating guidelines, which they take on themselves about pegging interest rates. And, in those circumstances, if the additional sale of Government bonds would push up interest rates, then they have a burden of trying to get them back down again.

And if they peg interest rates in the face of an increase in the public debt, that means that they have to increase the money supply. Which ends up by making interest rates still higher.

I mean, if they just did nothing, there is no burden. They just do nothing. That is my advice: Do nothing.

Representative REUSS. What do you mean by "doing nothing"?

Mr. MEISELMAN. Don't monetize the deficit.

And if there is a slow, steady rate of growth of money, the increase in money would be noninflationary. Interest rates would move up and down; but in a very narrow range, as was the case in our history before we had all of this inflation.

Representative REUSS. Now, since October 1979, the Fed has been adhering, so it says, to monetary aggregates.

Some say—and I would ask you whether you do—that they mildly depart from that when they use Federal funds as an intermediate targeting device.

But, leaving aside the whole eras farther back than October 1979, what is your complaint about Federal Reserve policy?

Mr. MEISELMAN. First of all, I don't believe that it's correct that, since October 1979, the Federal Reserve has followed a money supply target. I mean, the words are somewhat different, but the actions are largely the same.

And, in fact, it seems to me that the actions are given worse than before October 1979.

Since October 1979, we've had still greater variability in the rate of growth of money. It went from too high, to still higher, to negative, to very high again, just before the election. And, in the last 4 months, there has been essentially little or no growth in the monetary base.

I haven't done the calculations, but I think, in the past year or year and one-quarter, we have had still greater variability in the money supply.

So, I don't see that, as a practical matter, that there has been

any effective change in what the Federal Reserve has done. They are still pegging the Federal funds rate; and, in general, the pegged Federal funds rate still runs behind the market. This has the effect of increasing the volatility of the money supply.

Representative REUSS. Outside of their doing something about the Federal funds rate, other than just letting it oscillate as it will, it is pretty hard to lay a glove on them, though, isn't it, on your interest rate charge? Good Lord, they saw in the last year these two horrendous swings to 20-, 21-percent prime rates. They saw the decline in the summer of 1980 to 11 percent, actually below the rate of inflation.

It doesn't look to me as if the Fed were figuring interest rates as in the bad old days. How do you answer that?

Mr. MEISELMAN. Well, the reason that the interest rates have been this volatile is precisely because of the volatility of the money supply. It is true if the Fed doesn't hold on to the Federal funds rate quite as long as they did in the past, but they still do. So, you have the combination of an incorrect procedure in settling reserves, which is lagged reserve requirements, plus the fact that the Federal Reserve is still in the market almost continuously pegging the Federal funds rate. The Fed has no way of knowing what the market clearing interest rate is. The only way they would know is to get out of the market and see what the market result would be.

So what has happened now—and this is clear to anybody that follows the financial markets, as I have, is that money market rates have come down very sharply in recent months, and the Federal funds rate has fallen slowly and reluctantly. The Federal funds rate has not come down as much as other money market rates.

As a consequence of that, there has been little or no change in the monetary base. So we have had another part of the very sharp alternations of too much money and too little money, and now it seems to me we are in the phase of too little money.

Representative REUSS. Do you agree with Milton Friedman, Bob Weintraub, and others that if the Fed would just fix up lagged reserves and let the discount rate float and not worry about the Federal funds rate, that monetary policy would then become sensible and we would be well on the way toward ending the stagnation and inflation?

Mr. MEISELMAN. Those would be helpful ingredients, but you left out one thing, Congressman, which is, the rate of growth of money. The changes in the operating procedures are important, but we still have to focus on what rate of change of money we would settle on.

Representative REUSS. You know what the targets were for 1980. In a day or two, the Fed is going to announce what they are for 1981. What would you like to see them at?

Mr. MEISELMAN. I would like to see those targets for 1981 and beyond reduced, and I would like to see that the targets would be announced not only for 1981 but for subsequent years and that the range be made smaller and that the Federal Reserve be held to maintaining those and not only on a year-to-year basis but within a shorter period of time. At the present time, we have so many monetary targets that it has the effect of there being no target at all. We have M-1, 2, 3, 4, 5, 6, and it is inevitable that some of those M's be met and others not. And at the same time, it is impossible for all of them to be met.

So what I would like is for the Federal Reserve to settle on one M. I would think now at the present time perhaps M-1-B would be the best. Any one M would be better than having a whole family of M's. Stick with it, not just on a year basis but within a shorter period of time.

In order to make that possible, as a technical matter, it is essential that the Federal Reserve stop pegging interest rates, and it would also be helpful if the lagged reserve requirements were eliminated and were replaced by concurrent reserve requirements, which was the situation that they had before about a decade ago. That would make for better procedures, and at the same time you would engender better expectations of participants in the financial markets that would tend to stabilize rates. These ingredients would stabilize the rates more effectively than what the Federal Reserve is doing now.

The Federal funds rate is for overnight loans. That is the shortest duration of all of the different kinds of debt instruments. The Federal funds rate should pick up most of the noise in the system—most of that is random. To focus so much emphasis on what is essentially a random number for such an important policy variable as the supply of reserves to the banking system, is I am convinced, the height of folly.

We have financial markets, and we have large numbers of individuals in financial markets who are willing to take speculative positions precisely to absorb these kinds of disturbances.

Representative REUSS. This has been a fascinating discussion, and we could go on—and with profit—for days. I want to express my gratitude to each of you. Since at various times during the morning some of you had the look about you of gentlemen who had more to say but weren't recognized, do any of you want to take this opportunity to fill out some time with additional observations?

I think by the time we were through, most of you did get a chance to have your say, and I am grateful to you for coming here. You've helped us very much.

Thank you, and the committee will now recess.

[Whereupon, at 11:45 a.m., the committee recessed, to reconvene at 10 a.m., Tuesday, February 24, 1981.]

THE 1981 ECONOMIC REPORT OF THE PRESIDENT

TUESDAY, FEBRUARY 24, 1981

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 10:05 a.m., in room 6226, Dirksen Senate Office Building, Hon. Lloyd Bentsen (member of the committee) presiding.

Present: Representatives Richmond and Heckler; and Senators Roth, Hawkins, and Bentsen.

Also present: James K. Galbraith, executive director; Louis C. Krauthoff II, assistant director; Kent H. Hughes, George D. Krumbhaar, Jr., Deborah Matz, and Helen T. Mohrmann, professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, PRESIDING

Senator BENTSON. The hearing will come to order.

The Joint Economic Committee this morning is very pleased to welcome Ambassador Bill Brock. Bill Brock has been a friend and colleague of mine for many years. I can personally attest to his ability to turn things around. And I might say that I will be somewhat mollified in my new position of being in the minority of the Senate, if he would be as successful in turning American exports around. Lately we've been seeing two very different approaches to American trade.

We have one approach that says that everything is doing very well. They point to the fact that exports of American manufactured products went up 22 percent last year, and they allude to the first current accounts trade balance in some time. So they stress the incredible strength and the efficacy of our agriculture and our high technology industry.

On the other side you have doubts expressed, because we have some very real and some very profound problems on the horizon. They emphasize the fact that over the last 3 years we've had a $90 billion deficit in trade. Last year we had approximately a $72 billion deficit on the importation of energy into this country. So they see our high technology industry being targeted by some very aggressive nations and often subsidized export products on those high technology industries. This is in addition to protectionism being rampant within those countries.

I happen to believe that the U.S. trade situation is neither as sanguine nor as somber as a lot of people believe. Despite some obvious differences in outlook and emphasis, I think we all can agree that the best thing

we can do for American exports and their competitiveness is set our own economic house in order, to restore the stability, the productivity and the creativity of American industry.

We also can agree that foreign markets are becoming increasingly important to our domestic prosperity. There's really an iron link between the two. During the past decade both imports and exports have doubled as a percentage of GNP. One out of every eight jobs in this country is related to exports.

As we move to make some fundamental corrections in domestic economic policy, we have to increase that competitiveness. I believe we should also operate on the parallel track of removing disincentives to U.S. exports abroad.

I would like now to turn to Senator Hawkins for such statement as she would like to make.

Opening Statement of Senator Hawkins

Senator Hawkins. It's a pleasure for me to welcome Ambassador Brock here today. I share your pride in his accomplishments and wish him well in this great endeavor. I'd like to——

Senator Bentsen. Mine was more recognizing the realities.

Senator Hawkins. They speak for themselves here. I know he came here to discuss the Reagan administration's trade policy objectives and the role of the United States in the world economy. These are critical issues, in light of the increasing economic interdependence of nations and the vulnerability of the United States to other countries' trade policies and practices. The United States finds itself at a crossroad in its economic development. During the seventies we watched our balance of trade deteriorate to the point that our cumulate deficit for the latter half of the decade reached over $1 billion. We watched the dollar decline, sapping our bargaining strength, and we saw a critical decline in our competitiveness in the international marketplace.

Imports gained an increasing share of domestic markets traditionally supplied by American producers. Export-oriented nations in Europe, East Asia, and the developing world presented now challenges and moved ahead of the United States in numerous product sectors. Our Nation's policies, however, were not designed to deal effectively with this competition. Our international economic approach was geared toward helping every country except our own.

We burdened our exporters with unnecessary and damaging hinderance to trade. Our investment tax and regulatory policies hurt our Nation's technology advance and our firms' and workers' efforts to modernize and improve productivity. While we offered a free and fair U.S. market for foreign products, our trading partners were slow to reciprocate. We now have an opportunity to change the direction of U.S. trade, to improve productivity and greatly enhance our competitiveness.

Through changes in our domestic economic structure we can encourage firms to innovate. On the international front we can adopt policies that reduce the burden on our traders. We can work to eliminate foreign barriers to U.S. products. The Toyko round of multilateral trade negotiations was a beginning in our efforts to remove foreign,

nontariff distortions to trade, but we must follow through. We must aggressively enforce U.S. trade rights and seek all possible oversea marketing opportunities for the benefit of our producers of goods and services.

The challenge before us is great and requires imaginative solutions to complex problems. By adopting policies that put American firms and workers and consumers first and foremost, however, we can restore our domestic and international economic strength.

Senator BENTSEN. Thank you very much, Senator Hawkins.

Mr. Ambassador, we're very pleased to have you. If you'll proceed.

STATEMENT OF HON. WILLIAM E. BROCK III, U.S. TRADE REPRESENTATIVE

Mr. BROCK. Thank you very much, Senator.

May I say at the outset that I would have been privileged if the two of you could have prepared by opening remarks, because I agree with everything you've said, and I appreciate the tone and tenor of those comments.

I'd also like to express my delight at being able to appear before this committee, where I served with some considerable pleasure, something over 10 years ago now. I believe this is one of the more remarkable committees in the entire Congress. It does have the opportunity for an overall sense of perspective that is not always available to the line item committees that have to operate on a daily basis.

I think the work of this committee in recent years, particularly under the chairmanship of the Senator from Texas has just been exclusive. I commend him for his leadership and his ability to lead in a nonpartisan fashion, because I think that is the essence of our economic requirement. And I appreciate the quality of your work, and I look forward to working with you very much in the future.

I've got a fairly extensive prepared statement. I will try to summarize that so that we can go more directly to questions.

Much of the earlier remarks do relate to the same comments that have been made by the chairman and the Senator from Florida. We have had five consecutive years now of trade deficits, totaling over $100 billion. Our trade deficit with Japan remains heavily in deficit, $10 billion from the last year. I do think that it is important to note that while the trade deficit and import volume have declined in the last 2 years, that the developments in those two areas portend a little more positive movement in net terms. The developments are primarily attributable to the sluggishness here in our own domestic U.S. economy and the deterioration of the dollar over the last several years.

And that's not exactly the way we'd like to solve our trade problems. There has been improvement in the U.S. balance on current accounts. We have the 1980 surplus of approximately $5 billion, but that largely reflects the sizable increase in earnings from U.S. corporate activities abroad. Of those activities, 50 percent of those earnings are reinvested overseas rather than returned for investment in this country.

We have moved from an earlier era of economic isolation to one of growing international interdependence. As you've noted, U.S. exports in 1980 are double what they were just 10 years ago. Our manufac-

turing exports have increased from 14 percent of our production manufacturing to more than 20 percent; 30 percent of our agricultural sales are exported compared to just 15 percent a year, 10 years ago.

But at the same time, we do face, as the Senator from Florida has noted, a growing competitive challenge from our trading partners. Western Europe and Japan have recovered from their earlier adversity. The developing countries are aggressively seeking to pursue policies designed to achieve rapid economic growth with the result that we are no longer an economic superpower as was the case two decades ago. In 1960, we accounted for 45 percent of the world's market economies' total output. Today we're down to 29 percent, although we still obviously continue to grow.

In his speech to the Congress, President Reagan emphasized the poor performance of the U.S. economy in recent years and detailed his hope for a new economic recovery program. Our domestic economic performance has been a central element in the loss of U.S. competitiveness overseas. Underlying this trend have been such factors as overregulation of economic activity, burdensome taxation, high interest rates, inadequate returns on investment, excessive Government spending, and double-digit inflation.

These elements have had a strong negative effect on economic incentives and activities which lie at the core of competitiveness—savings, investments, and innovation.

Personal savings have declined by a third to a level under 6 percent, the lowest among the industrial countries. Gross capital formation is also lower for the United States than for our major industrial competitors. Investment resources available per worker in this country have grown by less than 2 percent a year over the past two decades, while in Europe the growth in capital per worker has been double our rate, and in Japan and Korea the growth rate has exceeded 10 percent per year or five times our rate of improvement. In the area of technological innovation, research and development expenditures as a percentage of gross national product have declined in the United States, while increasing substantially among our trading partners.

The result, a decline in U.S. productivity in absolute terms and in relative terms in comparison to other industrial nations. The lack of U.S. productivity growth, which this committee has addressed so cogently in recent years, severely limits the ability of our economy to generate noninflationary growth, noninflationary wage and salary increase. Since 1976, that growth has remained essentially flat, while hourly wages have increased by 20 percent. In contrast, Germany, France, Japan, and other nations have experienced recent productivity gains of more than 4 percent per year, with increases in domestic wages that have been larger than those in the United States and more in line with productivity gains.

We can draw two conclusions from this overview.

First, the United States must act quickly and decisively to reestablish a sound domestic economy in order to meet the competitive demands of the 1980's.

Second, we must preserve and strengthen the open and fair trading system that we have been constructing for 35 years and on which much of our prosperity depends. Protectionism can only hurt us in

the long term. It will damage market opportunities for our strong export sections, such as agriculture, capital goods and services, and high technology products. It will not provide the basis for any enduring and efficient revitalization of our presently weak sectors. Restrictive measures on imports should be imposed only as a last resort, and only to the extent they support improved efficiency of our human, physical, and natural resources.

The first task before us, of course, is to implement the agreements negotiated during the multilateral trade negotiations or MTN. The terms and timing of implementing the tariff concessions are clear cut, but implementation of the nontariff codes will be a considerably more complicated and less predictable process. In shaping the GATT's new code approach, the United States will be a most active participant and will be aggressive in defending its right.

In addition to implementing and extending the agreed codes, we will have to accelerate our efforts in two areas of unfinished MTN business; namely, development of an appropriate discipline for safeguard actions and completion of an anticounterfeiting code. This is essential for the future of the opening trading system that a common discipline governing safeguards be negotiated among the major trading countries, and that it cover action of all types, both governmental and private.

If U.S. firms are to take full advantage of the more open trading environment that is expected to result from the MTN agreements, the U.S. Government will have to remove the major export disincentives that are embedded in our tax and regulatory policies, as Senator Hawkins has mentioned. Some Government programs and regulations have a substantial negative impact on the ability and desire of U.S. managers to export. Among the key export disincentives are U.S. taxation of foreign earned income, export controls, the Foreign Corrupt Practices Act, and certain environmental and safety programs and regulations.

The Trade Policy Committee has assigned its highest priority to alleviating the problem of export disincentives and has already established working groups on the Foreign Corrupt Practices Act and other major issues.

Talking then to the question of U.S. competitiveness, there are four primary areas where we clearly have a lead today: Agriculture, international investment, services, and technology-intensive products. We must be particularly attentive to opportunities for further trade liberalization in these sectors. And I should have said, after we have dealt with our problems at home, that we need to look at these problems with regard to our trading partners.

Let me just mention, other than the industrial nations, we do have coming problems that are fairly obvious in certain specific areas that I want to make a note of before this committee. The People's Republic of China represents a particular challenge of special dimensions to trade policy. I raise that question. Our trading mechanism, the process that we have evolved over the years, was one which was basically established by countries committed to the market system between market economies and the rules and strictures of procedures established were ones which have great applications in all of those

nations. We now live in a world in which we have market economies, mixed economics, and nonmarket economics. And it is of consequence that our trade policy be flexible and adaptive to the new dealings we have to engage in with countries such as the People's Republic of China, which is obviously not at this point a market economy.

But even among the free market nations, we have increasing levels of challenge. Canada being one example. It's our most important bilateral trade partner. It's pursuing a much more nationalistic trade policy, which we have to take into account.

Mexico is becoming a much more aggressive nation, who is enormously important to us, as you recognize in your own area. Its oil-based economic expansion is accelerating. It's accelerating its industrialization and allowing for the expansion and diversification of its manufactured exports. These developments suggest the possibility of substantial changes in the terms and composition of our trade with that nation.

They could also offer the terms and content of our trade in the entire Caribbean basin, including Central America. For these reasons, the northern half of the Western Hemisphere will receive special emphasis in our trade policy development, including a report by the President to the Congress this year.

Finally, with regard to individal nations, the MTN was called the Tokyo round to reflect the locale of its deliberations. One might also call it the Tokyo round, because the liberalization of the Japanese market was one of the most important negotiating objectives of our Government. We have made significant progress toward that objective, but we must do much more, as we continue to seek open markets with Japanese. The Japanese market is attractive to American goods and services in terms of its wealth and the composition of consumer demand, but it is intensively competitive, with many special characteristics. Increased exports to this nation will substantially reduce our large trade deficit with that country, which exceeded $21 billion in bilateral trade and manufactured products last year.

U.S. trade policy must insure that American producers are in the best possible position to export to that market. U.S. trade policy must also reflect the fact that trade and investment are interwined inextricably. Investment policies, such as export performance requirements and local content requirements, distort both the geographical distribution of caiptal and the pattern of international trade.

The challenges to trade policy that I have very briefly described are considerable and complicated. They must be met successfully, if the United States is to achieve a dynamic economy with a full and efficient use of its resources. Trade is a messenger of change in the world economy and of the need for adjustment in our own economy. We can shut our ears to the messenger through protectionism and avoid any adjustments for awhile, but we will suffer in the long run.

Alternatively, we can respond to trade's messages of change by adopting forward-looking trade and economic policies, with the result that our high standard of living is preserved and, indeed, improved. It is essential to the prosperity and stability of the world in which we live. It is essential to the creation of jobs and the prospect of enhanced growth for this Nation, that we aggressively seek enlarged trading

prospects with our partners around the world, and that this Nation be a good deal more forthcoming in the content of conduct in economic terms around the world.

Mr. Chairman, that concludes the summary of my prepared statement.

[The prepared statement of Mr. Brock follows:]

PREPARED STATEMENT OF HON. WILLIAM E. BROCK III

I am pleased to have the opportunity to appear before the Committee and to respond to your questions regarding U.S. trade policy objectives and the role of the United States in the world economy. I am glad to be back among a number of my friends and former colleagues. Today I shall sketch with a broad brush the range of trade-related issues that we, as a nation, face; however, I anticipate and, indeed, look forward to returning often to consult with you on individual trade matters and issues of concern to the American people, the Congress and the President.

During the last several years, we have witnessed a deterioration in our balance of trade and payments and a decline in the value of the U.S. dollar abroad as well as at home. We have experienced five straight years of trade deficits that have cumulated to over $100 billion. Our trade with Japan has remained heavily in deficit ($10 billion in 1980), and our heavy oil dependence has led to a record $38.5 billion deficit with oil-exporting countries last year.

Although our trade deficit and import volume have declined in the last two years, these developments are attributable in major part to the sluggishness of the U.S. economy and the deterioration of the dollar over the past several years. There has also been improvement recently in the U.S. balance on current account. In 1980 the U.S. current account may record a surplus of approximately $5 billion. But, this improvement largely reflects the sizeable increases in earnings from U.S. corporate activities abroad in recent years. Nevertheless, 50 percent of those earnings are reinvested overseas rather than returned for investment in the United States.

Our trade and payments performance, of course, increasingly affects and is affected by economic activity abroad. Our earlier economic isolation has been superseded by a growing international economic interdependence. This trend has been developing throughout the post-World War II period and appears to have accelerated during the past decade. In 1980, U.S. exports of goods and services accounted for 12.2 percent of our gross national product, compared to 6.4 percent in 1970. In the manufacturing sector, exports have increased over the same period from 14 percent of our output to more than 20 percent. Furthermore, 30 percent of the value of agricultural sales of this country currently are exported, compared to 15 percent a decade ago. These figures give a clear indication of the growing dependence of our economy on international trade.

While foreign trade has come to play an increasing role in our economic well-being, we face a growing competitive challenge from our trade partners. Western Europe and Japan have recovered from their post-war devastation and expanded their productive capacity more rapidly than the United States. In addition, the developing countries, striving to raise their standards of living above the poverty level, have also pursued policies designed to achieve rapid economic growth. The result is that the United States is no longer the unchallenged economic superpower that it was two decades ago. In 1960 the United States accounted for 45 percent of the market economies' total output, but today we account for less than 29 percent. Our share of world exports has also declined. We are still relatively dominant, but we have many dynamic industrial and developing country competitors in the world economy today.

In his speech to the Congress on February 18, President Reagan discussed the poor performance of the U.S. economy in recent years and detailed a new recovery program. Our domestic economic performance has been a central element in the loss of U.S. competitiveness overseas. As the President noted, underlying this performance trend have been such factors as over-regulation of economic activity, burdensome taxation, high interest rates, inadequate returns on investment, excessive government spending and double-digit inflation. These factors have had a strong negative effect on economic incentives and activities which lie at the core of competitiveness—saving, investment and innovation.

80-478 O - 81 - 5

The rate of personal savings has declined by a third since 1975 to a level under 6 percent of disposable income—the lowest among the major industrial countries. Gross capital formation as a percent of GNP is also lower for the United States than for our major industrial competitors. Investment resources available per worker in this country have grown by less than 2 percent per year over the past two decades. Meanwhile, in Europe the growth in capital per worker has been double our rate; and in Japan and Korea the growth rate has exceeded 10 percent per year. In the area of technological innovation, research and development expenditures as a percentage of gross national product have declined in the United States, while such expenditures in other countries, especially Japan and West Germany, have increased substantially.

The result of these trends in savings, investment and R&D expenditures has been a decline of U.S. productivity in absolute terms and relative to other industrial countries. The lack of U.S. productivity growth severely limits the ability of our economy to generate noninflationary wage and salary increases. Since 1976, productivity growth in the business sector has remained essentially flat, while hourly wages have increased on an average by 28 percent. In contrast, Germany, France, Japan and other industrial countries have experienced recent productivity gains of more than 4 percent per year with increases in domestic wages that have been larger than those in the United States and more in line with productivity gains.

We can draw two important conclusions from this overview of the international competitive situation in which we find ourselves.

First, the United States must act quickly and decisively to reestablish a sound domestic economy in order to meet the competitive demands of the 1980s. We have lost export market shares abroad and our competitive position has been weakened domestically in several major industries. These include not only automobiles—where last year imports took 27 percent of our market—but also steel, consumer goods, and some electronics. In some cases—automobiles is a prime example—domestic economic policies and regulations have played an important role in weakening the ability of U.S. industry to compete against foreign producers. President Reagan's Program for Economic Recovery will make a substantial contribution toward reversing this trend.

Second, we must preserve and strengthen the open and fair trading system that we have been constructing for 35 years and on which much of our prosperity depends. The contribution of exports to domestic employment, agricultural production, corporate profits and a strong currency require us to pursue further reciprocal trade liberalization. Protectionism can only hurt us in the long-run. It will damage market opportunities for our strong export sectors (e.g., agriculture, capital goods and high technology products). It will not provide the basis for an enduring and efficient revitalization of our presently weak sectors. Restrictive measures on imports should be imposed only as a last resort and only to the extent that they support improved efficiency of our human, physical and natural resources.

With these general observations in mind, let me turn to several of the major long-term trade policy issues that face us. These issues are major elements of a long-term trade and investment strategy that we are developing and on which we will consult with the Congress in the near future.

The first task before us, of course, is to implement the agreements negotiated during the Multilateral Trade Negotiations (MTN). The terms and timing of implementing the tariff concessions are clear-cut, but implementation of the non-tariff codes will be a considerably more complicated and less predictable process. In the MTN the participants agreed on various principles and broadly defined procedures for dealing with selected non-tariff barriers. There remains before us the more difficult task of applying the agreed principles and procedures to specific cases in ways that support U.S. interests in developing a fair resolution of the individual cases and a coherent system of discipline. The success of this evolutionary process will be a critical factor in determining the fairness of the trading system of the eighties. Therefore, in shaping the GATT's new code approach, the United States will be a most active participant and aggressive in defending its rights. We will seek to broaden the relevance of the codes by encouraging the developing countries to adhere to them and bring their own trade problems to the code committees in a spirit of pragmatic problem-solving. We also hope to use the annual reviews of the codes and the programmed three-year review as opportunities for exploring new areas to which individual codes might

be extended. For example, we would want to examine the possibility of extending the coverage of the Government Procurement Code to include services, purchases by government utilities, and possibly other trade areas.

In addition to implementing and extending the agreed codes, we will have to accelerate our efforts in two areas of unfinished MTN business, namely, development of an appropriate discipline for safeguards actions and completion of an anti-counterfeiting code. It is essential for the future of the open trading system that a common discipline governing safeguards be negotiated among the major trading countries and that it cover actions of all types, both governmental and private.

If U.S. firms are to take full advantage of the more open trading environment that is expected to result from the MTN agreements, the U.S. government will have to remove the major export disincentives that are embedded in our tax and regulatory policies. Some government programs and regulations have a substantial negative impact on the ability and desire of U.S. managers to export. Among the key export disincentives are U.S. taxation of foreign earned income, export control, the Foreign Corrupt Practices Act, and certain environmental and safety programs and regulations. This administration is dedicated to achieving its social, economic and foreign policy objectives in a cost-efficient manner. This means that the economic burden of current and proposed regulatory policy, especially their implications for inflation, will need to be scrutinized carefully. Part of that scrutiny must be an assessment of proposed regulations' impact upon American competitiveness in the world market. U.S. products face very stiff competition on the basis of price, quality, credit and service.

We should not make the international sales environment unnecessarily tougher by imposing burdensome regulations and policies upon our exporters. The Trade Policy Committee has assigned the highest priority to alleviating the problem of export disincentives, and has already established working groups on the FCPA and other major issues.

The U.S. negotiating priorities of the 1970s reflected the domestic economic structure of the period. In a market economy such as ours, however, the structure of the economy changes continuously. Trade policy must keep abreast of those changes by pursuing additional liberalization in those areas in which our comparative advantage appears to be growing. Four areas come to mind immediately as continuing sectors of U.S. competitiveness—agriculture, international investment, services and technology-intensive products. We must be particularly attentive to opportunities for further trade liberalization in these sectors—especially services, which have not been covered by multilateral GATT agreements. Exports of services are a growing component of the total U.S. trade picture and now amount to a third of U.S. exports of goods and services. A healthy trade performance for U.S. services exports—such as insurance, consulting engineering and construction—also contributes directly to our merchandise export performance. Therefore, successful liberalization of barriers to U.S. service exports may pay a double dividend.

The pattern of U.S. comparative advantage is not the only aspect of the trade picture that is changing rapidly. The complexion of the trading community is also undergoing substantial change. The developing countries have emerged as increasingly important markets for U.S. manufactures, especially capital goods and high technology products. U.S. trade policy must take account of these trends by seeking improved and secure access to important LDC markets and by developing a workable mechanism by which individual developing countries assume fuller GATT obligations as their development status and trade competitiveness improve. This is a very difficult task, but the other aspect of the LDC's growing trade strength presents an even tougher challenge. We must find socially and economically acceptable ways of managing the adjustment difficulties in our own economy that result from the LDCs' evolving comparative advantage. A purely protectionist response would be extremely shortsighted. Cutting off imports from the developing countries would reduce their ability to purchase the exports of our most efficient industries. It also would impede the achievement of non-inflationary growth in our own economy because it would undermine the market process by which resources are allocated to their most efficient use.

Among the emerging LDC traders, the People's Republic of China presents a challenge of special dimensions to U.S. trade policy. The Chinese clearly expect to trade with us more heavily in the coming years than ever before. They

will be attempting to sell the same type of products as so many other Third World countries—clothing, footwear and miscellaneous light manufactures. The size of their potential production in itself would require a creative U.S. policy response. The situation is complicated enormously, however, by the fact that the PRC is a non-market economy. We must develop appropriate bilateral and multilateral means of dealing with this large centrally-planned economy so as not to undermine the integrity of the market system on which our trade policy and the GATT itself rest.

Our major trading partners also present challenges for U.S. trade policy as they make adjustments in their own economic objectives and associated trade policies. Canada, our most important bilateral trading partner, is pursuing a more nationalistic trade policy, especially in the area of raw materials and energy. Our approaches to trade expansion across our northern border must take account of these new Canadian policy directions. Trade with our southern neighbors also will be occurring under sharply different circumstances in the 1980s than previously. Mexico's oil-based economic expansion is accelerating its industrialization and allowing for the expansion and diversification of its manufactured exports. These developments suggest the possibility of substantial changes in the terms and composition of U.S. trade with Mexico. They also could alter the nature of trade in the entire Caribbean Basin, including Central America. For these reasons, the northern half of the Western Hemisphere will receive special emphasis in our trade policy development, including a report by the President to Congress this year.

The MTN was called the Tokyo Round to reflect the locale for the 1973 declaration that launched the negotiations. One also might refer to it as the Tokyo Round because the liberalization of the Japanese market was one of the most important negotiating objectives of the U.S. Government. We have made significant progress toward that objective, but we must do much more, as we continue to seek open markets in Japan. The Japanese market is most attractive to American goods and services in terms of its wealth and the composition of consumer demand, but it is an intensely competitive market with many special characteristics. Increased exports would also substantially reduce our large trade deficit with Japan—which exceeds $21 billion in our bilateral trade in manufactured products. U.S. trade policy must ensure that American producers are in the best possible position to export to that market.

U.S. trade policy also must reflect the fact that trade and investment are intertwined inextricably. Investment policies such as export performance requirements and local content requirements distort both the geographical distribution of capital and the pattern of international trade. Such policies are becoming increasingly prevalent in both developed and developing countries; the former use such policies to bolster industries with declining competitiveness, and the latter use these policies to establish industries whose political appeal outweighs the market's judgment of their economic value. If the United States is to protect its substantial interests in international trade and investment, it will be necessary to include these trade-related investment issues in the formulation and execution of our trade policy.

The challenges to trade policy that I have described are considerable and complicated, but they must be met successfully if the United States is to achieve a dynamic economy with full and efficient use of its resources. Trade is a messenger of change in the world economy and of the need for adjustment in our own economy. We can shut our ears to the messenger through protectionism and avoid any adjustments for awhile, but we will suffer in the long-run. Alternatively, we can respond to trade's messages of change by adopting forward-looking trade and economic policies, with the result that our high standard of living is preserved and, indeed, improved. I look forward to cooperating with the members of this committee in framing and executing such policies.

Senator BENTSEN. Mr. Ambassador, I would return the compliment. I don't know what I disagree with except possibly some emphasis. But since Senator Hawkins and I had opening statements, I would like to turn to Congressman Richmond to lead off on the questioning.

I would ask that each member limit questioning to 10 minutes.

Representative RICHMOND. Thank you, Mr. Chairman.

Mr. Ambassador, two things are of great interest to me. No. 1, Japan. Clearly in the past we pursued a one-way street. Like they say, love is a two-way street. Clearly in the past it has all been one way.

Just last year alone, as you said, we had a $21 billion deficit in manufactured goods. I assume your policy and the Reagan administration's policy is to equalize that deficit as quickly and efficiently as possible, right?

Mr. BROCK. It is.

Representative RICHMOND. Will that be done by limiting Japanese imports? Or will that be done by exerting our influence on the Japanese to export more?

Mr. BROCK. I guess that depends on the Japanese.

Representative RICHMOND. What is your feeling?

Mr. BROCK. It seems to me that the most dramatic step that could be taken on the part of the Japanese would be to insure the opportunity for U.S. marketing and sales and investment in that country. That means that barriers, primarily nontariff barriers, should be removed, that we should be allowed to invest in distribution systems in that country because they are used constantly as an excuse, and it is just that, for our inability to sell over there.

But let me say that while we can expect, I think, some very responsive actions on the part of the Japanese that we intend to pursue that very aggressively. The shoe does fit on both feet, and it is important that business in this country decide whether or not it wants to complete.

It has been awfully easy to deal in the largest common market in the world in this country and not have to worry about going out and printing our sales brochures in other languages or getting people to really go out and work those markets. It will take on our part a more aggressive stance as business people.

It is our job in the Government to remove those barriers. We intend to do that within the limits of our capability, but to the maximum degree we can will do that.

It also will take a much more aggressive position on the part of our business community.

Representative RICHMOND. Ambassador Brock, let's take my field, which is food. Last year, due to the intensely powerful, tiny but powerful, Japanese agricultural lobby in Japan, which as you know is tied in with the ruling party, we were only allowed to export $11 million worth of vegetables to Japan. Coincidentally, that is the same figure as the amount of vegetables that Hong Kong and Singapore bought from us. So here are 110 million people with an income just about the same as ours buying $11 million worth of vegetables.

We know that they have a net deficit of vegetables. We know that it costs than five times more to grow those same vegetables in Japan under their protectionist policy.

We know that we have got an incredible ability in the State of California which can service Japan just as quickly and efficiently as it can service New York City. We also know there is a great movement on now to produce of our own vegetables in the Northeast and the Midwest.

As you know the Northeast at one time was quite self-sufficient in vegetables. I look forward again to the day when it again will be self-sufficient.

We just can't waste the amount of energy it takes to ship a head of lettuce from California to New York City. It costs something like three times as much energy for transportation as for growing that head of lettuce, as you know.

Will you be in the forefront trying to get the Japanese to change that policy?

Mr. BROCK. Yes.

Representative RICHMOND. To where our California growers can ship a refrigerated shipload of vegetables to Japan in an orderly, steady fashion to start supplying the Japanese market with the types of vegetables they want. If you and I were to go to dinner at a Japanese house tonight we would bring a house present, a nicely wrapped melon. That melon would cost us $50 in a Japanese store. Granted these are very special melons, but a melon for consumption costs $10 to $15 in a Japanese market.

My friend John Elmore in the Imperial Valley can grow that same melon and make a good profit on it at a dollar. As you know, melons don't depreciate in quality during that week that they are in the refrigerated ship. In fact, they get better.

There are so many vegetables that we could grow. Artichokes. I can just think of a dozen different vegetables that the Japanese want that we could grow that would come to Japan just as fresh as they were when they left California, and which in some way or another help equalize this deficit of trade.

Mr. BROCK. It is not just vegetables. It is citrus, it is meat, it is across the board.

Representative RICHMOND. I want to get to meat in a minute. But citrus, they imported $175 million worth of citrus last year. There again, $1.50 worth of citrus for each Japanese person. It is ridiculous. Lord knows we have a great surplus of citrus also and a great ability to grow more citrus in California.

Senator HAWKINS. Florida.

Representative RICHMOND. And Florida.

Mr. BROCK. Please don't leave Florida out.

Senator BENTSEN. I am probably the only one in the crowd that actually grows it. [Laughter.]

Representative RICHMOND. Another point, Ambassador Brock, it has occurred to me that we Americans certainly have the patented ability to grow hard grains cheaper than any country of the world. Many Members of Congress say a bushel for a barrel. We know that is absolute nonsense because as soon as you raise the price of the grains you than bring 144 countries in able to compete with us. But as long as we keep the price of corn at $3.50 to $5, the price of wheat $4.50 to $6, the price of soybeans $7 to $9, in that area, which gives our farmers a good profit, nobody in the world can possibly compete with us.

Mr. BROCK. That is right.

Represenative RICHMOND. Now, rather than ship 9 pounds of soybeans to Japan or to Germany or to any other industrialized country so that they can grow their own chickens, rather than ship 3½ tons of corn to one of these industrialized countries so they can grow their own cattle, wouldn't we be better off to have our farmers ship that soybean and that corn to our own breeders and our own feedlots, then

on to our own slaughterhouses and ship frozen finished products to these industrialized countries?

Certainly your transportation costs would be lower. Certainly we would build up American industry and we would get jobs for Americans. And in the end the end price would be a lot cheaper because we have the ability to not only grow the grain but to handle the feedlot activities and the slaughterhouse activities and the transportation activities considerably cheaper than the Germans or the Japanese.

Would that be something that you would be interested in pursuing?

Mr. BROCK. Sure, I think you have to do both. In all honesty, I think you have to sell both the grains and the beef. I don't think you would want to do one or the other.

Representative RICHMOND. There, again, due to Japanese protectionism, high grade beef in Japan is again $15 to $20 a pound.

Mr. BROCK. I know.

Representative RICHMOND. We can deliver that same high grade beef if we are allowed to use our own corn, feedlots, and slaughterhouses, at maybe a third that price, and it would make a good profit for the farmer, for the feedlot man, and for the slaughterhouse.

Mr. BROCK. You know, you raise a point that has bothered me for quite a while. It seems to me that we flow in the same track that we accuse others of. It is so easy to argue for protection. Yet it is not in our national interest to pursue that; nor is it in the interest of our trading partners. It seems to me that the whole thrust of an effective trade policy is to move toward a freer trading environment in which all parties benefit.

We have come a long way in the last few years.

Representative RICHMOND. However, it is totally one-sided in the case of Japan. Here we are only allowed to ship 20,000 American automobiles to Japan. And a $5,000 car would cost $20,000, an $8,000 car would cost $40,000 in Japan. Clearly they are protectionists. Clearly they are making it impossible for us to ship our merchandise to Japan. Don't you think somehow or other during this coming administration all of that policy ought to be changed and somewhat equalized? Certainly the Carter administration didn't do much good on it.

I would hope—I mean, this is a completely bipartisan issue.

Mr. BROCK. Yes, sir.

Representative RICHMOND. All of us want more American products manufactured. We want more jobs for Americans. We want larger exports along with larger imports. But as I said at the very beginning, love is a two-way street. Don't you think it is improper of the Japanese to force such gigantic taxes on American cars, and for us to just sit back and allow it to happen?

Mr. BROCK. I do.

Representative RICHMOND. And I hope you will be doing something about it.

Mr. BROCK. We will be doing the best we can. But it is clearly my intention, and I think this administration's, to take the mandate that we received last year and try to translate that into a very different kind of policy. It is very apparent to me, at least, and I think to our administration, as it is to the Congress, that if we are going to seek as our ulti-

mate objective freer trade, that must be a two-way street. It must be fair trade. It must mean that if we are going to provide others with access to our markets, and the biggest and best market in the whole world, that we have the right to ask for a similar right of access to those markets.

Representative RICHMOND. I agree. Thank you. Ambassador Brock. Thank you, Mr. Chairman.

Senator BENTSEN. Thank you, Congressman.

I yield my question period to Senator Hawkins.

Senator HAWKINS. Thank you. I appreciate the courtesy. I have got to be in my office in a few minutes.

I have submitted a list of questions to Mr. Brock, and in light of the time frame that I am operating under today, I will be glad to supply the committee members with the list of questions, and hopefully he will give up the list of the answers.

Mr. BROCK. You write it and I will sign it.

Senator HAWKINS. I will ask a few.

Do you think you could assist in getting American Embassies and consulates and other Government officials to support U.S. company sales efforts like European governments support their companies?

Mr. BROCK. Yes. One of the intentions clearly stated in the Reorganization Plan No. 3—this was hardly over a year ago now—was to precisely that, transfer the function of commercial attache around the world from the State Department to the Commerce Department, and to seek a much more aggressive staffing in our Embassies with probusiness people who would seek out opportunities for American business and will be very supportive of their efforts to trade overseas.

I have had any number of meetings, almost daily, with some of the members of the Commerce Department, and frankly an awful lot of members of the State Department, to see what actions we can undertake that would change a perception on the part of American business that this Government is on occasion more interested in others than we are in our own.

The people who are to be named at the assistant and under secretary level in both Commerce and State are both strongly committed to this concept, and we are going to develop and are developing now a very aggressive program of enhancing American competitive strength through the support of our business sector and our workers both in our embassies and in our trade policies and in the removal of disincentives here at home.

All three comprise essential elements of our management plan.

Senator HAWKINS. Do you support antitrust law revisions which would ease restrictions on foreign exports and joint ventures by Americans, and also subject Japanese and other foreign companies to our antitrust laws to the extent they sell in the United States?

Mr. BROCK. We have testified—last week I had to speak to the AFL-CIO board and had to just submit my statement. But Mack Baldridge, the Secretary of Commerce, testified on behalf of the administration in support of the Export Trading Company legislation.

I happen to believe that it is absolutely imperative that this Congress join with the administration in removing that particular barrier

to our ability to compete. It is irrational to suggest that we can operate on a totally different standard from the rest of the world and that we can export our values by legislation. The best way to export our values is by competition and by the exercise of the market system in which we have prospered so much.

To do that we must afford our companies the ability to compete. That simply means that we have got to give them the opportunity to join together and form export trading companies. Our practices, our taxation of Americans abroad, and so on.

Senator HAWKINS. That is one of the other questions that I asked. I appreciate your direct answers, and also your awareness of the problem.

You have listed in your remarks that one of the areas where we are still in the lead would be high technology. It is my observation that probably the Japanese industrial strategy for the 1980's has targeted high technology. The electronics industry probably is the key to Japan's industrial development in the next decade. The industrial policy for these industries combines a coordinated package of tax incentives, guarantees, loans, subsidies, cartels, tariff rates, government procurement, and restrictions on foreign participation in the Japanese market.

In light of our interest in the high technology, integrated circuits produced in Japan become technologically and price competitive within the United States with U.S. products. Yet a recently negotiated trade agreement with Japan called for Japan to reduce their tariffs whereby parity with the United States would be achieved in 7 years. Is there any reason for not achieving parity today?

Mr. BROCK. None whatsoever.

Senator HAWKINS. In light of your Mexican comments, how does President Portillo's recent expression of affection for the regime of Castro affect your posture on our proper trade posture toward Mexico?

Mr. BROCK. You get right to the point, don't you?

Senator HAWKINS. I will submit it in writing if you would rather.

Mr. BROCK. I would rather do that too. I was going to take a shot at it. It is important for us to understand that we simply in the last 200 years have not dealt adequately with our closest and most important trading friends. Those would be both in the Northern Hemisphere and the Southern Hempishere of the Americas.

Mexico is essential to us. It has a different set of political objectives. It has very, very different problems. And I think we have to understand those differences and respect their ability to self-determine their own purposes. But it is also important for us to understand that we do believe in linkage, and there is a concern with the actions of other nations in the field of foreign policy that do affect our ability to enhance trade opportunities. We simply cannot consider trade unless you include it within the context of our foreign and domestic policy requirements.

So we would be concerned about the actions of any other nation if we perceive it as being less than supportive of U.S. desires. But we also understand that we cannot impose our will. They have the right to pursue their own goals.

So you try to maintain a rather exquisite balance between the two, in fact, use trade sometimes as the vehicle for establishing better relations in the diplomatic area. Sometimes the other side first. But in this particular instance it does seem to me that the policy of trying to erect fences to keep out people whose income levels are so different from ours is really not going to work, and we have very few options other than to try to support their efforts to build a stronger economic base so their own people can be productive earning citizens of that nation. And that means that we have to have freer investment policies and greater trade opportunities for both nations in their relations with each other.

Senator HAWKINS. Would you agree with the recent statement of Edwin Meese that the Soviet Union and other Communist countries cannot expect to enjoy advantageous trade relations while exporting revolution?

Mr. BROCK. I certainly do; absolutely.

Senator HAWKINS. Thank you. I did submit a list of questions. I'd like to ask just one that I need an answer to.

U.S. companies are at a disadvantage in selling against European companies which can profitably export at a large discount from their domestic prices, because under their value added tax laws, the value added tax is refunded on exports. Do you think we could work on removing that as one of the obstacles, the value added tax laws that they have that are so much more advantageous than ours?

Mr. BROCK. That is an area that we do think can be dealt with within the framework of the GATT and the MTN. What we've been trying to do is to establish a set of procedures for logical and consistent methodology by which you deal with these problems, whether they be in the form of subsidies or export barriers or import barriers.

We have established, with our trading partners, a process which is important to us, and it is necessary that we use the process for it to be of any particular value in areas such as this, and there are a lot of these—going way beyond that particular one, there are a lot of these. We will be very, very aggressive in trying to work within that system to remove the distincentives and the barriers to competitive relationships.

Senator HAWKINS. Thank you. I appreciate your attention to the tremendous problems that we have. I am excited about the opportunity of turning this around under your great leadership.

Mr. BROCK. Thank you very much.

Senator HAWKINS. Thank you, Mr. Chairman.

Senator BENTSEN. Thank you, Senator Hawkins.

Mr. Ambassador, I was listening to your comments concerning protectionism, and I agree with them. Yet I am the fellow that introduced, along with Senator Danforth, legislation to put an import quota on Japanese cars. And in the long run, I don't want quotas, and I certainly don't want protectionism. But we have an extraordinary situation facing us.

The Japanese are some of the most able and toughest negotiators that we have run up against, and I have a great admiration for them, in fighting for what is best for their country, as they see it. They have asked us to be patient while they work out the problems of the increasing exports to America of their automobiles. While they ask for our

patience, they invest billions of dollars in additional capacity and their workers work on overtime to produce those cars.

This morning the Italians clamped a lid of 2,500 vehicles on Japanese imports. That is symptomatic of the kinds of barriers that Japanese autos are finding all over Europe. The French, for example, have used one regulation or another to keep 10,000 Japanese autos on their docks since last fall. The English, as I understand it, have an informal agreement on a 10-percent limitation.

Mr. Ambassador, where do you think those extra cars are going to go?

Mr. BROCK. It seems to me, if I can look at the problem in a larger context with you just for a second, we first have to recognize that we probably, as a matter of certainty, would have difficulty with our domestic automobile industry were there no imports, because the industry has gotten in trouble in part because of actions of their own, and in part because of actions over which they had absolutely no control whatsoever, some of them extending to Washington itself.

If we are going to deal with the problems of that industry, it is important that we deal with it in its more fundamental sense; that we deal with it first on the basis of what we can do domestically to improve this competitive strength and the creation of jobs. Once you've done that, then I think we have every right to seek from trading partners an understanding of that problem, a willingness to exercise a considerable degree of restraint while we work our way out of the difficulty, because we are in fact allies and friends, as well as trading partners. And you do have problems understanding friends on occasion.

I would be concerned, Senator, and I know you do not suggest this, but I would be concerned if we dealt with the problem only from the stance of imports; because I think if we do that we will not be dealing with the fundamental question. If you deal within the larger context, and I think it is perfectly right and proper to consider some restraint—hopefully it could be self-imposed by our trading partners. But I would not rule out any option in consideration of what we must do to deal with a very severe difficulty.

Let me make one other point. I think, in looking at actions such as you have suggested, we must draw the distinction between an industry that is as basic to our well-being as steel or autos, and other industries in which we do not have a national security interest. It is simply unacceptable for me to even hypothesize that this country would ever allow the devolution of our automobile base, our industrial plant. We would not do it, we should not do it, and we won't. There is no question about that.

It seems to me that if we seek a freer trading world, and I think both you and I share that objective, we've got to do it within the context of reality. The reality is that this country is not going to tolerate the demolishment of its basic plant in that area.

Senator BENTSEN. Mr. Ambassador, I've been a free-trader all my life, and I went to the Geneva negotiations doing everything I could to promote free trade.

Mr. BROCK. I know that.

Senator BENTSEN. It is with a great deal of reluctance that I

cosponsored the introduction of such a resolution, but we've got an extraordinary situation. I don't want to go through the repetition of what I've listened to from the previous men who have held your position, who have said: "we're going to work it out with patience." Well, I've watched the Japanese increase their production and add additional production through overtime of their workers, and then told us to be patient.

I don't want us to finally end up with one American automobile manufacturer in this country, and I am sure you don't either. But I look at the price of a Chevette, for example, in this country, which is around $8,000, depending on what you put on it. The same automobile, though, sells for approximately $15,000 in Japan; I checked the numbers last week. We have sent representatives of this committee to Japan to check on these nontariff barriers.

I have watched as some of these other countries run full-page ads in the Washington Post trying to influence the decisions of the Congress. I'd like to run full-page ads in Japan. And all that would run on those ads would be the prices of American products sold in Washington, D.C., as compared to the price in Tokyo for the same product; prices of what the Japanese product was a Japan, and what it was in the United States.

Look at a Toyota. You say a Chevette is selling for almost twice as much in Japan. But then you look at a Toyota that sells for virtually the same price in Japan as it does here.

Now, regarding all these protestations, I don't fully accept them on the part of the Japanese negotiators. When they talk about free trade, all I ask is: look at the price. Put them side by side. And I would like to run that ad week after week in the Japanese papers, and let the Diet over there read them. Let the people read them. I have a hunch you'd get some of the same kind of pressure put on the Diet that an informed public here puts on the Congress.

Representative RICHMOND. That makes a lot of sense.

Senator BENTSEN. Mr. Ambassador, I think as a last resort, and that's the way you phrased it, that we'd have to put some kind of restriction on if we don't see, through the executive branch and through your good offices, some kind of consideration being made so we don't see this additional excess capacity from Japan that will not be going to Europe now, in effect dumped here.

Now, Mr. Ambassador, there was a comment made about Mexico. I happen to love Mexico. If I'd been born five miles further south I might have been a senador and deputado in the Congresio de Mexico, instead of a Senator in the U.S. Congress. But I think I understand them fairly well, and they are awfully important to us. Mexico has 70 million people; in 19 years they will double the population. If you continue the present birth rate and mortalty rate, by the year 2025 they will have more people than we do, if you extrapolate those trend curves.

They are becoming a power and a nation of wealth. They are very sensitive. They are very proud people, and they have very mixed emotions about the United States. Time and time again they say, "Mexico, so far from God, is so close to the United States." They like to remember the past, too.

But when we say we neglect Mexico, I don't buy that. We have more treaties with Mexico than we have with any other country. We have more State Department people in Mexico than we have in Russia, than we have in France, than we have in Germany. We have more favorable trade treaties with Mexico than any nation I know, or at least meet what we offer any other nation.

My own particular farm has gone out of production of things like tomatoes, because the Mexicans have taken that over. Yet what we run into when we try to sell our things to Mexico is a licensing agreement. They would not approve GATT, and we gave them most favored nation treatment.

So they are going to be a growing, important trade partner of ours. But once again, we've got to try to work to see that our products get consideration there, too. And I sympathize with the objectives of how important it is for us to have that good relationship.

Mr. BROCK. Can I just interrupt you for a second, because I think it would be wrong for me to leave the impression that I may have left with you. I don't disagree with anything you've just said at all. I think again it goes to the question of Representative Richmond and Senator Hawkins as well: If we are honest in our intention to improve the prospects of greater trade, it must be from a more open approach to that trade and a statement on those barriers which we find to our ability to compete and our access to those markets. And it must be from the point of view, particularly, of our closest trading partners on the basis that if benefits are sought through access to our markets, that there is a quid pro quo.

We can only deal with each other on the basis of respect; and respect requires a strength and a consistency in our position. That is very much my intention and I would very much welcome the senators' support in pursuing that goal, because I don't know how else you can deal with people. If we continue to give and ask nothing in return, all we are doing is cancelling American jobs in exchange for a vote in the U.N. on occasion, and I don't think that's a worthwhile exchange.

Senator BENTSEN. Mr. Ambassador, I want to ask you one more question. Then I will submit the rest of my questions, due to the limitation of time.

After considerable congressional pressure, Reorganization Plan 3 of 1979 and the companion executive order established the Office of the United States Trade Representative as the senior adviser to the President on trade. Now, some spokesmen for the Reagan administration have suggested folding USTR into the Commerce Department, and designating the Secretary of Commerce to chair the trade policy committee.

Mr. Ambassador, what I want to know is are you going to remain an ambassador with portfolio or without portfolio?

Have you reached an understanding with the Secretary of Commerce about who is to be the senior adviser on trade matters?

Mr. BROCK. I have. I will chair the trade policy committee. The statute is explicit in its directions. The trade policy committee, through the U.S. Trade Representative, does constitute the principal policy mechanism for trade in this government. The USTR is designated as the President's principal adviser on trade, the Nation's chief

negotiator and the agency has the lead role in the development of trade policy.

I think those matters are understood at Commerce and State, as well as Agriculture. I have had very extended conversations with all of them. There will always be gray areas. What we've agreed to do in those gray areas is to work together and to develop a coordinated policy where we speak with one voice. It is my role to chair the committee that does that and take that role.

Senator BENTSEN. Mr. Ambassador, I am pleased to hear that. I now defer to my colleague, Senator Roth, for such questions as he might have.

Senator ROTH. Mr. Ambassador, I regret that there were two or three things going on at the same time, as usual, so I missed the opening remarks. I would like to just carry on for a minute on the discussion or question just asked by Senator Bentsen.

As chairman of the Governmental Affairs Committee I have been very concerned that the administration follow the statutory requirements and not try to modify its organizational structure without going through the committee and through the Congress, if a change is indeed to be made. I will not pursue it for the moment, because I do intend to hold sometime relatively soon, hearings on the organization of trade in Government affairs, at which time I will want to go into the organization of the proposed council.

I would want to emphasize at this time, because I've been critical of the past administration, that the Carter Reorganization Plan No. 3 was never gotten together. There was a division of responsibility and a great deal of infighting to the extent that the Carter administration really was unable, in my judgment, to come up with the kind of solid recommendations that are necessary.

I am delighted to see that State, as well as Commerce, and of course USTR, have people that are qualified to put trade on the front burner. But I do say that I would be very concerned if we begin to find a fighting for turf, because I think the essential thing is going to be some kind of consolidation of the trade functions somewhere in the Government, whenever we reorganize.

I would like to make a few comments for the record, Mr. Ambassador, on the situation with Japan and automobiles. I think I told you during a telephone conversation, as well as by letter, that when I was in Japan recently, in January, I met with the Acting Prime Minister, as well as other top officials in Tokyo about the automobile situation.

I, like Lloyd Bentsen, think that action is needed sooner, rather than later. And it is my feeling, after discussing this matter with various Japanese leaders, I know you've been there since I have, that they are probably going to try to enter into some kind of an orderly agreement if that is the wish or desire on the part of the U.S. Government.

I personally think it is unrealistic to expect that they are going to restrict autos by themselves. I think that the best chances of success in this area, and as I said, there seems to be a willingness to do something, is through some kind of a voluntary, orderly marketing agreement.

If you feel that your authority is lacking, and I know some of the Japanese concerned think it is necessary that there be legislative ap-

proval to avoid the antitrust implications, then it seems to me we ought to proceed with the legislation that was introduced last year by Don Riegle and myself, to clarify the authority of the President.

But I would urge you very strongly to move on that very promptly, so that we can get off to some kind of an agreement with the Japanese in this area.

I might just say, as a passing remark—I think I was the first one on the Finance Committee to actively support the multilateral trade legislation. But it doesn't bother me to enter his kind of agreement, under these circumstances.

The automobile industry is modernizing. They are trying to catch up.

As I told my Japanese friends, in the late 1940's and 1950's, we gave them the time and the opportunity to industrialize, to adopt measures that were protective of these new industries.

We're pretty much in the same situation today, and I can't emphasize too strongly that I think we ought to tell the Japanese, as we ought to tell others, that we're providing their defense umbrella. And if we're going to provide a defense umbrella that's viable, we have to have our basic industries, including the automobile industry.

So, when we ask them to grant us time to modernize, then we're helping them as well as ourselves.

I think they basically understand that.

But I'm sorry I missed the earlier discussion.

Do you think there's going to be any resolution of how to proceed on this matter in the very near future?

Mr. Brock. Yes, I do. And I think it's fair to state that the administration views the matter with considerable urgency.

We are very aggressively working to develop an overall policy for dealing with the problems of that particular industry, and erecting a trading policy which would encompass this and a number of other critical areas.

I'm not disagreeing with you.

Except in the sense that I don't believe that other countries realize what we're paying to provide for the defense of the free world. I don't think they have any idea of the magnitude of a $190 billion defense budget.

And I would assure the Senator that, if we did not have that responsibility, and we must accept it—we acknowledge this. We do it knowingly. But if we didn't have that responsibility, we wouldn't have any deficit, and we wouldn't have a 20-percent interest rate, and we wouldn't have 12, 13, or 14-percent inflation. And we wouldn't have 7 million people out of work.

The burden that this country has carried, ever since the late 1940's, is absolutely awesome. Not only in defense, but in the extension of freedom around the world.

The openness of our markets—while we did allow others to engage in rebuilding and maintaining a considerably higher level of protection—as we talked about earlier in this very session—that cost us, too.

All we have been willing to bear—because it is important to us, and what we believe in. But there is a time when others should start carrying a piece of the load. And I do not see an adequate response in that regard, on the part of a number of friends around the world.

And it seems to me that it's time for us to be very straightforward and say so.

It's also time for them to understand that we have difficulties, because we have carried an inordinate share of the burden. But we expect, and we have a right to expect, a response.

Senator ROTH. I agree with what you're saying, Mr. Ambassador.

As I indicated, in meeting with the leaders of the Japanese Government, I was underscoring the importance of our contribution, and linked that—if you want to put it that way—to why they should be willing to enter some kind of voluntary, orderly marketing agreement.

Because its in their interest, as well as ours. And there has to be an effort on the part of both, sharing these burdens. And you're exactly right. We would not be in our present position if we hadn't had to carry that burden since World War II.

I'd like to move on to two or three other areas.

I have said many times, and I think you agree with me, that the way to turn this country around, of course, one, is to do something about productivity. And that's what the President's economic package is all about.

But the other side of the coin is trade. We have to find markets as we become more competitive, and we have to learn how to sell abroad.

We have to learn to put trade as a top priority.

Now, one of my concerns is that every administration and every official always says, when you ask them "are you for trade, do you put that as a top priority?"—the answer is "yes."

Mr. BROCK. Along with freedom and the flag. It all goes together.

Senator BENTSEN. If you would excuse me, Mr. Ambassador. I have the same problem you have; competing commitments.

I will ask Congressman Richmond to preside.

Mr. BROCK. Thank you very much for letting me join you today.

Senator ROTH. In any event, I think it's very important that we have it written into the law to require statutorily that trade become a primary national goal.

Why do I think that's important?

I think it's important that every level of the bureaucracy understands that his country places trade as a top priority. I think it's important that the courts, in making decisions—for example, in the antitrust area—recognize that the United States is in a world market, not merely a domestic market.

So that I propose, at the appropriate time—either by separate legislation or, perhaps, as a finding in some of our other legislation—to write into the law such a statutory requirement.

I wonder if you would care to comment on that proposal?

Mr. BROCK. I think it is somewhat akin to hiding your head under the sheets to think that we could continue to ignore trade as a major priority of not only this Government but, more importantly, of this Nation.

We are a trading country, and if we don't accept it and admit it and get out there and compete, we're not going to be economically well off, and we're not going to be able to carry the defense and other burdens that we have knowingly accepted in the past 30 years.

We have to compete. There is no choice.

The thing that is a little disturbing is that we are so goldurned good. We really are competitive.

But we have imposed barriers on ourselves, which are self-defeating. If you give American business the chance, I'll tell you, there are very few people we can't stand toe-to-toe with anywhere, on any issue, in any area you want to go.

But you can't do that if you're going to regulate American businesses into stagnation, if you're going to tax them into stagnation. You cannot do that if you're going to impose barriers on exports, disincentives, corrupt practices, antitrusts, taxation of Americans abroad.

If we, by action of our own Government, deny our own workers a chance to compete—we've got to remove those barriers.

We've also got to get a lot tougher in dealing with our friends, and insist that access to our market be accompanied by access to theirs.

If we'll do that, if we'll establish this as a priority, I think we can change an awful lot of things and, frankly, I think we'll be living in a little more stable and peaceful world as a consequence.

Senator ROTH. My time is up.

But I would first of all say that one of the reasons I was happy to see you become USTR, is I think you will be aggressive, you will be a fine one.

I think there's new ground to break. I'm not quite as optimistic as you are. I think business, as well as Government, and labor, have a lot to learn in order to be competitive in the world market.

But I'll save that for another time.

Mr. BROCK. You and I both agree on that. Very much so.

Senator ROTH. Mr. Chairman, as I understand it, we have the right to submit questions for the record?

Representative RICHMOND [presiding]. Of course, Senator Roth. I'm sure the Ambassador will answer them.

Mrs. Heckler.

Representative HECKLER. Thank you, Mr. Chairman.

I would like to welcome you, Mr. Brock. I think you are extremely courageous and generous, as you've always been, in taking on what I consider to be one of the hardest assignments in Washington.

Mr. BROCK. Also one that's the most fun. Second-most fun. [Laughter.]

Representative HECKLER. Knowing very intimately of your service to the Congress, the House, the Senate, your leadership of the Republican National Committee, which I thought was absolutely superb—that record of excellence augers well for the very, very difficult assignment that you're going to have in this particular role.

To me, the USTR is something like the cop on that beat, internationally. With the wave of a hand or the signing of a pen, you can signal the imports to go or to stop. It's an extremely important and powerful position, but a very complex one.

I would agree with everything that's been said that I have heard. As with the usual congressional scheduling, I've been to four other meetings this morning, but I'm delighted that I made this one.

I feel that we are dealing with a tangled web of interrelationships. On the one hand, we are a strong trading Nation. On the other hand,

80-478 O - 81 - 6

we have very dynamic industries that are suffering from many problems right now.

We must serve both of those conflicting interests.

I think that we're at a point of crossroads in so many areas, in terms of our economic policy—which I think has taken a turn for the better, under the President's leadership—and at the same time I feel that we are faced with very serious dilemmas at home. I think there's a serious question as to what the role of the USTR will be in these circumstances.

I have felt, at times, that the USTR was an accessory to the State Department and, in that role, the interests of American industries concerned about their fair share of the market, were always sublimated to international relationships, which are indeed extremely important.

In all or most of these cases, we are dealing with countries that are our friends, whose friendship is valuable, not only for trading opportunities with us, but internationally in terms of world peace.

It is indeed a tangled web.

I feel that it's a mistake to have the trade policy issues placed before you characterized in the polarizing fashion of free trade versus protectionism.

That isn't where we are today. That is the jargon of literally 25 years ago, maybe 50 years ago.

Today, we are dealing with questions that require fine tuning; questions of fairness.

Obviously, the survival of a certain number of domestic jobs and the capacity to produce for America is important. We must retain that capacity, while being fair to our trading partners, from whom we also expect fairness in opening up their markets.

One area in which I have spent a great deal of time is the textile area, as a member of the Textile Caucus. And I think that what was finally agreed upon under Mr. Strauss, who is a very fine negotiator, was actually a fair agreement.

The question is, How will it be observed?

I am from a district which has many exporting firms. Boston is a major exporting port. So it is not without a concern for our exporting capacity that I also advocate a strong sense of fairness toward the textile apparel interests in my congressional district.

Most recently, we've had very serious problems with the People's Republic of China, on the question of the important of woolen sweaters. There was such a serious trade disruption that a special session was held with the People's Republic of China on December 15, but no solution was reached.

Since they have reached their limit on sweaters, under the provisos governing the consultation mechanism, sweaters are embargoed from the People's Republic of China.

Before this happened, however, Chinese imports were up 40 percent over 1979, with surges coming in the full range of textile. Obviously, our relationship is at a stalemate in terms of the People's Republic of China, and they are in a position of friendship with the United States. We wish to trade with them. We wish to open up their markets.

What do you think would be a fair resolution of this problem, and what attitudes do you presently take toward the People's Republic of China, particularly with regard to textiles?

Mr. BROCK. Basically, when we negotiated the multifiber agreement, the clear understanding was it was an overarching agreement under which we would place, in some rational context, the valid role of negotiations with the individual countries.

That process has worked, I think, reasonably well.

Where we ran into the difficulty—in this particular instance which you cite—was in the surge of a couple of items that hit without anybody paying sufficient attention, or without an adequate recourse.

The actions which we are presently undertaking are to strengthen those bilateral agreements with a number of our trading partners, with the view to trying to stay within that MFA framework, and to avoid those surges which, if unaddresed, frankly are going to lead us into more protection and less jobs.

That's the one thing you want to avoid.

The whole purpose of setting up an international process or mechanism or institution is to avoid those short-term actions which lead to long-term hazard or damage.

And that's precisely what we're trying to do right now.

I'm going, even today, to some of our trading partners. Under these circumstances, we're trying to establish stronger relationships on a bilateral basis, because frankly that's necessary in order to renew the MFA, which expires at the end of this year.

We'll be going to those negotiations in May, and what we hope to do is, before that time, have stronger bilateral patterns established with each of the principal countries. That we're pursuing very aggressively.

Representative HECKLER. Have you engaged—during the short time in which you've held this office—in any negotiations or consultations with the Chinese Embassy?

Mr. BROCK. I have not personally, but some of my staff have had some of those conversations. Yes.

Representative HECKLER. I feel that the process of the MFA was fair. As in all negotiations, sacrifices are made by each side. What I question is whether or not there is a strong commitment to the implementation of the agreement, such as the limitation of the new provisions on carryover and carryforward.

Do you have any strong feelings about the implementation, and whether or not the machinery is actually sufficient to provide a fair answer for American industry?

Mr. BROCK. I think there are some areas—and this would be one—where we can seek improvements in the agreements to negotiate, this summer and fall.

Generally speaking, I agree with you. The overarching agreement was rational and productive for all parties, as any agreement is that's a compromise, and reflects a compromise that I hope benefits both parties.

A good business deal always does—allows both parties to gain from that.

We do intend—over the next very few weeks—to carefully analyze the component parts of the MFA, as well as our bilateral agreements, to see where improvements can be made.

Frankly, I think we can make some modest improvement. But I

would not suggest to you a dramatic change in the overall objectives of the MFA. I don't think we would seek that. Rather, we'd try to improve it on pretty much a technical basis.

Representative HECKLER. I do not think from the point of view of that one industry that they're seeking any dramatic changes, but they are adamantly seeking a full and fair implementation of the agreement.

Mr. BROCK. They have every right to seek that, and that would be our intention.

Representative HECKLER. Thank you very much. I understand my time has expired.

Representative RICHMOND. Thank you.

Ambasador Brock, the Reagan administration has indicated its support for a stronger U.S. export policy, and you were enunciating that this morning. How do you tie that into the drastic cuts in the Reagan budget for the Export-Import Bank, which as I understand it is really our only arm capable of making American products competitive with foreign products?

Mr. BROCK. I shall be very careful in how I respond to that.

Representative RICHMOND. You know that there's an enormous amount of Government financing available to the German manufacturers and Japanese manufacturers. It seems to me this is hardly the time for us to cut back on the relatively small amount of financing we give to our own manufacturers via the Ex-Im Bank.

Mr. BROCK. We have tried for some considerable period of time to work with other Nations—France, which has been singled out by some as being particularly difficult in this area—to negotiate away from export credit subsidies and to a more market-oriented competitive circumstance wherein no country engages in evasive tactics. We simply were not successful in negotiations.

Representative RICHMOND. Therefore it doesn't seem to me a good idea for us to unilaterally cut our own export armament.

Mr. BROCK. I frankly enjoy the game of poker, and once in awhile I'm crazy enough to think that it's fun to play table stakes, and so I had to shove all the chips out on the table.

But in this particular instance, it would be an interesting exercise to see if we wanted to put a lot of chips on the table and see if we couldn't, as a result, save those chips by getting others to negotiate into a responsible position. We just cannot go—we simply cannot come to the Congress, ask for a reduction in every single domestic program of note other than the basic human support programs such as social security—we can't do that and exclude from that budget constraint something like the Export-Import Bank.

Representative RICHMOND. Except, as you know, Mr. Ambassador, Export-Import Bank loans help small and medium-sized businesses, help American employment, and certainly I believe it's self-defeating to reduce our allocation of funds to the Ex-Im Bank.

Mr. BROCK. I think you'll find that the small business component of Ex-Im is in pretty good shape. There has been an expression of concern as to the degree of concentration of those loans in one or two industries, as you well know.

But let me take you to the more important issues; at least this is what I think Mrs. Heckler was referring to when she mentioned our overall economic program. I cannot adequately stress the need for us to be successful in regenerating productivity, economic growth, and reducing the rate of inflation and interest rates.

The reason we have trouble competing in the sales of high technology products—and that's primarily where Ex-Im works, as you well know—is because our interest rates are absolutely exorbitant. If we are successful in getting that rate of interest down to 10 percent, we don't need Ex-Im, because the Ex-Im financing is at 8½ and 1½ isn't going to make the difference. We're good enough competitors to where we can accommodate that, because our fundamental goal in this economic program is to reduce business taxes, to give them R. & D. tax credits as the President suggested, and to reduce those interest rates by reducing the drain of this Government on capital markets. If we succeed, we can compete very, very effectively.

Representative RICHMOND. As you know, we're not going to get interest rates down to 10 percent until we have much lower unemployment and much less inflation, and unless we continue export sales in the United States, it's going to hurt, right? We ought to leave the Export-Import Bank alone for a time.

I agree with you, once we get our interest rates down to 10 percent, there's no urgent reason to have the Ex-Im Bank financing at 8½, but right now the interest rate is at 19, and with a compensating balance it gets up to 21, as you know. It helps small high technology firms export. It seems to me it's vitally necessary as a competitive tool to compete with Germany and Japan—they do it—and France.

Mr. BROCK. The gentleman knows full well that I'm playing the role of the devil's advocate, but I'm also going beyond that in saying that if we maintain the support of the small—and by small, you're talking 50 to 100 million; internationally that's pretty small—we're maintaining the ability to give them support where they have it to match the competition.

But just this morning on the news there was a statement that we had a new announcement of a reduction in interest rates. It simply is not required for any financial institution to charge more than 2, 2½, 3 percent above the rate of inflation. That's their margin. That is necessary to do business. You and I both know that. That's an adequate profit margin.

Now what do we have?

Representative RICHMOND. I have talked to the Federal Reserve Bank, right?

Mr. BROCK. You know I have some differences with the Fed on occasion, but the point is that we're not 2 or 3 percent above the rate of inflation today in our interest rates. Even at the reduced rate as of this morning, we're 7 points over.

Why is that additional 4 points tacked on? It's because people are worried that the rate of inflation is going to get worse. What they're doing is discounting inflation. If we can reduce that inflationary expectation, we can knock 4 points off very quickly. If we can deal with the problem of capital formation by R. & D. tax credits, by increased depreciation so that we have more internal generation

of cash flow to reduce the demand on the capital markets and reduce our deficits at the Federal level, what we've done——

Representative RICHMOND. Ambassador Brock, I'm wondering what we're going to do during the next 2 years? It's going to take you to start exhibiting some of your brilliance. I have every confidence in the world that you know your business. I think this is totally bipartisan. Both Democrats and Republicans agree that past experiments have to stop. I'm quite sure you're going to do a great job in the next few years.

But what I want to know is, what are we going to do temporarily? Certainly I don't think it's a good idea to ax Ex-Im Bank funds. Let's go on to another question.

Mr. BROCK. Let me just say this. I don't think we have time to hurry. I think we've gone so far down the road of quick fixes and giving the economy a shot here, giving the economy a shot there, bail out this group, bail out that group, that we have created an economic hodgepodge that is not consistent and does not have any central theme or set of objectives.

I grant you we're going to have to bite some very tough bullets.

Representative RICHMOND. Let me get on to another question.

I noticed an announcement today in the Washington Post, about your intention to reassess the status of high technology. How do you feel the grain embargo worked on the Soviet Union? What's your personal feeling on that?

Mr. BROCK. My personal feeling is, in the short term, it singled out one group for penalty—to wit, the American farmer. They paid a higher price than anyone else. That was the first 6 months' result.

The second 6 months' result, it raised the ante considerably on the Soviet Union. It has made matters more difficult for them. They have had short crops now for 3 consecutive years. They've had to draw down their stock. They've had to engineer all kinds of ways to try to buy replacements, and they've had to do it with smaller ships, more strain on their shipping system and higher prices, and frankly they've got less meat on the table.

I think it's had an impact that has been recognized.

Representative RICHMOND. What's your attitude on high technology goods to the Soviet Union?

Mr. BROCK. I have always questioned the idea of selling any unique product that has a defense—related purpose. High technology is a broader description than that which I've just given you.

I guess my attitude would be conditioned on two factors. One is the availability from other countries and two, the actions of the Soviet Union as a member of the international community. In the latter sense, they have not been a responsible member of that, so it's very difficult for us to find ways to enhance our relationship as long as they're engaged in the kind of activities they're engaged in around the world, depriving people and other nations of their freedom.

Representative RICHMOND. You say one of the big problems is the availability of more capital?

Mr. BROCK. Yes; it is.

Representative RICHMOND. Let's go back to food which we discussed earlier this morning. Food obviously is becoming America's major

weapon, America's major trading device, the major item that we have. We have an absolute patent on the ability to grow cheap food, right?

Mr. BROCK. Yes, sir.

Representative RICHMOND. I hope you have some plans for using that God-given patent we have as some kind of level with somebody, with some of the trading partners, who have built up a gigantic trade deficit with us. That's one thing the American people have given you; you have that on a silver platter. Nobody but nobody can produce the quantities and quality of hard grains that we can. After all, people eat hard grains. Nobody can produce this in the quantity and quality of hard grains at anything remotely like the prices we produce them at. So you have that in your pocket to trade with.

It seems to me that you ought to get some real good leverage out of it.

Mr. BROCK. I hope that we have the ability and judgment and the integrity to use an awful lot of levers that we haven't used before—the access to this marketplace, the availability of our incredible productivity in food stock as one, the access to our capital system, capital markets, through our high technology exports. Our services are unique in the world. All of those constitute tools which have not been used effectively for a variety of reasons, and I would hope we can do better.

Representative RICHMOND. I hope you'll make me happy and try to export more finished products and raw grains, too. It's just so totally wasteful for the American worker if we don't.

Mr. BROCK. I do agree. We will try to do that.

Representative RICHMOND. It can be done, you know. The whole process of exporting chickens, hogs, and beef can be done much, much more efficiently than exporting hard grains to the industrialized countries who also have the same rate of annual pay as our workers, specifically Western Europe and Japan. It's about time both of these areas started trading with us on an even basis.

My time is up unfortunately. I do want to ask a few more questions. Mrs. Heckler.

Representative HECKLER. I'd just like to pursue very briefly the high technology question. I don't know if you have these figures available. However, I wonder what the amount and volume of our high technology exports to the Soviet Union are at the present time?

Mr. BROCK. Virtually nil. In the embargo, the previous administration saw fit to include those high technology items in the constraints. There are very few.

Representative HECKLER. So there is presently an embargo on all high technology items?

Mr. BROCK. I don't know whether it's included in the embargo per se.

Representative HECKLER. Did the grain embargo include high technology?

Mr. BROCK. At the same time as the grain embargo or shortly thereafter, we put very severe constraints on the export of high technology items to the Soviet Union. That did not apply to the satellite nations in Eastern Europe, but it does apply to the Soviet Union, if I recall correctly.

Representative HECKLER. Is it possible in your review of this policy that you might designate a separate policy for Eastern Bloc nations, as it presently exists? Is that likely to continue?

Mr. BROCK. I would think so. It certainly is a matter that we would consider, and I see no reason not to treat individual nations as individual nations. Some have been far more forthcoming than others.

Representative HECKLER. Under the embargo on high technology, is this all inclusive and comprehensive so that anything, even a computer, could not be exported? I'm worried about the parameters of the term "high technology." What are we really talking about?

Mr. BROCK. I'm not sure that I can answer that as effectively as the Commerce Department, which is the agent of implementation of the constraints. But it's a fairly encompassing limitation. It includes products that may be produced by other countries. I think there's been some urging that other countries restrain themselves as well.

Representative HECKLER. From the article in the Washington Post, it would seem that the issue of linkage, which has been most recently discussed in terms of the SALT agreement, is now going to be extended to questions of trade. Is that the basic underlying theme of your position?

Mr. BROCK. Sure. I don't know how you can deal with people except in the totality of the relationship. It doesn't make sense to me to say that we can take one item of negotiation and treat it as if it were a cause unique. It has to be considered within the larger relationship which you have with that country—diplomatic, political, and social.

The gentleman's questions relating to Japan are absolutely valid in this context. There are links, and the actions of others with regard to us which impinge upon our objectives or goals, the well-being or our workers' rights to have a job are going to be taken into consideration as we deal in other areas. You bet your life they are.

Representative HECKLER. I was questioning productivity, which has been the occupation of this committee for several years and fortunately now is becoming a priority in America. I wonder if you have any unusual information on the development of the use of robots, especially by the Japanese in expanding their productivity?

Mr. BROCK. I'm not sure that I have any unusual information. The fact is, if I recall, in the last report that I saw, the Japanese have been moving very aggressively in the area, and they have, I think, about 10 times as many robots in place as we do. That is not an unmixed blessing, as you well recognize. I think, you know, the world is moving so fast, you've got to be very careful that we don't throw the baby out with the bath water. I think you've got to be concerned about employment.

Representative HECKLER. Exactly. That is my concern.

Mr. BROCK. It's a valid concern.

Representative HECKLER. Thank you, Mr. Ambassador.

Representative RICHMOND. Thank you, Mrs. Heckler.

Mr. Ambassador, I'm a delegate to the European Common Market Committee. We have a couple meetings every year. It's been increasingly apparent to me, first of all, that entity that was founded some 35 or 40 years ago has grown and been infinitely more successful than anyone in the world ever expected.

Now they have a budget and a parliament and a Court of Justice and a Council of Ministers. It's an amazing operation. Every word is translated simultaneously into nine languages. Next year it will be

translated into two more languages, because the place functions—and it is developing a United States of Western Europe, and they do have a common market, and each country is benefiting by it.

It appears to me that this something we need very badly in the Western Hemisphere—a Western alliance that would be made up of Canada, the United States, Mexico, the Central American countries, the Caribbean countries, the West Indian countries. It would start right at the border of the countries that border on the Andean Alliance, because I don't think we ought to interfere with that group.

What is your feeling about that? Do you think there's any possibility that we could be working toward some kind of common market among the Western Hemisphere powers, thus bringing us some of the little countries also?

Mr. BROCK. There's a very serious discussion of that in academia and in political circles as well among people who are looking toward the longer term. I personally feel that we are the best demonstration in all of mankind and frankly in all of recorded history of the value of a common market.

This Nation has, in fact, been the world's greatest common market for 200 years. We were first a confederation of states, and then we settled that with some agony about 100 years ago, and then we became, in fact, finally and irrevocably, a union. The benefits that flow therefrom are absolutely obvious in intellectual and spiritual terms as well as materialistic terms.

I would hope that we can move in the direction of that sort of trading system, but I do think it's important to note that we are so big and so very productive that I think it tends to terrify others when they consider such a prospect, and I'm not sure it's anything that will come very fast.

Representative RICHMOND. But by the year 2000, the population outside in the United States will equal the population in the United States in the Western Hemisphere. In other words, Canada and Mexico and the small countries will have the same population we have.

Mr. BROCK. I understand that. Whatever steps we can take to insure that their interdependence with this country is enhanced I think would be to the mutual benefit of the people of all these countries.

Representative RICHMOND. Thank you very much, Mr. Ambassador. It's been a pleasure to hear you. As I said, this is a totally bipartisan meeting. I can't think of one word you said that any Democrat would argue about.

Mr. BROCK. I shall need your continued support, because it is a bipartisan problem.

Representative RICHMOND. Thank you. The committee will recess until tomorrow morning.

[Whereupon, at 11:45 a.m., the committee recessed, to reconvene at 10 a.m., Wednesday, February 25, 1981.]

[The following additional written questions and answers were subsequently supplied for the record:]

RESPONSE OF HON. WILLIAM E. BROCK TO ADDITIONAL WRITTEN QUESTIONS POSED BY SENATORS ROTH AND HAWKINS

Question 1. Trade in commodities such as tin, copper, cocoa, coffee, and tropical timber is an important element of our international relations. Over the last decade, we have seen the proliferation of study groups (e.g., for lead and zinc),

international arrangements and conferences and international agreements, such as the one for tin. Developed and developing countries alike are seeking to secure reliable access to adequate supplies of a wide range of critical raw materials.

How can United States best assure that adequate supplies, particularly of strategic materials, are freely available at stable prices? Will commodity policy be an area of continuing policy concern for the Administration?

Answer. The Administration is currently examining potential problems with regard to the availability of strategic materials. To assure adequate supplies of materials at stable prices, we must insure that we keep open the trade channels from as many producing countries as possible. We currently depend on Canada, Australia, and Southern Africa for most of our strategic minerals. We should continue to promote trade in these areas while at the same time encouraging investment and trade in domestic resources and potential producing areas such as Brazil, Argentina, and the deep seas.

Commodity policy will continue to play a role in U.S. trade policy in the Reagan Administration. We will look at each commodity on a case-by-case basis, but we will insure that agreements are economically beneficial to the United States before we enter into them.

Question 2. Regarding implementation of the agreements concluded during the Tokyo Round of Multilateral Trade Negotiations under GATT, in addition to those in the Executive Branch, many members of this and other congressional committees worked long and hard to arrive at codes of conduct to which we could adhere. We have been less successful, however, in convincing other countries to become signatories to these nontariff measure agreements. In the subsidies area, for example, only 15 of the 99 participants in the Multilateral Trade Negotiations have signed the code on subsidies and countervailing measures. In government procurement, 20 countries including the nine from the European Community, have joined. How will we go about expanding foreign, particularly developing country, adherence to the multilateral codes? What kind of leverage do we have over these countries to encourage their playing by agreed international rules?

Answer. Enforcement of the MTN nontariff codes and greater participation—particularly by the LDC's—in those codes is a major U.S. trade policy goal. However, it is too early to assess the degree of success the United States has had in convincing other countries to accept these MTN nontariff agreements.

Some countries, for example, are still in the process of drafting or ratifying domestic legislation to implement the agreements, and will sign the codes when that process has more or less been completed. Moreover, non-signatory countries are always indicating to the respective code committees an interest in accepting the various codes. Not long ago, only 19 countries (including the EC member states) had accepted the subsidies code. However, 23 countries (including EC member states) have now accepted the code and two countries (both developing) have signed subject to domestic ratification. Hence, though somewhat slow, progress is continually being made in increasing the number of signatories to the MTN nontariff agreements. Currently, there are LDC signatories to every code except civil aircraft, and some LDC's continue to be seriously involved in the implementation of the agreements.

Concerning the adherence of all countries to international trade rules, we have developed what we believe to be highly effective methods of monitoring foreign implementation of the MTN codes and of ensuring that other countries play by the newly agreed international rules on nontariff barriers to trade. At the center of our efforts in this regard is our strong involvement in the individual code committees in Geneva. The purpose of the code committees is to oversee code implementation and monitoring, and to provide code signatories an opportunity to consult on any matters relating to the operation of the agreements. The USG has made it clear in these committees that we expect code signatories to fully comply in the codes and that we will not hesitate to use appropriate code mechanisms when problems arise.

Our overseas posts will also play a major role in monitoring compliance. In line with these responsibilities, we have worked with our posts in all code adherents to design specific reporting requirements covering both monitoring and export promotion activities. In regard to the former, these requirements include forwarding copies of all foreign legislation, regulations and other major documents relating to the codes as well as reporting on any code-related problems

of U.S. firms overseas or any general information which might point to noncompliance.

In Washington, we are closely watching for both systematic abuse and individual problems. In regard to the former, we are carefully scrutinizing all relevant documents provided by the posts and by code adherents through the GATT code committees. The private sector advisory committee will also play an important role in this process.

In regard to individual complaints, there are a number of avenues for individual firms that have code-related difficulties. Complaints may be lodged through this Office or through the Trade Advisory Center which has been established for this purpose, among others, by the Commerce Department. These complaints may be lodged informally or formally through the procedures of Section 301. Additionally, complaints may be lodged through our overseas posts.

Recognizing that any complaint mechanism will be useless unless the public is aware of it, we are providing detailed information of our new rights under the MTN codes and of complaint procedures through speeches, conferences and two series of publications.

As provided for in the trade reorganization plan, USTR is playing the lead role in compliance monitoring and is working through the inter-agency trade policy mechanism presently geared up to review complaints and act quickly.

Question 3. An important element of USTR's work plan is the development of Administration positions on the many unnecessary barriers to exporting faced by our producers. Excessive taxation, burdensome regulations, and certain antitrust practices discourage exporting at a time when we desperately need to expand trade and bolster the dollar. How has the USTR worked out the approach with your Cabinet colleagues to ensure the Administration moves quickly on these disincentives?

Answer. The Cabinet-level Trade Policy Committee (TPC), which I chair, met on February 12, just several weeks into this new Administration, to discuss the need for developing a strong export policy. At that meeting, it was agreed that increased exports are an essential and vital part of the Administration's program to revise our economy and to strengthen American influence abroad. The TPC agreed that export policy must be elevated to a higher national priority, consistent with its important place in our national recovery program and constraints on the Federal budget.

To accomplish this objective, it is critical that we alleviate a number of disincentives to exports that have been erected over the years. The TPC established an ambitious work program to develop Administration positions on several disincentives, such as the Foreign Corrupt Practices Act and provisions on taxation of overseas earned income.

In addition, at that meeting the committee agreed to support the concept of export trading companies as embodied in legislation introduced by Senators Heinz and Danforth and their colleagues in the Senate and Congressman LaFalce and his colleagues in the House of Representatives. This proposal will go a long way toward dealing with the concerns of exporters regarding antitrust provisions by providing for a certification procedure under which export firms and associations could obtain antitrust immunity for specified activities. The Department of Commerce, which has major responsibilities for export promotion, will be the lead Administration spokesman for this piece of legislation.

Question 4. Services trade is becoming an increasingly important part of our trade and overall economic picture. Services account for 30 percent of U.S. exports, 70 percent of U.S. jobs and 65 percent of the U.S. gross national product. Services trade contributed a $35 billion surplus to the U.S. current account balance in 1980. Yet, there has been little international progress in identifying common interests in the services area and reducing barriers to trade in services. What are USTR's plans for identifying and reducing services trade barriers? What is the best forum for dealing with service trade—the Organization for Economic Cooperation and Development (OECD)? The GATT? Bilateral talks? What leverage do we have to convince our trading partners to liberalize service trade?

Answer. USTR has been actively working with U.S. service industries' trade associations and the U.S. Chamber of Commerce to identify barriers to trade in services. We have compiled what we feel is a relatively comprehensive inventory of barriers faced by U.S. service firms. We are now preparing strategy papers on each of these sectors which will outline the key trade issues in each

sector, trade implications of these problems and possible ways to resolve them, both in the short and long term.

At this time, we feel it would be premature to specify where negotiations on services might take place. How we ultimately proceed in services in the international arena will depend on where and how we are likely to make the most expeditious progress. Where it is possible, we will probably want to build on existing agreements, such as the GATT nontariff codes, various technical sectoral agreements and work that has been carried out over the past several years by various committees of the OECD that has focused on individual service sectors or issues. In part, our approach will be dictated by the priority assigned to certain types of issues, for example, the priority of trade issues vis-a-vis investment issues; the priority we assign to comprehensive solutions that may leave certain elements of ambiguity versus more narrowly defined solutions that are likely to be more precise and achieve a higher degree of discipline; and the priority we assign trade problems vis-a-vis developing countries and trade problems vis-a-vis developed countries.

Services represent an increasingly important component of international trade for all of our major trading partners. Nations are also becoming aware of the fact that there is a strong positive relationship between trade in goods and trade in services. These two factors have made it advantageous for all countries to consider ways to liberalize service trade.

Question 5. Performance requirements were first identified as a major trade barrier during the Tokyo Round of Multilateral Trade Negotiations. As far back as 1975, the automotive industry, in particular, was complaining that countries, including India, Mexico, Brazil, Spain and South Korea, required that, as a precondition for direct investment foreign companies employ an increasing percentage of local content in their production. Many also require that nearly all this production be exported. Such requirements distort trade, often causing U.S. manufacturers to export back to the United States, in direct conflict with their own or other U.S. firms' manufacturers.

How does the Administration propose to deal with trade-distorting local content and export requirements imposed by foreign countries on U.S. investors? How can we justify the retention of programs such as the generalized system of preferences for developing countries when the very countries that benefit from those programs employ performance requirements?

Answer. The United States is committed to an open noninterventionist investment system which allowed for the relatively free movement of investment capital and contributes to the efficient use of scarce resources. It is the U.S. position that the use of trade-related performance requirements is detrimental to all trading partners. The trade system already faces major challenges given the difficult economic situation worldwide. Excessive and inappropriate regulation of direct investment exacerbates these difficulties.

The use of trade-related performance requirements appears to be increasing in the world as a whole. Probably the most prevalent sector requiring fulfillment of trade-related conditions is the automobile industry. The most well-known, of course, is the Mexican Decree for Development of the Automotive Industry. The United States opposes the trade conditions imposed by the Auto Decree, and we have held bilateral discussions with the Mexicans on this matter.

The United States is taking initiatives bilaterally and multilaterally against the use of these investment conditions. In addition to our bilateral discussions with such countries as Mexico and Canada, we are surveying our U.S. companies on the use of performance requirements and examining policies of the Eximbank when performance requirements are involved in a transaction. We also are initiating work in multilateral organizations on performance requirements. For example, we have proposed a work program in the OECD Trade Committee and the GATT Consultative Group of 18. We have encouraged a study by the World Bank on investment incentives and performance requirements. We will continue to pursue these efforts.

Question 6. The Carter Administration, in its 5-year report on the operation of the generalized system of preference duty-free import program, supported the "graduation" of developing countries to developed country status. "Graduation" would be accomplished by eliminating advanced developing countries' GSP eligibility on a product-by-product basis. At present, many of the newly industrializing countries can compete with the best of them in specific product areas and do not need additional advantages. Moreover, the benefits are not equitably spread among

the developing countries. In 1978, almost 70 percent of all GSP duty-free imports came from five countries, and 90 percent came from 15 countries. While supporting "graduation" of these countries, President Carter did nothing concrete to advance this policy. What is USTR's plan for graduating the developing countries that have reached maturity in individual product areas out of the GSP program?

Answer. The GSP program already has a substantial amount of graduation built into it in the form of the competitive need limitations. The major five beneficiaries of the U.S. GSP—Taiwan, Hong Kong, Korea, Mexico and Brazil—account for 70 percent of all GSP trade excluded by competitive need. This amount increases to 80 percent when only industrial items are counted. These countries will be excluded by competitive need on $3.8 billion of trade this year. Furthermore, the share of the major five countries in total GSP trade which actually received duty-free treatment is dropping. In 1980, $7.3 billion entered duty-free under GSP. The top five countries accounted for only 60 percent of that amount down substantially from the 67 percent share they had of GSP duty-free imports in 1979.

Above and beyond the graduation that already exists in the program, the April 1980 President's Report to Congress on the First Five Years' Operation of the GSP announced that additional measures to improve the distribution of GSP benefits among beneficiary countries would be implemented this year. Graduation will be applied in two major areas: in adding new products to GSP and in removing products from eligibility in response to petitions considered during annual product reviews and in redesignating items that were previously ineligible for GSP due to competitive need. The President will consider three criteria in taking each action: the level of economic development of beneficiary developing countries supplying a particular product, their competitive position in the product in question, and the overall economic interests of the United States.

I have forwarded to the President my recommendations for this year's change in the GSP. Among those are my recommendations for the first use of graduation beyond the mandatory competitive need limitations. Amounting to about $510 million, the graduation recommendations include $355.5 million that would not be redesignated for the five (Taiwan, Hong Kong, Korea, Mexico, and Brazil) major beneficiaries; $69 million that is being graduated from Korea on steel wire rope and stainless steel cookware as a result of tariff line subdivisions; $67 million that will not be eligible for new product additions; and $18.1 million of trade from Hong Kong on eyeglass frames and parts that would be removed in response to a petition. These amounts, combined with the $3.8 billion of trade from the five major beneficiaries that will be excluded from GSP eligibility by competitive need, will result in a total of about $4.2 billion of trade from the five major beneficiaries that will be ineligible for GSP duty-free treatment as of March 31, 1981. Further, as a result of the product review, I have recommended that another $75.9 million, of which $63 million is from the major five beneficiaries, be removed from GSP for all countries. I believe that these recommendations to the President clearly underline the determination of the United States to restructure the GSP program to favor the mid-level and less advanced developing countries.

Question 7. In testimony before the Senate Finance Committee in January, you stated that "Many of our products—grain, beef, citrus, and others—are blocked by arbitrary trade measures imposed by other countries." What steps does USTR propose to take to reduce or remove those foreign arbitrary trade measures?

Answer. It is important that we expand our efforts to provide greater access for our competitive agricultural products. We will do this in both bilateral and multilateral forums. The United States is presently involved in the General Agreements on Tariffs and Trade (GATT) dispute settlement process with the European Community on citrus and wheat flour. On citrus our complaint is that EC preferences to third countries are prejudicing U.S. citrus exports to the Community. On wheat flour, EC subsidies to third countries are displacing U.S. sales. Under the terms of our TN agreement with Japan, we will begin consultations with them in 1983 and in 1984 on expansion of Japanese citrus and beef quotas.

Question 8. President Reagan will soon announce the formation of six working groups to consider issues of particular importance to the national economy and welfare. One council formulated to consider "commerce and trade" matters is to be chaired by the Secretary of Commerce, with the Secretaries of State, Treasury, Agriculture, and Transportation and the U.S. Trade Representative as members.

What are the responsibilities of this working group? How will its functions

relate to that of the statutorily provided for Trade Policy Committee, which is chaired by the U.S. Trade Representative? Reorganization Plan Number 3 of 1979 states that the USTR is responsible for issuing policy guidance to agencies and departments on a wide range of international trade-related matters. Accordingly, where will the decisionmaking process be located—the "Commerce and Trade" working group or in the Trade Policy Committee?

Answer. The Council on Commerce and Trade will not duplicate the functions of the Trade Policy Committee and the U.S. Trade Representative as provided for in Reorganization Plan No. 3 of 1979 and in the statutory assignments of responsibility. Accordingly, the Council addresses international trade issues not appropriately considered in the Trade Policy Committee (e.g., export controls) and domestic commerce issues.

Question 9. You recently stated that the Government is unlikely to move quickly on ending the partial embargo on grain since the Reagan Administration will link trade with foreign policy. We do not want to give the Soviets something for nothing by removing the embargo and not replacing it with something stronger. However, we should avoid using trade as a foreign policy tool. Our agricultural community and the American taxpayer have been hit by this embargo, and it should be replaced as soon as possible with a U.S. policy that is more effective in forcing the Soviets out of Afghanistan. What does the Administration see as the proper course of action for the Nation in this area?

Answer. As you know, the partial embargo on grain exports to the Soviet Union was imposed by the Carter Administration in response to the Soviet invasion of Afghanistan. The embargo was an important component of a myriad of economic sanctions designed to demonstrate to the Soviet Union that actions of international illegality are not without associated economic costs. As such, a decision to continue or lift the embargo must be made within the broader context of our existing relationship with the Soviet Union.

The Cabinet met on February 4, 1981, to consider this issue, in light of the Administration's ongoing assessment of an appropriate policy vis-a-vis the Soviet Union. The Cabinet decided that a decision on lifting the embargo should be postponed until both the international political and domestic agricultural situations are clarified. At that time, the Administration will be in a better position to consider this issue.

Question 10. What are the prospects for future multilateral negotiations to liberalize trade? In services? On the use of measures to safeguard domestic industries? On remaining barriers to trade?

Answer. Over the last year, we have made a great deal of progress on building international consensus for future discussions on trade in services. We expect that this consensus-building process and discussions on a possible framework for future negotiations will continue over the next few years. Our immediate goal is to seek further support at the June OECD Ministerial meeting for continued OECD activity on trade in services. This activity will be focused on identifying services trade barriers, considering the trade implications of these barriers and how governments might improve international cooperation in services trade.

During the MTN, considerable progress was achieved in developing a safeguards code. The major issue that brought the negotiations to an impasse was the Nordic and EC insistence that importing countries should be permitted to take unilateral safeguard actions against selected supplying countries. The developing countries were only willing to permit a deviation from the MFN principle if there were strict criteria and international discipline on selective actions. The U.S. position was close to that of the LDC's.

It has been only very recently that the United States has been able to focus the attention of other countries on safeguards. Many countries have been inclined to spend their time on MTN implementation, while others simply see few advantages to new initiatives on safeguards (i.e., they prefer the status quo). During May 1980, two proposals (one Swiss, the other Nordic) for moving forward on safeguards surfaced. However, informal plurilateral meetings at that time between developed and developing countries to once again begin serious safeguards discussions resulted in the unanimous opinion that the time was not yet ripe to begin a new drafting and negotiating exercise.

Nonetheless, a basic agreement was then reacted among six developed and six developing countries to begin holding regular informal safeguards discussions to draw parameters and establish a basis for renewed negotiations. Several of these informal meetings have already been held in Geneva.

In addition to the bilateral safeguards discussions we are pursuing with Canada, USTR is presently coordinating the development of an overall USG safeguards strategy.

In the period immediately ahead, it is clear that the USG, our major trading partners and the GATT Contracting Parties generally, will give first priority to the effective implementation of the MTN agreements. As to the remaining barriers to trade, several issues unresolved during the MTN and others which were never discussed would effectively reduce any remaining barriers to trade if agreements on these issues could be negotiated. They include the conclusion of negotiations and the establishment of codes on safeguards and counterfeit trade, the establishment of a code of conduct for trade in services, and further liberalization of trade in agricultural products.

Our trade partners tend to bemore interested in focusing on the implementation of the MTN results than on examining issues left over from the MTN and trade barriers not previously studied. However, in moving forward with our discussions of the above issues, the USG hopes to convince our trading partners and all GATT Contracting Parties of the importance of resolving these problems and of continuing the process of reducing barriers to international trade.

Question 11(1). Do you plan to go beyond the traditional role of the U.S. Trade Representative in promoting tariff reductions and free trade generally and to seek remedies for other problems, such as two serious ones?

(1) Removal of disincentives and impediments to U.S. exports?

Answer. Yes, I do plan to work hard for the removal of disincentives and impediments to U.S. exports. Barriers to trade will be reduced worldwide throughout the 1980's as the recently concluded multilateral trade negotiations are implemented. Our trade competitors will aggressively pursue these new market opportunities, and unless our exporters are allowed to fully compete, the U.S. trade position will worsen further.

Reorganization Plan No. 3 of 1979, whose purpose was to provide for better leadership and coordination of all aspects of U.S. trade policy, assigned to the Office of the U.S. Trade Representative specific responsibility for export policy. To implement this responsibility, I held a meeting of the Cabinet-level Trade Policy Committee on February 12, 1981, to establish an ambitious work program to alleviate disincentives to exports. As staff prepares specific proposals over the next several months, the Trade Policy Commission will meet to develop the Administration's position.

I believe removing disincentives to exports is critical. Many of these disincentives have been imposed in the pursuit of other important national objectives. What is needed at this time is to review these programs to see how our critical export needs can be better meshed with these other national objectives.

Question 11(2). Do you plan to go beyond the traditional role of the U.S. Trade Representative in promoting tariff reductions and free trade generally and to seek remedies for other problems, such as two serious ones?

(2) Unrestrained invasion of selected U.S. markets by the Japanese, such as in electronics and semiconductors, when Japan rigidly controls electronics imports into Japan?

Answer. We believe major strides have been taken over the last several years to open the Japanese market. In the Tokyo Round of the Multilateral Trade Negotiations Japan agreed to duty reductions 50 percent greater than those offered by the U.S. When MTN tariff cuts are fully implemented, the average Japanese tariff on dutiable imports from the United States will be 4.3 percent compared to the average U.S. duty on Japanese goods of 4.6 percent.

Japan has also agreed to lower non-tariff barriers in areas of interest to the United States, as evidenced by the agreement on the Government Procurement code and our understanding on manufactured tobacco products.

Much more remains to be done, of course. Increasingly we are running into cultural and attitudinal barriers which require new approaches. We are now seeking ways to reduce these types of trade barriers.

Question 12. Do you propose to foster within the U.S. Government, as a whole, a stronger and more consistent commitment toward exporting?

Answer. A comprehensive, consistent and positive U.S. Government export policy is an essential and vital part of this Administration's program to revive our economy and strengthen American influence abroad. Government must cease assigning exports a low priority relative to other domestic and foreign policy objectives. In this regard the Cabinet-level Trade Policy Committee, which I chair, recently agreed that export policy must be elevated to a higher national priority,

consistent with its important place in our national recovery program and constraints on the Federal budget. In my capacity as U.S. Trade Representative, I intend to foster this view within both Government and the business community.

Question 13. Will you seek to curtail the subordination of export and trade policies to political objectives, such as periodic use of export controls, embargoes, and boycott-related activities, to influence internal policies of other non-Soviet nations on matters such as human rights, foreign policy, racism, business practices, or product safety?

Answer. It is neither possible nor appropriate for this Nation to formulate or implement trade policy with regard to a particular country without taking into consideration the overall actions of that country. This does not mean the subordination of trade policies to political objectives or vice versa, It does mean that we will use trade to reflect the most important values of our foreign policy when the benefits to our nation of doing so clearly outweigh the disadvantages. I believe that considerable weight should be given to the foreign availability of items considered for export controls.

Question 14. Would you support antitrust law revisions which would ease restrictions on foreign and exporting joint ventures by Americans and also subject Japanese and other foreign companies to our antitrust laws to the extent they sell in the United States?

Answer. In regard to easing restrictions on exporting joint ventures by Americans, I have expressed my full support for export trading company legislation that is presently under consideration in the Senate. A key provision of this legislation is the establishment of a procedure whereby a trading company may apply to the Secretary of Commerce for a certification of immunity from U.S. antitrust laws for specified export trade activities. Such certification would only be given if the activities proposed would not substantially lessen competition within the United States.

In regard to the possible easing of antitrust restrictions on foreign joint ventures by Americans, I am not prepared to make a definitive comment at this time. However, I could agree to support an objective review to determine to what extent extraterritorial application of U.S. antitrust law operates as an unreasonable export disincentive. Such a review should be accompanied by recommendations as to what changes in enforcement policies or in the law are desirable.

I do not believe that antitrust law revisions are necessary to subject foreign companies to our antitrust laws to the extent that they sell in the United States. The Sherman Act may be used to restrain or punish an overseas conspiracy whose clear purpose and effect is to restrain significant commerce in the U.S. market.

Question 15. Do you think you can assist in getting American Embassies and consulates and other Government officials to support U.S. companies' sales efforts like European governments support their companies?

Answer. We have proposed a policy of closer coordination and onsite support by U.S. Government officials of our exporters. As you are aware, many governments dispatch to foreign countries high-ranking government officials, or even relatives of Heads of State, to help promote major export projects. Some of these foreign officials are reported to offer special financing, foreign aid, or other measures that tie in with an export sale. While the U.S. Government continues to maintain a policy that export competition should be on a straight commercial basis we are prepared to respond to these other forms of government-aided selling that our exporters encounter.

Question 16. Many American businessmen believe that Americans compete for exports at a disadvantage, not only because of specific impediments, but also because of the sheer number of special laws and regulations imposed on exporters by our Government, added on top of all the regulations on domestic business. They believe that even if they can comply with each one individually, their management and personnel are diverted from worthwhile marketing and business efforts by the time, effort, expense, and delays required by interpreting the rules and finding ways to comply. Could your Office do anything about this problem?

Answer. An important objective of this Administration is to remove or liberalize unnecessary and unjustifiable regulatory and legal impediments to commerce. In this regard, the Trade Policy Committee has agreed on an ambitious agenda for the next several months for developing Administration positions for removing important disincentives to U.S. exports. Liberalization of many

of these disincentives will require Congressional approval. I anticipate that I will be consulting with various members of the Senate and House of Representatives in the coming months in regard to these issues, and would hope that we can work closely together to develop a bipartisan Administration/Congressional approach to resolving these problems.

Question 17. Do you favor expanding activities of the Export-Import Bank by (1) removing limitations on its scope and (2) increasing available funding?

Answer. This in not an opportune time to pursue efforts to expand the Export-Import Bank's activities. However, USTR, in conjunction with other government agencies, will be making assessments as to the appropriate role of the Government in export financing, and how best to accomplish this role, in preparation for input into Eximbank's authorization legislation which will be renewed in 1983. Because both the domestic and international economic environments in which the authorization legislation is framed are markedly different than in 1977–78, considerable study is needed before delineating a new scope for the Eximbank.

Concerning increases in the available funding for Eximbank as a means to expand Eximbank activities, such increases would be inconsistent with the overall limitations imposed by the President's economic package, including limitations on federal credit activities. Instead we are focusing on strategies to marshal those resources in the most efficient and tactical way possible. In addition, the Administration will continue to press our major trading partners in the OECD multilateral negotiations on export credits to bring the interest rates on official credits closer to market rates, thus neutralizing the importance of financing in determining the competitiveness of exports.

Question 18. With respect to specific impediments or disincentives to exports imposed on U.S. companies, could you assist in eliminating one or more of the following obstacles?

(1) Excessive reach of the Foreign Corrupt Practices Act which seeks to control the morality of overseas selling practices but applies only to U.S. companies and not their competitors, whether or not the prohibited activity is illegal in the buying country.

(3) Continued threats to cancel the already very limited DISC benefits for U.S. exporters.

(4) Use of export controls to promote objectives not related to national defense—such as controlling nonmilitary items and sales to noncommunist nations.

(5) Taxation of U.S. citizens working abroad on extraordinary pay given them to cover higher living costs, education of their children in English language schools, and financial incentives to hire them to work in remote places.

(7) Antiboycott tax and criminal laws which go beyond forbidding action and prohibit furnishing truthful answers to questions about the companies' business.

(8) Application of Federal "mail fraud" laws to indict American executives for alleged misrepresentations by their companies to foreign governmental customers, even when the foreign government has taken no action on the matters.

(9) The disadvantage U.S. companies have in selling against European companies which can profitably export at a large discount from their domestic prices because under their Value Added Tax laws the VAT is refunded on exports.

Answer. The Administration will be strongly supportive of efforts to remove a number of the obstacles to exports listed here. For example, the Cabinet-level Trade Policy Committee, which I chair, has agreed that removing disincentives to exports is important to the achievement of our national economic goals. The Committee has set out an ambitious work program for reviewing disincentives and will ensure that immediate priority is given to reviewing the Foreign Corrupt Practices Act, taxation of U.S. citizens working abroad, and the use of export controls to promote objectives not related to national defense. Other export disincentives will be considered over the coming months.

We are aware of the international situation with regard to the DISC in the GATT, and are reviewing this legislation in connection with our export expansion objectives.

Value Added Tax laws are specifically addressed in the subsidies code, as well as the remission of indirect taxes in excess of domestic levels. The latter is included on the its of prohibited subsidies. Beyond this, the Administration has not yet fully considered further initiatives to deal with this matter.

Question 18(2). With respect to specific impediments or disincentives to exports imposed on U.S. companies, could you assist in eliminating one or more of the following obstacles:

80-478 0 - 81 - 7

(2) Foreign nontariff import regulations which exclude or make it very difficult to sell U.S. made products in foreign countries such as France and Japan, whereas the United States allows imports from those countries with no similar restrictions.

Answer. After 6 years of negotiations among over one hundred countries, the Tokyo Round of Multilateral Trade Negotiations (MTN) significantly reduced tariffs on industrial and nonindustrial products of both developed and developing countries. While the U.S. did not get all tariff rates reduced nor the degree of reduction we wanted on some items, the results are nevertheless very good. The developed countries reduced their tariffs about one-half the existing rates. And in the three largest U.S. export markets, the European Community, Canada and Japan, the combined reduction averaged over 40 percent. Most tariff reductions began on January 1, 1980 and will continue with equal annual cuts, the total reduction to become effective not later than January 1, 1987.

Moreover, in contrast to earlier rounds of trade negotiations in which the primary focus was the reduction of tariffs, the Tokyo Round focused on reducing or removing nontariff measures that restrict or distort trade. Hence, in addition to substantial cuts in tariff level, the MTN produced a series of codes designed to regulate the use of nontariff measures in international trade, harmonized national practices, and establish permanent mechanisms within GATT to manage disputes. They provide—for the first time in the history of world trade—a single set of rules to govern international trade and are a good strong growth of trade. As an increasing number of countries sign the codes and as they are implemented, it is clear that there will be greater harmonization of trade practices between the U.S. and its major trading partners.

Question 18(6). With respect to specific impediments or disincentives to exports imposed on U.S. companies, could you assist in eliminating one or more of the following obstacles?

(6) Prohibitions or severe limits on sales commissions for AID and foreign military sales programs even when it is known a job cannot be obtained or performed without a sales representative.

Answer. According to A.I.D. officials, sales agents' commissions are eligible for A.I.D. financing under A.I.D. commodity import programs governed by A.I.D. Regulation 1, 22 CFR Part 201. Such commissions must be disclosed to A.I.D., they must not be paid to a representative of the importer. See Section 201.65(h), (j), and (k) of A.I.D. Regulation 1. Within these limits sales agents' commissions are eligible for A.I.D. financing.

In some cases, A.I.D. has asked the host country to finance any sales agents' commissions paid in connection with particular project activities. Near East Bureau representatives have informed me that this practice has developed in Egypt in particular. A.I.D. financing of such commissions has been withheld on the theory that such costs are properly paid by the purchaser in local currency (not A.I.D. dollars) and also to minimize the opportunity for buyers and sellers to arrange payments for improper purposes under the guise of sales agents' commissions. A.I.D. does not refuse to finance a contract, however, merely because it may include sales agents' commissions.

With respect to military sales, statutory stipulations require that disclosure about payments of any sales commissions or fees incurred in connection with U.S.-foreign military sales programs be made to the Secretary of State. This is done in part to assure foreign governments that no commissions are paid in connection with military procurements. Foreign military sales levels in recent years do not suggest undue restraints on the programs arising from our statutory stipulations, according to the Defense Department.

However, U.S. Embassies have been under instruction from prior Administrations to avoid promoting U.S. military exports for procurement by foreign governments. Thus, U.S. manufacturers of military articles are hampered in their legitimate marketing efforts. We should reevaluate our policies in this area with a view of improving the positions of U.S. firms in international markets.

Question 18(10). With respect to specific impediments of disincentives to exports imposed on U.S. companies, could you assist in eliminating one or more of the following obstacles?

(10) Integrated circuits produced in Japan have become technologically and price competitive with the U.S. products. Yet, a recently negotiated trade agreement with the United States would be achieved in seven years. Is there any reason for not achieving parity now?

Answer. Integrated circuits was one of the many items on which the United States and Japan agreed to cut tariffs during the MTN—with these cuts to be staged between 1980 and 1987. However, we have recently begun to explore with the government of Japan the possibility of accelerating the agreed MTN cuts to a harmonized level.

Question 18(11). With respect to specific impediments or disincentives to exports imposed on U.S. companies, could you assist in eliminating one or more of the following obstacles?

(11) Many believe that the Multilateral Trade Negotiations which were negotiated in 1979 still leave U.S. industry at a structural disadvantage. What is your view of this and what do you intend to do about it?

Answer. The MTN agreements contributed substantially to the liberalization of international trade and to the better conduct of that trade. Considering the increasing importance of foreign trade in our economy and the contribution of exports to domestic employment, agricultural production, corporate profits and a strong currency, it is clear that the MTN agreements have contributed and will continue to contribute to the economic and structural well-being of the United States.

However, if U.S. firms are to take full advantage of the more open trading environment that is expected to result from the MTN agreements, the U.S. Government will have to remove the major export disincentives that are embedded in our tax and regulatory policies. Some government programs and regulations have a substantial negative impact on the ability and desire of U.S. managers to export. Among the key export disincentives are U.S. taxation of foreign earned income, export controls, the Foreign Corrupt Practices Act, and certain environmental and safety programs and regulations. U.S. products face very stiff competition on the basis of price, quality, credit and service. We should not make the international sales environment unnecessarily tougher by imposing burdensome regulations and policies upon our exporters.

Finally, the U.S. negotiating priorities during the MTN reflected the domestic economic structure of the period. In a market economy such as ours, however, the structure of the economy changes continuously. Trade policy must keep abreast of those changes by pursuing additional liberalization in those areas in which our comparative advantage appears to be growing—including, for example, agriculture, international investment, services and technology-intensive products. We must be particularly attentive to opportunities for further trade liberalization in these sectors which are now thoroughly covered by multilateral agreements in the GATT.

Question 19. How does President Lopez Portillo's recent expression of affection for the regime of Fidel Castro affect your evaluation of the proper United States trade posture toward Mexico?

Answer. President Lopez Portillo's recent comments about Cuba do not represent a change in Mexican policy towards Castro but a continuation of Mexico's traditional position. Mexico has been the only Latin American country to maintain diplomatic relations continuously with Cuba since Castro seized power, and Mexico has not participated in efforts to isolate Cuba economically.

Neighbors, such as the United States and Mexico, do not always have identical policies on every issue. Our trade has increased dramatically with Mexico in the past few years, and Mexico now our third largest trading partner. The trade is to our mutual advantage.

The present form and degree of Mexican affection for Castro do not appear to threaten U.S. interests in the region. Accordingly, we do not feel that it would be appropriate at this time to attempt to influence Mexico's policy toward Cuba through changes in U.S. trade policy. If the Cuban-Mexican relationship were to change markedly in a direction which directly threatened U.S. interests or regional stability, the question of linkage with trade policy would have to be reviewed.

Question 20. Do you agree with the recent statement of Edwin Meese that the Soviet Union and other Communist nations cannot expect to enjoy advantageous trade relations with the United States while exporting revolution?

Answer. I believe it is common sense that foreign policy and trade policy ought never to be at cross purposes; thus important values in foreign policy ought to be reflected in our trade policy. Of course, trade issues must be considered on their own merits, reflecting our domestic, as well as foreign policy, interests.

THE 1981 ECONOMIC REPORT OF THE PRESIDENT

WEDNESDAY, FEBRUARY 25, 1981

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 10 a.m., in room 6226, Dirksen Senate Office Building, Hon. Henry S. Reuss (chairman of the committee) presiding.

Present: Representatives Reuss, Richmond, and Brown; and Senators Jepsen, Abdnor, and Hawkins.

Also present: James K. Galbraith, executive director; Louis C. Krauthoff II, assistant director; Charles H. Bradford, assistant director; and Lloyd C. Atkinson, William R. Buechner, Timothy P. Roth, and Robert E. Weintraub, professional staff members.

OPENING STATEMENT OF REPRESENTATIVE REUSS, CHAIRMAN

Representative REUSS. Good morning.

The Joint Economic Committee will be in order for its continued hearings on the state of the economy.

I am personally delighted—and I know the committee is collectively, bicamerally, and bipartisanly delighted—with the action of the Senate yesterday in unanimously endorsing the chairmanship of the Council of Economic Advisers of our old friend and respected adviser, Murray Weidenbaum.

Under our constitutional procedures, Mr. Weidenbaum, the House does not have a say in these confirmation matters. But unofficially we say "amen" to what the Senate did. You have an absolutely admirable record in public and private life. You've had many stints of experience in the Federal Government, going back I guess—I hesitate to say it—25 or 30 years.

You've had a remarkable record in the private sector, including a long period at that superb institution, Washington University of St. Louis. Your whole life and career is, in my view, an example to those who wonder about a career in Government, who have been in and out. But the minute you've danced over the years has been advantageous to both the public and private sectors.

We're very happy you are where you are because you are a man of great learning and supreme commonsense. I like to think that you will lean back in your chair and consider carefully whether the ideas put across by those believers of particular theories in this administration—and, indeed, in most administrations—have their place. The supply-siders will be propelling the Laffer Curve into heaven knows what heights in the months to come. The monetarists had their inning this morning when, as I understand it, they have triumphed.

And Mr. Volcker is even now announcing that the monetary policy of the United States, so tight that the pips are squeaking, will be made even tighter.

I know that our relationship in the years ahead will be a very pleasant and profitable one for both, because we are both—we of this committee and you—dedicated to the goals of the Council of Economic Advisers and of the Joint Economic Committee; goals of maximum employment, maximum production, and maximum purchasing power.

So, heartiest welcome. Mr. Weidenbaum. You're among friends, and we treasurer your presence here.

Senator Jepsen.

Opening Statement of Senator Jepsen, Vice Chairman

Senator Jepsen. Thank you, Mr. Chairman.

As vice chairman, I bid you welcome, Mr. Weidenbaum. The air around Washington and its environs is always filled with political rhetoric, and it always has been. But the level of rhetoric in this town surrounding the administration's proposed tax rate cut may be without precedent.

Just the other day, one of my colleagues in the House characterized the proposed cuts as Robin Hood in reverse, as taking from the poor to give to the rich. That's pretty good rhetoric, but I don't think it's going to play very well in Peoria, in Des Moines or, for that matter, in New York or Los Angeles. It won't play well because the people of this country have simply had enough of the Government taking more and more of their wages and getting only promises in exchange.

The workers of this country know that the old economics doesn't work and the old rhetoric is not going to stop them. The fact is that these tax rate cuts are anti-inflationary and progrowth.

I cannot imagine a policy initiative other than responsible monetary policy, cuts in Government spending, and a rational approach to regulation that could benefit all of us more.

To say that the tax rate cuts would be inflationary missed the point for two reasons:

First, the tax rate cuts will not occur in a vacuum if the Congress is politically astute. And if it is anything, it is that. Broad and deep spending cuts will be forthcoming. This alone will dampen any tendency for the deficits to increase.

Second, the tax rate cuts are designed to increase the rate of return to work, saving, and investment.

I believe the American people respond to incentives, that the work ethic is alive and well and, most of all, I know—and so does everyone else in this country—that work, saving, and investment are fundamentally anti-inflationary.

A recently published book characterized the United States as a zero-sum society, a society in which one person's gain must come at another person's expense.

I do not believe that we live in such a society. I do not believe that we have to live in such a society. Most important, I am convinced that the Reagan administration's program for economic recovery will assure that we will not live in such a society.

To all of the Robin Hood rhetoric, I make the same response as John Kennedy did when he was attacked on the same grounds, "A rising tide raises all boats."

I think it is time we concentrate on giving the tide a little push and spend less time thinking about how to bottle it up. Welcome.

Representative REUSS. Thank you.

Congressman Brown.

OPENING STATEMENT OF REPRESENTATIVE BROWN

Representative BROWN. I want to welcome Mr. Weidenbaum, Mr. Chairman, and to suggest that he is somebody whom this committee has always looked to for good economic advise. And in particular we look to him for good advice with reference to his famous study about the impact of regulation.

I hope, as Chairman of the Council of Economic Advisers, you will be able to resolve that problem for us, if nothing else. But I'll also look for some other problems to be resolved.

I wish that you could resolve the concern I have about savings. We'll talk about that when we get to the questions.

Thank you, Mr. Chairman.

Representative REUSS. Mr. Weidenbaum, please proceed.

STATEMENT OF HON. MURRAY L. WEIDENBAUM, CHAIRMAN, COUNCIL OF ECONOMIC ADVISERS

Mr. WEIDENBAUM. Mr. Chairman and members of the committee, I thank each of you for your very kind and supportive statements.

Mr. Chairman, I especially appreciate the kind remarks you made about my long-term relationships with this committee, which goes back to the 1950's, when this was the first committee I ever testified before and the first committee I ever prepared a study for. And I look forward to continuing that very long—and I hope mutually productive—relationship.

I thank Senator Jepsen for his kind and welcome support of the Reagan administration program. Of course, I am prepared to expound on that subject at length.

I'd also like to thank Representative Brown and all of you, and point out that I'm here to expound what I hope you take, as I take to be, a major innovation in economic policy.

I would like to submit my prepared statement for the record and merely cover a few of the highlights, because I think the basic dimensions of the economic program of the administration are well known.

Therefore, I would just like to indicate a few key points, notably that this is a four-part, interrelated program and that each of these items not only makes an important contribution but is carefully related to the remainder of the program, so that a substantial reduction in the growth of Federal spending reinforces the economic effects of a significant reduction in tax rates, which, in turn, is again fully supported by relief from regulatory burdens and, a subject I'd like to turn to in a moment, a monetary policy, which is consistent with these, but which, in turn, because of these policies, can work more effectively.

I would like my oral statement to skip over the material on expenditures and taxation which has been covered adequately by my colleagues in the Reagan administration.

I would like to briefly talk about the regulatory area that Congressman Brown mentioned and point out that in the brief period which this administration has been in office we've seen not talk, but a great deal of action on the subject, starting with the suspension of a burst of midnight rulemaking on the part of the outgoing administration, as well as the recent promulgation by the President of an Executive order with teeth in it, which truly requires that regulatory endeavors meet a benefit-cost test and that the agencies seek the most cost-effective approaches to regulation.

In fact, it's in the spirit of the article in this morning's Washington Star, which, as the Star notes, I wrote before joining the administration. But I am pleased that the material is still pertinent.

I would like now to turn to the part of my prepared statement dealing with Federal Reserve policy, which I think has a particular bearing on the current situation.

Surely an important aspect of the Reagan administration's comprehensive economic program is a monetary policy to provide a financial environment consistent with the steady return to sustained growth and price stability.

During the first week of the administration, the President underscored his commitment to the historic independence of the Federal Reserve. It is clear, of course, that monetary and fiscal policy are closely interrelated. Success in one area can be reinforced by success in another.

Thus, a predictable steady growth in the money supply, moving down to rates well below that experienced in that recent past, will be a vital contribution to the achievement of the economic goals of this administration.

I said it's a two-way street. What I had in mind is that the planned reduction and subsequent elimination of Federal deficit financing on the part of the Congress and the executive branch will, in turn, help the Federal Reserve system performs its vital role in the overall program to achieve sustained growth and stability.

But let me add a word of caution: Balance in the conduct of monetary policy is both difficult and vital. Thus, if monetary policy is too expensive, then inflation in the years ahead will continue to accelerate and the administration's economic goals will be undermined.

Under those circumstances, inflationary psychology would intensify and wages, prices, and interest rates would reflect the belief that inflation will continue. An easy-money policy would be counterproductive.

On the other hand, if monetary policy is too restrictive, a different set of problems can arise, unnecessarily aggravating recession.

This is not just a theoretical concern. In the past there have been frequent, abrupt monetary policy changes. Unnecessary restrictive monetary policies have led to excessive short-term monetary growth, an important element in the stop-and-go policy of the past.

Furthermore, such frequent policy changes sent confusing signals. The uncertainty from such monetary U-turns undermines long-term

investment decisions and economic growth. Thus, history teaches us that great care is necessary to carry out successfully our program of monetary consistency and stability.

This administration is determined to do our part. We have been and will continue to confer regularly with the Federal Reserve Board on all aspects of our economic program. Indeed, expense reduction, tax cuts, and regulatory reform will help to advance the efforts of the independent Federal Reserve System.

To that end, the economic scenario in my prepared statement, and in the administration's program, assumes that the growth rates of money and credit are steadily reduced by one-half between 1980 and 1986, with the Federal Reserve gradually but persistently reducing the growth of money. Inflation should decline at least as fast as we anticipate.

Moreover, if monetary growth is restrained at the same time that our fiscal goals are achieved, then inflationary expectations will decline. And since interest rate movements are largely a mirror of price expectations, reduction in inflation will produce reduction in interest rates.

In conclusion, this program for national recovery truly represents a substantial break with past policy. The new policy is based on the premise that the people who make up the economy—workers, managers, savers, investors, buyers, and sellers—do not need Government to make reasoned and intelligent decisions about how to organize and run their lives. They continually adopt their own behavior to fit their current requirements.

Therefore, the most appropriate role for Government and economic policy is to provide a stable and unfettered environment in which private individuals can plan and make their own decisions.

The new economic recovery program is designed to bring a greater sense of purpose and consistency to all aspects of Government policy.

As a result of the policies we propose, it is our expectation that the economy's productive capacity will grow significantly faster than could be achieved with continuation of the policies of the past.

We project that real GNP will recover from its current period of weakness and move to a 4 to 5 percent annual growth path through 1986.

Concurrently, the rate of inflation can be expected to decline steadily, to less than 5 percent annually by 1986, less than half of the current double-digit rate.

But if the program is accepted piecemeal, if only those aspects that are politically attractive are adopted, then this economic policy will be no more than a repeat of what has been done before. And we already know the sad results of the past stop-and-go policies.

Indeed, if we, as a nation, do not take the bold new policy initiatives proposed in the Reagan program, we will face a continuation and a worsening of the trends that have developed in the last 2 years.

Gentlemen, we have a rare opportunity ot reverse the trends of the past, to stimulate growth, productivity, and employment at the same time that we move toward the elimination of inflation.

If we succeed, it is a bipartisan effort. Our Nation could well be on the verge of the most significant redirection in our economy in nearly

half a century, a redirection based on the creativity and ambition of the American people as the vital forces of economic growth.

And I look forward to working with this committee in that important endeavor.

Thank you very much.

[The prepared statement of Mr. Weidenbaum follows:]

PREPARED STATEMENT OF HON. MURRAY L. WEIDENBAUM

It is a special pleasure for the Chairman of the Council of Economic Advisers to testify before the Joint Economic Committee, our sister organization established by the Employment Act of 1946. In their different ways both organizations have contributed very substantially to the growing public interest in economic questions and, more importantly, to a higher level of understanding of economic analysis.

Personally, as someone who has prepared a variety of studies and submitted numerous statements to this Committee, over a long period of time, I have a special pleasure in being here to discuss what I believe to be one of the most important innovations in economic policy in many years.

I welcome this opportunity to discuss the President's program for economic recovery. Others from the Administration have described the program in detail. This morning therefore, I would like to present the basic concepts and economic rationale of the Administration's program.

What is most distressing about the state of the U.S. economy today is the almost relentless worsening in the trends of inflation, tax burdens, interest rates, productivity and the real wages of American workers. If we continue the policies of the past, these trends are likely to worsen further. I think most people recognize that. As the President has said "we must switch lanes." We must break the cycle of negative expectations.

If the President's program is implemented swiftly the benefits to the average American can be striking. For example, inflation—which is now at double digit rates—could be cut in half by 1986. The American economy could produce 13 million new jobs by 1986, nearly 3 million more than if the status quo in government policy were to prevail. The economy itself would break out of its anemic growth patterns to a much more robust growth trend of 4 to 5 percent a year. It is our belief that these posiive results can be accomplished simulaneously with reducing tax burdens, increasing private saving, and raising the standard of living for the American family.

The President's agenda for the future recognizes that appropriate policy which is consistently applied can release the strength of the private sector, improve economic growh, and reduce inflation. The economic mechanisms for achieving these desirable goals are well known properly functioning markets, the free play of wages and prices, reduced government spending and borrowing, reduced government barriers to risk-taking and enterprise, stable and reliable monetary policies.

The program consists of four parts: (1) a substantial reduction in the growth of Federal expenditures; (2) a significant reduction in Federal tax rates: (3) prudent relief from Federal regulatory burdens; and (4) a monetary policy on the part of the independent Federal Reserve System which is consistent with those policies. These four complementary policies form an integrated and comprehensive program.

REDUCED FEDERAL SPENDING

The leading edge of our program is the comprehensive reduction in the rapid growth of Federal spending. The budget restraint program represents more than just "cosmetic" changes in estimates of Federal expenditures. But we have not adopted a simple-minded "meat ax" approach to budget reductions. It is essential to stress the fundamental principles that guided the development of our spending cuts:

First, and most importantly, all members of our socievy except the truly needy are asked to contribute to the program for spending control.

Second, we will strengthen our national defense to a level consistent with world tensions and our position of leadership.

Finally, these fundamental principles led to nine specific guidelines that were applied in reducing the budget:

Preserve "the social safety net" of programs designed to protect the truly needy who must rely on society for aid, such as aid to veterans and social security for the elderly.

Revise entitlements to eliminate unintended benefits, such as double benefits for certain types of unemployment.

Reduce subsidies to middle- and upper-income groups, such as have occurred in the school lunch program.

Impose fiscal restraint on other national interest programs, including the Departments of Commerce, Energy, and Interior.

Recover costs that can be clearly allocated to users, notably fees to be paid by boat and yacht owners for Coast Guard services.

Stretch out and retarget public sector capital investment programs, including a variety of public works projects.

Reduce overhead and personnel costs of the Federal government.

Apply sound economic criteria to subsidy programs, as in the proposed reduction of dairy price support.

Consolidate categorical grant programs into block grants, such as the proposal to combine 45 narrow categorical grants for education into two far-more-efficient block grants.

The selection of specific reductions has been a difficult task involving the entire Administration. In the process we have consulted with representatives of business, labor, agriculture, minority groups, and State and local governments.

The spending reduction plan will shift budget priorities so that Federal resources are spent for purposes that are truly the responsibility of the national government. As the table below indicates, our budget plans reflect the increased importance attached to national defense, maintaining the Federal Government's support for the truly needy, and fulfilling our responsibilities for interest payments on the national debt. The spending reductions will restrain Federal involvement in areas that are more properly left to State and local governments or to the private sector.

SHIFT IN BUDGET PRIORITIES

	1962	1981	1984
Outlays shares (percent):			
Department of Defenses—Military	43.8	24.1	32.4
Safety net programs	24.5	36.6	40.6
Net interest	6.4	9.8	8.6
All other	25.2	29.5	18.5
Total	100.0	100.0	100.0

Carrying out this program of budget restraint will also halt and being to reverse the tendency of government to take an ever-large share of our economic resources. From a high of 23 percent of the gross national product in fiscal 1981, Federal outlays are now scheduled to decline to 21.8 percent in fiscal 1982 and to reach approximately 19 percent beginning in 1984.

REDUCED TAX RATES

The second element of the program, which is equally important and urgent, is the multi-year reduction in Federal personal income tax rates by 10 percent a year for 3 years in a row. The Administration's personal tax proposals will bring down average individual tax receipts to 10.8 percent of personal income in 1984, still 1.6 percentage points above where it was in 1965. Without these marginal tax rate cuts, however, individual taxes would rise to 14.7 percent of personal income by 1984. Failure to enact these proposals is thus tantamount to imposing a tax increase on the average American taxpayer.

Closely related to this is an incentive to greater investment in production and job creation via faster tax write-offs of new factories and production equipment. One of the major tasks facing the U.S. economy in the 1980s is to promote more capital investment. We must increase the share of our Nation's resources going to investment in order to combat the decline in productivity growth, to hasten the replacement of energy-inefficient machines and equipment, and to comply

with government mandates for health and safety requirements. Both improvements in productivity and increases in productive jobs will come from expanded investment.

REDUCED REGULATION

The third key element of our economic expansion program is an ambitious reform of regulations that will reduce the government-imposed barriers to investment, production, and employment.

The rapid growth in Federal regulation has retarded economic growth and contributed to inflationary pressures. There is widespread agreement on the legitimate role of government in protecting the environment, promoting health and safety, safeguarding workers and consumers, and guaranteeing equal opportunity. But there is also growing realization that excessive regulation is a very significant factor in our current economic difficulties.

The most important effects of regulation are the adverse impacts on economic growth. These arise because regulations may discourage innovative research and development, reduce investment in new plant and equipment, raise unemployment by increasing labor costs, and reduce competition. Taken together, these longer-run effects contribute significantly to our current economic dilemma of high unemployment and high inflation.

In many cases the costs of regulation can be substantially reduced without significantly affecting worthwhile regulatory goals. Unnecessarily stringent rules, intrustive means of enforcement, burdensone reporting and recordkeeping requirements, and other regulatory excesses are all too common.

The Administration's regulatory reform is focusing on three principle areas:

We will be reviewing all major regulatory proposals by executive branch agencies, especially those that would impose large costs on the economy or involve overlapping jurisdiction among agencies.

We will be assessing executive branch regulations already on the books, concentrating on those that are particularly burdensome to the national economy or to key industrial sectors.

We will be developing legislative proposals designed to deal with statutory obstacles to more cost-effective regulation.

BALANCED GROWTH OF MONEY AND CREDIT

The fourth aspect of this comprehensive economic program is a monetary policy to provide the financial environment consistent with a steady return to sustained growth and price stability. During the first week of the Reagan Administration the President underscored his commitment to the historic independence of the Federal Reserve System. It is clear, of course, that monetary and fiscal policy are closely interrelated. Success in one area can be reinforced by success in the other. Thus, a predictable and steady growth in the money supply moving down to rates well below that experienced in the recent past will be a vital contribution to the achievement of the economic goals of this Administration. The planned reduction and subsequent elimination of Federal deficit financing will help the Federal Reserve System perform its important role in the overall program to achieve sustained economic growth and price stability.

Let me add a word of caution. Balance in the conduct of monetary policy is both difficult and vital. Thus if monetary policy is too expansive, then inflation during the years ahead will continue to accelerate and the Administration's economic goals will be undermined. Under those circumstances, inflationary psychology would intensify and wagés, prices, and interest rates would reflect the belief that inflation—and the destructive effects of inflation—will continue. Surely, an easy money policy would be counterproductive.

On the other hand, if monetary policy is too restrictive, a different set of problems can arise unnecessarily aggravating recession and unemployment. This is not just a theoretical concern. In the past there have been frequent abrupt monetary policy changes. Unnecessarily restrictive policies have quickly led to excessive short-term monetary ease. Furthermore, such frequent policy changes sent confusing signals. The uncertainty from such monetary U-turns undermined long-term investment decisions and economic growth. Thus, history teaches us that great care is necessary to carry out successfully a program of monetary consistency and stability.

The Administration is determined to do its part. We have been and will continue to confer regularly with the Federal Reserve Board on all aspects of our

economic program. Indeed, the expenditure reductions, tax cuts and regulatory reform will help to advance the efforts of the independent Federal Reserve System. To that end, the economic scenario assumes that the growth rates of money and credit are steadily reduced by one-half between 1980 and 1986.

With the Federal Reserve gradually but persistently reducing the growth of money, inflation should decline at least as fast as anticipated. Moreover, if monetary growth rates are restrained at the same time that fiscal goals are achieved, then inflationary expectations will decline. And since interest rate movements are largely a mirror of price expectations, reduction in one will produce reduction in the other.

CONCLUSION

This program for national recovery represents a substantial break with past policy. The new policy is based on the premise that the people who make up the economy—workers, managers, savers, investors, buyers, and sellers—do not need the government to make reasoned and intelligent decisions about how to organize and run their own lives. They continually adapt their behavior to fit the current environment. Therefore, the most appropriate role for government economic policy is to provide a stable and unfettered environment in which private individuals can plan and make appropriate decisions. The new recovery program is designed to bring a greater sense of purpose and consistency to all aspects of government policy.

As a result of the policies set forth here, our economy's productive capacity is expected to grow significantly faster than could be achieved with a continuation of past policies. Real economic activity is projected to recover from the 1980-81 period of weakness and move to a 4 to 5 percent annual growth path through 1986, as shown in the table below. Concurrently, the general rate of inflation is expected to decline steadily to less than 5 percent annually by 1986 from the current 10-percent-plus rate.

ECONOMIC ASSUMPTIONS

[Calendar years]

	1981	1982	1983	1984	1985	1986
Nominal gross national product (billions)	$2,920	$3,293	$3,700	$4,098	$4,500	$4,918
Percent change	11.1	12.8	12.4	10.8	9.8	9.3
Real gross national product (billions, 1972 dollars)	$1,497	$1,560	$1,638	$1,711	$1,783	$1,858
Percent change	1.1	4.2	5.0	4.5	4.2	4.2
Implicit price deflator	195	211	226	240	252	265
Percent change	9.9	8.3	7.0	6.0	5.4	4.9
Consumer Price Index (1967=100)	274	297	315	333	348	363
Percent change	11.1	8.3	6.2	5.5	4.7	4.2
Unemployment rate (percent)	7.8	7.2	6.6	6.4	6.0	5.6

The adoption of the Administration's economic program will mean that the most significant growth of economic activity will occur in the supply side of the economy. The projected steady expansion in business fixed investment will allow our economy to grow without fear of capacity-induced inflation pressures. In addition, it will also increase productivity and reduce the growth of production costs by incorporating new and more efficient plants, machinery, and technology into our manufacturing base. The results will be revitalized growth in the real incomes and standards of living of our citizens and significantly reduced inflationary pressures. As our economy responds to a new era of economic policy, unemployment will be significantly reduced.

If the program is accepted piecemeal—if only those aspects that are politically palatable are adopted—then this economic policy will be no more than a repeat of what has been tried before. And we already know the results of the stop-and-go policies of the past. Indeed, if we as a Nation do not take the bold new policy initiatives proposed in this program, we will face a continuation and a worsening of the trends that have developed in the last two decades.

We have a rare opportunity, however, to reverse these trends; to stimulate growth, productivity, and employment at the same time that we move toward the elimination of inflation. If we succeed, our Nation could well be on the verge of the most significant redirection of our economy in nearly half a century—a redirection based on the creativity and ambition of the American people as the vital forces of economic growth.

Representative REUSS. Thank you, Mr. Weidenbaum.

We will now examine under the 5-minute rule.

Representative BROWN. Thank you, Mr. Chairman.

Mr. Weidenbaum, I am concerned about whether or not the President's program is going to be accepted, not in the countryside, because that seems to be fairly evident at this point by such supporters of the Reagan administration as the Washington Post, the New York Times, the Harris pollsters, and so forth. All are suggesting that there is a strong flavor of support out in the country for what the President and you want to undertake. I sense that support in talking to people in my own district.

Where I'm concerned about whether or not the support will come is here in Washington. Where those still in the majority in the House of Representatives, still hold the same spirit of understanding of how the economic system works, that they have always had; that we ought to have more regulation by Washington; we ought to accommodate money creation; we ought not to reduce those taxes; all because Washington knows how to use the money better than the individual does, and all those other shibboleths that have worked so well for the last few years to reduce the standard of living of the average American.

Regulations—evidence of belief in the superiority of the Washington mind over the rest of the country, Government over the individual, force over the market, and freedom of the market to operate, accommodation of money creation; an attitude that says when things don't go as we expected them to go, the Government then changes the rules by just expanding the money supply and making every dollar work a little bit less. That seems to be the mental attitude of some of my colleagues—even on the Joint Economic Committee, where we were pretty supportive in the last 2 years, as a consensus, of the approaches which you seem to be taking.

I gather you read those reports and have advised the administration to follow them.

Mr. WEIDENBAUM. Yes, sir.

Representative BROWN. Finally, on taxes where, if anything, it's apparent that the tax reductions proposed may be "hearinged" to death, if I can use "hearing" as a verb. Where it's obvious that they're going to be studied and studied and studied and studied. [Laughter.]

I would hope that we'd act on some of these things that are revolutionary. Now can you tell me first, if we only take part of the program—that is, the cutting back of Federal spending to get the Federal Government out of the credit markets in this country—will that do the trick? It seems to me, that one of the problems is the competition between the Federal Government and the private sector for the limited amount of savings to be borrowed for the modernization of the American economic system.

Will it be sufficient if we merely reduce Federal spending to reduce that pressure on the amount of savings that we have?

Mr. WEIDENBAUM. The short answer, Mr. Brown, is "no;" which is precisely why we put together a balanced but comprehensive package. If there's anything that we've learned from the sad experiences of the past, it's that fighting inflation by cutting spending or fighting unemployment by cutting taxes isn't enough. That is the stop-and-go failures of the past.

What we truly need is a balanced policy that attempts to restore the traditional rapid growth of the American economy, and I think that the tax program is designed to do just that, while simultaneously through the expenditure restraint program, we deal with the underlying inflation. In fact, the kind of tax program we have developed, as I explained to your colleagues on the Ways and Means Committee yesterday, isn't the traditional income redistribution policy of the past, but on the contrary, concentrates on the reduction of marginal rates.

The whole idea of the tax cuts is to provide a powerful incentive to the private sector to increase saving, to increase investment, and ultimately therefore to increase the investment in new jobs which is so vital to restore the growth rate of the American economy. And that, in turn, will bring forth a major expansion of revenues, coupled with the expenditure restraints to enable us to achieve a highly desirable goal of balancing the budget, not only in 1984 as a long-shot endeavor but to keep a balance in the Federal budget in the years beyond 1984 to maintain economic stability once we've achieved that difficult but very important objective.

Representative BROWN. If you cut Federal spending and therefore reduce the amount of growth of the annual deficit of the Federal Government, you have tended to reduce some of the pressure on the normal increase in savings. If the first part of the tax package is passed—that is, th Capital Cost Recovery Act, 10-5-3, 10-7-4-2, whatever the formation of it is—you have increased the savings of business to the extent that they have been able to hold on to some of their profit, because they've been given a quicker depreciation rate. But you've also induced business, I would think, to go into the private capital markets and borrow money to expand and modernize their businesses; is that right?

Mr. WEIDENBAUM. Yes, sir.

Representative BROWN. If we do that, then, doesn't that also increase the pressure, and perhaps if they over absorb the reduction of the Federal Government's borrowing for private capital markets, aren't you going to need some other savings inducement to get that savings base from which the borrowing comes enlarged?

Mr. WEIDENBAUM. Yes; which is precisely why we've come up with a four-pronged program. First of all, merely trying to cut the spending side of the budget in an age where the budget is dominated by entitlements, which are paced so heavily by economic conditions, is vital to restore the rate of economic growth and therefore reduce the demand for those entitlements, because no matter how much the effort to achieve economy in the base of the budget is successful, unless we can restore the rate of economic growth, the demand for unemployment compensation, food stamps, welfare, and medicaid will continue to grow rapidly.

I think there's no substitute for the major cuts—the 10, 10 and 10—the major cuts in personal tax rates that we've urged. But I think we need to understand why there's an inadequate supply of savings in this country.

Part of it, of course, is the tax system that's tilted against saving in favor of consumption. But there's a more basic reason in my estima-

tion, and that is, the basic incentive to save has been eroded. That's why saving is at such a low level in this country by any historical standard of what the savings rate should be. Because of the inflation, the average citizen sees that under these inflationary situations, it may not pay from his or her point of view to save for that proverbial rainy day.

On the other hand, our program is geared to reducing inflation and inflationary expectations dramatically and drastically. This will do more, I am convinced, to restore the traditionally higher savings rate of this Nation than any other action—certainly than any, frankly, specifically targeted action.

Representative BROWN. My time is up. I'll come back to your questions in a moment.

Representative REUSS. Thank you. Mr. Weidenbaum, I think that you and the administration can expect considerable help from this committee and also from the Democrats with the general task of cutting expenditures and regulatory reform.

When it comes, however, to monetary policy and tax policy, there may be an opportunity for dialog there, particularly as I indicated in my opening statement. I view it as unfortunate for one and the same administration to have not one but two particularist—I won't say fetishes, but economic specialties like the monetarists and the supply-siders.

I think you and I would agree that a great way to fight inflation is to get productivity up. And a great way to get productivity up is to have more capital investment in plant and equipment. If that is so—and because it's so—shouldn't we be rather leery of an economic policy which is made up of 50 percent monetarism, the results of which we see in the Fed's new administration-induced targets of this morning where, though they created a new M–1B—that's the most common measure including currency and checking accounts in banks—at the rate of 8 percent last year. They've now lowered their targets to 3.5 to 6 percent. Similarly the M–2 is lowered from 9.8 percent to 6 to 9 percent.

Considering last year's performance brought us two bouts of over 20-percent interest rates and considering the widespread distress throughout the economy and particularly the chill which those interest rates instilled in capital investment, that kind of a monetary policy does not seem to me calculated to get capital investment.

Then you combine that with the supply-siders who blithely undertake a tax cut which will have the immediate effect of causing a reduction in revenues of $140 billion a year when it's fully effective. That kind of action, many people fear, is likely to be inflationary for reasons that we've been taught for the last 30 years.

Now my question, isn't that a particularly uncongenial combination of specialists? It's all right to have supply-siders attached to monetary moderates. It's all right to have monetary moderates attached to supply-siders. But put them together and you really get an extremist, radical configuration.

I know you don't agree with that, but set my friend's perturbations at rest here.

Mr. WEIDENBAUM. Fine, Mr. Chairman. I welcome the opportunity.

I would update Thomas Jefferson and say at this point, we are all monetarists: we are all supply-siders, and I say that sincerely as an eclectic economist who has learned over the years a great deal from my monetarist friends who have, I think, taught us all the lesson that easy money, excessively rapid rates of growth in the money supply, ultimately generate high interest rates.

On the other hand, the other extreme is destablizing as well, so that the sort of moderate reduction in what has been an excessively high rate of growth in the money supply will contribute ultimately to lower inflation and lower intrest rates. Very frankly, I welcome the fine statement that Paul Volcker is giving at this time to your colleagues of the Banking Committee.

I'm also pleased that he included in the statement such a strong endorsement, as I understand it, of our economic program. It's good to see the independent Federal Reserve System is on the same wavelength that we are.

But I see great consistency with those monetarist concerns, as you describe them, Mr. Chairman, and the important education provided by my supply-side friends who have remined us of a lesson many conservative economists were well aware of, but not all of our more liberal friends, unfortunately. That is, incentives to private work, to private saving, to private investment are a fundamental ingredient to a healthy economy and that demand management—to use a shock word and I hope soon to be discarded phrase—demand management is a very inadequate way of looking at economic policy.

In my own case, as the chairman and members of the committee know, I'm an eclectic economist looking for truth wherever it lies. I'm fond of reminding my Keynesian and supply-side friends of the truth of the teachings of the great neo-classical economist, Alfred Marshall, who taught us quite properly that there are two blades to the economic scissors—supply and demand.

Representative REUSS. Good for Alfred. I think he was right then and continues to be.

Well, I know that in your little aphorism, "We are all monetarists; we are all supply-siders," you didn't mean to suggest that those were the only alternatives available. For example, I consider myself a structuralist. I think that's how we're going to get out of our problems. And over the months to come, I want to return to that wellspring, because from what I know of you, you wouldn't be averse to taking a swig or two of structuralism as you approach what needs to be done in our economy.

Mr. WEIDENBAUM. I would urge an ambitious program of regulatory reform to truly improve the structure and function of the American economy.

Representative REUSS. My time is up. Senator Abdnor.

Senator ABDNOR. Mr. Weidenbaum, maybe I can start from a very simple premise. High interest rates are the greatest single problem in some areas of the country. I'm talking about the extremely small businesses, the mom-and-pop stores, the people on the farm. They have to have big loans at times, and most of these businesses have no hopes of making the kind of return that the interest requires.

Is there anything down the road in the President's economic plan

that gives us hope that these interest rates will level off and drop somewhat? How about 1 year from now? I know you can't say 3 or 4 or 5 years. Do you have some hopes here?

Mr. WEIDENBAUM. Senator, that truly is our intention and our hope and our expectation. As someone who is looking for a house in Washington and has a 7.25 percent mortgage in St. Louis, I am well aware of what's happened to interest rates. I haven't yet had the courage to put in a bid at these high interest rates myself. So that's not a theoretical matter. Bringing down those high interest rates is a need I feel very personally.

I have to speak as an economist. And as an economist, I have to tell you that it's my belief, and the belief of most of my colleagues, that it's the high inflation that has driven up interest rates. And the only fundamental way of bringing and keeping interest rates down to a much lower level than they are now is to deal with the underlying cause, and that's the inflation.

That's why I think we have no alternative but to turn back to the four-pronged approach we have in the President's program—tax cuts to stimulate the economy, spending cuts to bring down the deficit, regulatory reform to deal with the cost inflation, and finally a monetary policy consistent which quite clearly will slow down the growth of money and credit.

But the effect of that will be, frankly, contrary to what a lot of laymen often associate with declining growth in the money supply. The result will be that highly desirable goal of lower inflation and lower interest rates.

This is strong medicine. I know no other effective alternative, Senator.

Senator ABDNOR. Do you think in a year's time we can see some improvement in lowered interest rates as a result of what you're talking about here?

Mr. WEIDENBAUM. Yes, sir. In fact, I know that in the past that when interest rates swing, sometimes they can swing very sharply on both the upside and the downside, as we saw during this past year. One thing we certainly saw this past year is, when the Federal Government tries to directly control—I have in mind those credit controls that were imposed swiftly and then almost as swiftly taken off—that that doesn't help bring down the general level of interest rates. That just destabilizes and confuses everybody.

Senator ABDNOR. This is a different type of recession than we've had throughout history as a whole. Usually when you have high inflation, high interest rates, and high unemployment—I've only been here 8 years, but up until now the answer we always had in the past was, throw in more Federal programs, create more Federal programs to put people to work.

This is a new approach. When I hear people knocking it, it bothers me, because some of those same people are the same ones that helped create the mess that go us into this thing and have spent years putting more fuel on the fire. Now all at once, we hear them talking the other way. Now they sound like we've been troublemaking for the last 10 years when this problem came up.

Even our great economists are getting in their 2-cents worth, now

they're all telling us we have to stop spending. That's one thing they all seem to agree on. I don't know where they've been, some of them, for the last 4 years, but I don't think it's something that happened all at once.

So welcome to the club. But Ihope we can try some new approaches to this problem instead of throwing the same old medicine that we have in the past. All we'd have to do is check the past and see what has been the results.

Thank you.

Mr. WEIDENBAUM. Thank you, Senator.

Representative REUSS. Mr. Richmond.

Representative RICHMOND. Thank you, Mr. Chairman.

Mr. Weidenbaum, I know you are a great academician and a great economist, but——

Mr. WEIDENBAUM. But.

Representative RICHMOND. I am not a great academician and I am not a great economist, but I am a businessman. Now you stated as a result of the policies set forth here our economy's productive capacity is expected to grow significantly. Now, why by taking money, by reducing the taxes of people with earnings above $25,000, by not substantially increasing the taxes of people with earnings below $25,000, by making some rather miniscule, unimportant and rather thoughtless cuts to the budget, how do you suddenly plan to increase the Nation's productivity?

I will tell you how to increase the Nation's productivity, if you want, because that is my business. But why do you say this Reagan program is going to suddenly increase our productivity and all these other wonderful things to stimulate growth, productivity, and employment. What is Mr. Reagan doing with this so-called Stockman budget that is going to have all of these wonderful effects. By cutting mass transportation you sure as heck don't stimulate the economy. All you do is increase the oil bill.

By cutting highway maintenance you certainly don't increase or improve the economy. All you are doing is making it more difficult for American industry to handle its transportation needs.

By cutting programs for the poor people you don't fix the economy because what you do is remove that bit of buying power that is so necessary to increasing the productivity of the economy.

If you will please tell me how you plan to increase productivity, I would really like to know about it.

Mr. WEIDENBAUM. I appreciate the opportunity. First of all, as someone who actively participated in developing those budget cuts, I welcome the opportunity to explain that this was a careful program-by-program review.

Representative RICHMOND. Except you didn't hit the two places where there really are major savings available that would really stimulate the economy and really get this country going again and really get the average American person to feel that his Government——

Mr. WEIDENBAUM. Would you break the suspense and share the knowledge with me? Which are those two areas? We have 5 minutes, as far as I am concerned.

Representative RICHMOND. I have 5 minutes right now. You said you feel the President's budget now would stimulate the economy. How?

Mr. WEIDENBAUM. First of all, if you look at those budget cuts you will see that the social safety net of vital programs to help the truly needy not only is maintained it is expanded.

Representative RICHMOND. I disagree.

Mr. WEIDENBAUM. Look at the numbers. The social safety net of programs which have been carefully defined rise from $239 billion this year to $264 next year to over $360 billion by 1986. From 37 percent of the budget to 40 percent of the budget.

Representative RICHMOND. Mr. Weidenbaum, by cutting training programs you are not helping the poor people. You are not helping generations of welfare recipients. The only way to get people productive is to train them, right?

Mr. WEIDENBAUM. Very frankly, the sad ineffective programs of the past visibly haven't worked.

Representative RICHMOND. So let's think of some new training programs.

Mr. WEIDENBAUM. The new program is called revitalizing the private sector, giving the private sector the incentives. That is why tax reductions are aimed at the private sector, because productive jobs are in the private sector, Mr. Richmond, not in the public sector.

Representative RICHMOND. I agree with you, Mr. Weidenbaum. I agree perhaps the CETA program hasn't been everything we expected it to be.

Mr. WEIDENBAUM. I agree with that.

Representative RICHMOND. But how about a tax credit to corporations to actually train employees a year before they know that their own employees are going to retire? Train unemployable people, give them a year's training, give that corporation a full tax credit for that year, and that person knows that he or she is going to walk into a job a year from now.

Mr. WEIDENBAUM. We have tax credits in the tax code for such purposes. But I strongly urge that, if we have learned anything, it is that pinpointing specialized programs, whether they are on the expenditure side or the revenue side of the budget, doesn't work as well as letting those economic decisions—as a businessman I think you appreciate that—letting those economic decisions be made not by a few offices here in Washington, but by thousands of companies, millions of savers, millions of employees in the private sector. That is how you get a more productive healthier economy.

Believe me, looking at, studying, having been part of many of those spending programs over a period of 30 years I don't feel that they should be defended. If anything, I think the presumption should be, and I think that is what the public wants, this is the time for an innovation in public policy. The tired expenditure programs of the past haven't prevented the economic distress.

If you look at our central cities—I come from St. Louis where we have——

Representative RICHMOND. My time is up. Let's discuss new and better programs in the next session. Thank you.

Mr. WEIDENBAUM. Fine. I look forward to that.

Representative REUSS. Senator Hawkins.

Senator HAWKINS. I am concerned about education among other things, as I know you are. One of the reasons I feel the people can't work or cannot be employed in this country today is that they lack the basic skills of reading and writing and sentence structure. We may have raised a generation of communicators that speak well and can use a tape recorder to record, but who cannot reduce it to paper. I find this a big problem in this city. I am very concerned as a member of Labor and Human Resources, where eduction comes also, to do something about the basic quality of education that we are receiving, that we are giving and that our children are receiving in whatever area of the United States.

Now the President has proposed combining all or part of those 47 Federal elementary and secondary school programs into block grants for the State and local school districts. He also wants to reduce spending on those programs by $7.3 billion over the next 5 years. I examined how much has been spent on education per child over the last 5 years and it has increased steadily per child. Yet I know the quality of the education has gone down.

For those sob sisters that are wringing their hands over less money for less quality of education, I think they are proven wrong just by the strict arithmetic.

Do you agree that consolidating and returning the control of the underlying programs to States and localities will enhance the efficiency of the program as well as enhance the economy?

Mr. WEIDENBAUM. Very much so, Senator. In fact, in designing the program we met with many mayors, with many Governors, with representatives of State and local governments, and they urged us to reduce the paperwork, regulations, and all of the overhead that the Federal Government is now imposing on school districts, counties, cities, and State governments. And that is the basic idea of those grant consolidations.

I believe you will find that more effective dollars will be going into education. Sure, the amount going into paperwork reporting to Washington will go down. The dollars spent on that overhead will go down. That is why the overall category in spending goes down. But I think under our block grant approach you will find more effective dollars going to the school districts so that they can do their job of education and spend less of the time being second guessed by grant proposal reviewers here in Washington.

Senator HAWKINS. Spending cuts are one of the essential elements of President Reagan's plan for economic recovery, and there have been deep cuts in some programs, but given the importance of spending cuts to the success of the President's program, could you suggest some areas in the budget where further savings can be achieved? My phone is ringing off the hook with people in these agencies that are having cuts saying, why don't you look at that department? You know, I used to work over there, and you should see what they do. You think we are bad. You ought to look over there.

So we are compiling quite a long list of helpful hints for budget cutters. And I just wondered what further programs you are considering for cuts. I know you are going to have to make further cuts.

Mr. WEIDENBAUM. Our effort is continuing. As a member of the budget review group established by the President I can say we met as recently as yesterday afternoon to come up with still additional budget cuts, and this is an ongoing effort. Now, of course, as the President constantly reminds us, we are really talking about slowing down the rapid growth of Government spending. It is realistic to understand in a growing society with a growing population that dollars spent by the Federal Government each year frankly are going to continue to rise. But by looking for soft spots, low priority programs and by reducing those often wasteful expenditures we can substantially reduce the growth in Government spending.

And if you have specific ideas, Senator, or your constituents have recommended to you, if you would pass them on we welcome them very much.

Senator HAWKINS. Thank you. My 5 minutes have expired, Mr. Chairman.

Representative REUSS. Are you in the midst of a stream of consciousness? Why don't you go on?

Senator HAWKINS. I am conscious all the time.

Representative REUSS. Why don't you go on?

Senator HAWKINS. Yesterday, we had Ambassador Bill Brock before our committee, and it was interesting to hear some of the ideas that he has to help us out of the tremendous problems we have when it comes to American exports. I can find very few incentives, but a lot of disincentives to American exports.

We compared and talked a lot about the great lengths to which Europeans and Japanese go to encourage their exports and to discourage imports. Even Mexico was discussed a little bit yesterday while we were talking about discouraging imports.

How should United States change its trade negotiation stance to insure that American companies can compete fairly in the international market, in your plan?

Mr. WEIDENBAUM. Senator, you scratch an economist and you find, at least in theory, a free trader. But I must go on to point out that the reality is that free trade must be a two-way street. And far too often the barriers to our exports are very real. And I think the really right answer isn't to erect barriers in this Nation to imports but to use that leverage of our concern about world trade to get other nations to reduce their often serious barriers to our exports.

I think that the fundamental way of improving the competitiveness of American industry, and that badly needs to be done, the fundamental way isn't to design a protectionist policy, very frankly, but to deal with the underlying problems of stagnant productivity, low capital formation, stagnant research, and development.

There is not an easy way to reverse those trends. I think our program, our four-pronged program will go a long way, especially those tax cuts. The liberalization of the depreciation allowances would provide the incentive to expand our capital base, which is essential for competitiveness.

I note that the liberalization of depreciation allowance is extended to research and development, and I think that is vital. However, in my studies of Government regulation, I have come across

so many instances where a Government regulation, often unwittingly, makes it difficult for our companies to compete fairly and effectively with their counterparts overseas.

I think that is another compelling reason to support an ambitious program of regulatory reform, and, as you know, the President has appointed a high level task force, chaired by the Vice President—I happen to be an active member of that task force—on regulatory relief.

I think that can do more to aid the competitiveness of American industry to reduce obstacles to foreign trade than any other single action that I can think of.

Senator HAWKINS. Are you talking about changing the rules of the mix of borrowed capital, Americans versus Japanese? We are allowed to borrow so small, a minimal amount compared to the amount the Japanese can borrow.

Mr. WEIDENBAUM. Very frankly, I was thinking of regulations in an industrial sense. In other words, EPA, OSHA, FDA, the whole array of costly, burdensome social regulation. I hope that when the Congress later this year holds hearings on the Clean Air Act that they will use that as an opportunity to carefully explore the costs as well as the benefits. I think that there is great danger, unless the regulatory system is fundamentally reformed, that we are literally tying one hand behind the back of American industry and making it extremely difficult for them to compete in world markets as well as to meet the needs of American consumers.

So there is a great deal that Congress, I think, needs to do, not in terms of new foreign trade oriented programs, but of undoing a great deal of the harm, albeit unintentional, that is done to American industry via that whole array of government regulation, which I have reported to this committee on earlier occasions.

Representative REUSS. Mr. Weidenbaum, I heard recently that in Florida some CETA workers have evidently been involved in the drug traffic. Wouldn't it be logical to assume that when CETA is abolished in a few weeks, that even more CETA workers or former CETA workers, since they now are on the unemployment rolls, would be involved in the drug trade?

Mr. WEIDENBAUM. You have really tested the outer limits of my professional abilities, Mr. Chairman.

Senator HAWKINS. You are saying former CETA workers.

Representative REUSS. They would then be former CETA workers. You wouldn't have any opinion either way?

Mr. WEIDENBAUM. I would have a general observation. That is, there have been studies of the striking correlation between a healthy economy and literally physical and psychological health.

As an economist, obviously, I would urge speedy congressional action on our program to restore a healthy economy. It's been the observation of many who have studied this very seriously that developing an environment in which people are working productively, earning their own way in life, is conducive to a much healthier physical and mental state.

Representative REUSS. Absolutely. And I say less of a propensity to deal in drugs. But if the choice is between being a CETA worker

and being without a job, I would not think that being without a job would produce a better attitude and less likelihood of getting involved in the drug trade.

Mr. WEIDENBAUM. I'm prepared, Mr. Chairman, to state that the alternatives to Government-subsidized employment aren't always negative. In fact, my presumption would be, in many cases, people would take private productive employment.

I look at reports issued periodically by each of the local employment offices. St. Louis is just one example among many. There are thousands and thousands of unfilled jobs in this Nation.

Representative BROWN. Would you yield, Mr. Chairman?

Representative REUSS. I cannot yield now. I'm delighted to give Senator Hawkins some extra time, but I would want my 5 minutes.

Mr. WEIDENBAUM. There are thousands and thousands of unfilled jobs in this Nation. In my locale, I added up all of the local employment service reports on unfilled jobs. I do wonder about providing incentives to seek out private employment in contrast to the subsidized Government jobs.

Representative REUSS. There's no difference between us at all, that we prefer jobs to nonjobs, and we prefer private jobs to public jobs. I think there's probably no difference between us when we say that he or she who does not have a job, public or private, is probably more likely to get into unhappy human activities, including drugs, than someone who does have a job.

Mr. WEIDENBAUM. Yes.

Representative REUSS. Good, One quick question. Did you happen to read the article by Emma Rothschild in the New York Review of Books, I think, of February 7, a recent article, at any rate.

Mr. WEIDENBAUM. No, Mr. Chairman.

Representative REUSS. She makes the point, and I hope I do her justice, "Since manufacturing is only a quarter of our economic activity," and since the whole plant and equipment push is dedicated to manufacturing, the vast service industries, which are more than half of economic activity, don't have anybody tending the productivity store. Therefore, aren't we putting our chips on the wrong horse? I think that's her point.

Mr. WEIDENBAUM. If that's her point, I think it's in error. Some of the largest and most rapid increases in productivity in recent years have been in the nonmanufacturing center of the society. I'm well acquainted with them, because they have occurred in air transportation, as a result of the introduction of jet airplanes. But this has not shown up as plant and equipment expenditures in manufacturing, but plant and equipment expenditures in air transportation.

Representative REUSS. How about, however, all of our so-called service, nonproduct industries? Finance, insurance, teaching?

Mr. WEIDENBAUM. We are seeing a burst of productivity resulting from the use of computers, word processing equipment, almost a revolution in offices with, I think, tremendous future increases in productivity in the offing. I think she's mistaken, frankly.

Representative REUSS. I'm glad to have your views, and I appreciate them.

I have another engagement to which I must go. So before I turn the

presiding task over to Mr. Richmond, let me thank you once again. You've acquitted yourself nobly, and we look forward to many happy days with you.

Mr. WEIDENBAUM. Thank you for those generous remarks, Mr. Chairman.

Representative RICHMOND [presiding]. Thank you, Mr. Chairman. The chairman told me I'm next.

Representative BROWN. Mr. Chairman, could I ask a question about that? I thought we were going to go in order.

Representative REUSS. You're right. I think Bud Brown should be recognized.

Representative RICHMOND. I stand corrected, Congressman Brown.

Representative BROWN. Mr. Weidenbaum, let me just tell you one CETA from my district. It doesn't have anything to do with narcotics, but it does have to do with beer and bowling. That is where I ran into the guy, at a bowling alley. A very attractive young guy about 26 years old, had been trained for a full year under CETA to be a fireman, along with 11 other people who had been trained by the municipality for the same job, to be a city municipal fireman. He spent a full year getting that training. When they gave the exam, they could fill four posts. Eight of those fellows had had a full year out of their life wasted in CETA training. The city, of course, qualified four people, and what did they care about what he did for a year. CETA's not that good of a program, whether people are in narcotics or in there training for a nonjob. I hope you will move with some dispatch to terminate a program which doesn't do the job it's intended to do. There are a lot of those kinds of programs in Government.

Let's talk about whether or not the 10-percent across-the-board tax cut will do what it's intended to do. In my first line of questioning, I was trying to develop the belief or the theory that we must in some way enhance the pool of savings from which private borrowing is done to strengthen our competitive position in the economy, so as not to increase interest rates and inflation. When the private sector is induced to borrow heavily to modernize, we must get the Government out of competitive borrowing from that limited pool of savings, so that there is more available for the private sector.

It seems to me that this is not a zero sum game, because if everybody is borrowing, and there's a limited amount of savings, then the interest rate is forced up, and the inflation rates goes up, if the money supply is stable. Certainly, we want to keep the money as stable as possible to accommodate normal growth but to keep it stable, so that we don't have inflation because we're bastardizing the value of the money.

Now there must be a better economic word than that.

In any event, what I'm concerned about is whether or not the marginal tax cut at 10 percent will supply a sufficient amount of additional savings when we induce the private sector through other tax cuts for the modernization of their plant and equipment. My concern is that it will not provide that additional savings capacity in a sufficient amount because of the very high interest and inflation rates that we have now.

I would suggest to you that there was a time in this country, as indicated by the statistics of your predecessors, that I think are gen-

erally accepted; in 1933 when the savings rate in this country was actually negative, and the rate has fallen to very low levels recently. With high inflation rates, it has fallen to 3 percent over a few months' period, which is an exceptionally low rate. The rate has fallen at other times when there's been high inflation. After the Second World War, after the Korean war, even in the inflationary period that preceded the recession of 1974 and 1975, savings rates went down.

Now my concern is that the 10-percent, 3-year tax cut might have been appropriate when it was first introduced—and still is appropriate as far as I'm concerned—to induce people to work harder and to induce some more savings. The real question is, are you giving any consideration, or should any consideration be given to tax cuts that focus the American taxpayer into putting money into savings, as such, so as to increase that savings pool, as long as we're going to induce investment through 10–5–3.

Mr. WEIDENBAUM. Mr. Brown, I strongly endorse the administration's program. I had a part, obviously, in putting it together, so that won't surprise you. But the reason I'm so enthusiastic about is, it's designed to do just that, to increase the pool of savings, but it does it in many ways. First of all, bringing down the deficit, means the Government will take less of that pool of savings, and more is available for the private sector.

Representative BROWN. That really doesn't increase the pool, it merely reduces the competition.

Mr. WEIDENBAUM. And relieves the pressure on interest rates, as well. The most fundamental factor to increase the now depressed savings rate in this country is to bring down the inflation and the inflationary expectations. I mean, I think, our four-pronged program is designed to do just that, and you have to look not at the impact of each of the four items in isolation, as the tax cuts, the spending cuts, the regulatory relief and the monetary policy. Don't look at them in isolation, but as a package. If you look at them as a package, my evaluation, is they will result in a very substantial increase in the rate at which consumers and savings pool of this nation.

Now I expect those tax cuts, the 10–10–10, the first income tax cuts, to have a very strong effect on savings. Essentially, it's the middle class that does the saving in this country, and those tax cuts are roughly proportionally to the existing tax burden. I say, roughly, because the upper income classes get a proportionally smaller tax cut than more moderate income groups.

Representative BROWN. Because of a maximum tax.

Mr. WEIDENBAUM. That's right.

Representative BROWN. If the 10-percent tax cut does not induce the additional savings you would like to see induced, in other words, if the interest rate goes up, even with the marginal tax cuts, are you prepared to call for some efforts to focus those savings by a tax cut on the income earned from savings?

Mr. WEIDENBAUM. Very frankly, Mr. Brown, I am not enamored of specialized legislation like that, that often in the past seems to have not been terribly effective. I am much more enthusiastic about the prospects of comprehensive general reductions in taxes which also serve the vital purpose of reducing the role of the tax collector in people's econ-

omic decisions. There's less concern, "Is this tax deductible." And a project in investment and expenditure is made on its own economic business merits. I think that's vitally important.

Representative BROWN. My time is up. I would like to submit a question in writing to you, but the question is going to focus on whether or not a tax interest income isn't a double tax.

Mr. WEIDENBAUM. I'll be pleased to answer your question, Mr. Brown.

Representative RICHMOND. That's one of the few issues on the floor of Congress that I agree with Mr. Brown on.

Mr. Weidenbaum, let's talk about productivity again.

How do you foresee improving the Nation's productivity through the Reagan budget and tax package?

Mr. WEIDENBAUM. Directly by increasing the volume of investment in new factories, new production equipment, in new research and development. Those are the key sources.

Representative RICHMOND. Where are you going to get the new investment of Reagan's tax package?

Mr. WEIDENBAUM. First of all——

Representative RICHMOND. What has been created by Reagan's program that will force people to rush out and renovate their factories?

Mr. WEIDENBAUM. A powerful set of tax incentives.

Representative RICHMOND. What tax incentives?

Mr. WEIDENBAUM. A major liberalization of depreciation allowances.

Representative RICHMOND. We know it's been in Congress for years now, with or without President Reagan, we're going to pass a 10–5–3. It's long past due.

Mr. WEIDENBAUM. I welcome your support.

Representative RICHMOND. I think that's totally bipartisan. There's not a single Member of Congress who would disagree that it's about time we renovate our depreciation allowances.

Mr. WEIDENBAUM. That's good news.

Representative RICHMOND. But Mr. Weidenbaum, that alone isn't enough.

Mr. WEIDENBAUM. That is a major effort. A second major effort.

Representative RICHMOND. You need demand.

Mr. WEIDENBAUM. Precisely. This is why we have the 10–10–10 personal tax cuts.

Representative RICHMOND. 10–10–10 personal tax cuts on upper income people is not going to create a sizable enough demand for consumer goods to warrant people to go ahead and modernize their factories. Two-thirds of the tax goes to people, who we consider upper income. The poor people don't get any sort of benefit whatsoever. I think someone with an income of $15,000 a year saves $3 a week, at best.

Mr. WEIDENBAUM. Very frankly, it's not an effort to redistribute income. It's an effort to reduce the tax burden proportional to the existent tax burden. By why? To increase the economy. The 12–13 million new jobs that we estimate that will come from the Reagan program will do more for the poor people than a host of shopworn, tired programs.

Representative RICHMOND. Where will you get the 12 million new jobs? I'd love to know.

Mr. WEIDENBAUM. In the private sector.

Representative RICHMOND. How?

Mr. WEIDENBAUM. By reducing the tax burden, by reducing the regulatory burden.

Representative RICHMOND. These are lovely words.

Mr. WEIDENBAUM. That's how the economy works.

Representative RICHMOND. The only way to get increased employment is to get increased demand.

Mr. WEIDENBAUM. No, sir. That is the old——

Representative RICHMOND. Don't say no, sir, for heaven sakes. I run a factory. Why do you think I increase my production in a factory? Because we get more orders from manufacturers. I happen to manufacture consumer goods.

Mr. WEIDENBAUM. We have seen, Mr. Richmond, pumping up of demand by the Government, without increasing the supply, only leads to more inflation.

Representative RICHMOND. I'm not suggesting pumping up demand by the Government. First of all, I'm suggesting redistributing President Reagan's tax cut.

Mr. WEIDENBAUM. That won't get you more savings. It'll get you less savings.

Representative RICHMOND. Mr. Lester Thurow was in here the other day to tell us whether we increase or decrease, no matter what we did, the outlook for American savings is about the same as it's been.

Mr. WEIDENBAUM. That's his view.

Representative RICHMOND. I'm inclined to agree with him. I'm inclined to believe that if we really want savings in the United States, if we want to create a fund for which major corporations can retool—because secondary industry is not in bad shape in the United States—many corporations, such as my own, are absolutely about as modern as we can be; our only problem is getting orders from primary industry.

Now if we want to really retool major industry, if we want to retool the terrible, terrible condition of our city structures throughout the United States, we've got to have a governmental agency, such as RFC, with tax-exempt bonds.

Mr. WEIDENBAUM. Have you looked if the RFC——

Representative RICHMOND. Then the poor people will save.

Mr. WEIDENBAUM. The RFC was abolished by the Congress because of a host of scandals.

Representative RICHMOND. Do you need scandals?

Mr. WEIDENBAUM. You had a small group arbitrarily giving out goodies to their friends.

Representative RICHMOND. Mr. Weidenbaum, I don't suggest that the next RFC has to arbitrarily give out goodies to its friends. I suggest that the next RFC could very, very carefully worry about the continuation of the industrial structure of the United States. We have no new steel mills. We have very few new chemical plants. The infrastructures of all of our cities in the United States are about to collapse. We've got serious, serious troubles, and only the Federal Government can help.

Mr. WEIDENBAUM. Your remedy, really, is the hair of the dog that bit you. It's Government policy that's been misguided. Government policies that have gotten us into this economic mess. And truly what we really need is to reduce the Government obstacles, reduce the Government barriers, so we can have a healthy private sector.

Frankly, I couldn't disagree with you more.

Representative RICHMOND. This Government mess is only of recent making. Inside of a few years ago, well after the RFC had gone out of business, this country wouldn't have been considered to be in a Government mess; right? The answer is "Yes." So lately our economy has slipped. Lately, our international competition has become absolutely ferocious, and later it's occurred to all Americans.

Mr. WEIDENBAUM. We agree on the diagnosis. It is on the treatment that obviously we disagree.

Representative RICHMOND. Just tell me—well, my time is up. Senator Abdnor.

Senator ABDNOR. Well, this is an interesting discussion. I guess I grew up in a different type of an environment. My parents came to America from another country. They never spent a day in school and they took quite a lot of abuse getting started.

You know, my father told me, at the end of his life, at 92, this was the greatest country in the world, because you could come to America, do what you want to do and be what you want to be. And I think that's the thing that's made America great. Not all these great programs that Congress has dreamt up.

People like an opportunity, and I think what the President's program is trying to once again do, is to give people an opportunity to do something for themselves.

Mr. WEIDENBAUM. Yes, sir.

Senator ABDNOR. Frankly, I've wondered for a long time why this great Nation, that has led all other nations in productivity, has suddenly dropped back. Something is wrong with the programs we've had in the past. Why is it that a country like Japan which didn't have any natural resources other than their people when they started out; into steel, make it into automobiles, haul it all the way back and still compete with us? There's got to be something wrong. Hopefully some of the answers might be found in regulatory reform. Certainly I've heard it talked about for years. We've had legislation in Congress that would drastically cut regulation, but we have never been able to get it passed. Now we're talking seriously. Talk is one thing, but doing something about it is something else. Am I wrong? Is your program designed to try and increase productivity and make for some real opportunity and stimulate the economy enough to create jobs?

Mr. WEIDENBAUM. Yes, sir. [Laughter.]

Senator ABDNOR. I thought that's what we were talking about, and I think we've harped long enough on some of these other programs. Since I've been here there has been CETA's and everything else. We've created unemployment payments for 13 weeks not only for the areas that are really desirous and needed, but for everyone else. We've taken social security and made it possible for everyone to get $122, regardless if they qualify. If that's the kind of stimulant we need, I read it wrong.

Mr. WEIDENBAUM. I would like to be strongly associated with your views. [Laughter.]

Some of those "cuts" would eliminate the kind of subsidies that my children got in terms of school lunches when they went to school. Now, we're forming the program so that the truly needy will continue to get help from the Federal Government in terms of school lunches, but middle-class people like me will have, in the future, to pay for their pay for their own kids' school lunch.

Senator ABDNOR. I think they ought to, yes.

Mr. WEIDENBAUM. And I think that's right. We don't need to be subsidized by the taxpayer.

Representative RICHMOND. Thank you, Senator.

Senator HAWKINS. I'd like the record to reflect that I concur 100 percent with Senator Abdnor.

Mr. WEIDENBAUM. I'd like to get on with the positive aspects instead of crying and saying it's not going to work. You know, nothing has worked properly for about the past 30 years, and I just do not understand why we have to waste your time this morning. I'd like you to be doing something really positive in getting this program moving instead of trying to allay the fears of those that think what if. You've got to look at the other side. What has happened? What is left to do? You know, let's try it. People might like it. I cannot believe that this is an exercise in filling up papers, making records, and selling newspapers every day, wringing one's hands. We've got to get on with it. So I'm hopeful that we hurriedly can get on with it. On the subject of truth in packaging. I think the people of America are smart. They are right now saying that if you guys don't get in there and support the President's program we're going to get those other guys next time. We're going to get the rest of you turkeys later, if you don't support this President. I said that this morning.

The people are watching closely and reading all of this rhetoric, but when I was commissioner of the Public Service Commission to regulate utilities, I was forceful enough to get a fuel adjustment bill separated from the utility bill so the customer understood how much, in dollars, went to fuel and how much was going to the rest of the total bill. I thought the customer had a right to know that fuel was a tremendously escalating thing. We flushed it out separately. I was visionary enough and radical enough to think that we also should do that for the environmental part of your utility bill. Much of my bill is going for cleaner air because I think the public wants clean air. I know they do, but I think they need to know at what price and maybe let them have some input.

If we're just talking about cleaner and purer air and more beautiful streams and mountains and everything, tell the people what it's going to cost. It seems to me that we haven't had a truth in packaging from Congress. We've flashed up what this is going to cost you. What are the benefits and what are the negatives? And I like some of the things I'm hearing from Congress. On the other hand, I'm delighted in some of your ideas, and I wonder how do you feel this truth in packaging could be sold?

Mr. WEIDENBAUM. Senator, that's a very intriguing idea because I've been teaching a notion that the cost of complying with regulation

is really a hidden tax. It's a hidden sales tax on the consumer. If the consumer knew how much he or she were paying, they'd be howling. My own view, having studied Government regulations in great detail, is that in many cases, certainly for clean air or for clean water, the objectives are truly worthwhile, but very frankly the way the agency is carrying out the objectives, often due to acts of Congress, is very inefficient, very uneconomical, very wasteful. They don't have any great pressure to worry about it because it doesn't show up in their budget, it shows up in the budgets of the private sector.

Therefore, I'm just delighted that President Reagan issued this new Executive order which, as it gets going, will force every regulatory agency that comes under the order to make sure that all of its new regulations are cost effective. But I assure Members of Congress that we also will be coming in with recommendations for statutory changes because a lot of those excessively costly regulations result, very frankly, from laws passed by the Congress.

I think it's high time we took a new look at some of those old statutes, and we'll be glad to help you.

Senator HAWKINS. Thank you.

Representative RICHMOND. Thank you, Senator. I certainly agree that all Federal regulations should be reviewed on a timely basis, and any regulations that are extraneous should be reduced. Any businessman would say the same thing.

Mr. WEIDENBAUM. Thank you, sir.

Representative RICHMOND. On the other hand, we must keep in mind that many of those regulations were promulgated because of the situation which existed at that time having to do with poor labor conditions or poor factory conditions or unsafe conditions, or what have you, which perhaps are in a lot better shape now. Let's get back to your prepared statement and discuss the President's budget.

We both agree, of course, that the biggest problem in the United States today is probably the fact that we pay a thousand percent more for energy today than we did 10 years ago. Would you say that's probably at the heart of much of our troubles.

Mr. WEIDENBAUM. It's one of the key problems.

Representative RICHMOND. I guess it would have to be the No. 1 key problem because if we were still using cheap energy I think this country would still be flourishing.

Mr. WIEDENBAUM. Very frankly, if the Congress over the years hadn't passed a lot of counterproductive laws that encouraged the wasteful use of energy, that encouraged building offices, factories, homes, that used a tremendous amount of energy because energy prices were kept artificially low, I don't think we'd be suffering so much from the world increase in energy prices. Look at Western Europe, look at Japan. They import far more energy as a percent than we do, but they haven't suffered nearly as much as we have from the energy problem. Why? Because government policies didn't interfere with energy the way ours have over the years.

Representative RICHMOND. Why? Because the cities are constructed vertically rather than horizontally and the why is that most all major cities in Europe and the industrialized world have mass transportation.

Mr. WEIDENBAUM. They have smaller cars. Gasoline and energy prices generally weren't kept artificially low.

Representative RICHMOND. And mass transportation. Now, don't you think it was——

Mr. WEIDENBAUM. Right here in Washington.

Representative RICHMOND. Mr. Weidenbaum, we know for a fact that the national rate of inflation in New York City is continuously below the national average, and that the natural rate of inflation of Los Angeles is double the national average. Why? The why is really easy. In New York City very few people have automobiles; in Los Angeles every single person needs an automobile because there's no mass transportation. As bad as our mass transportation system is in New York City, it's still the oldest system in the world, the longest system in the world, and even to this day, the most efficient system in the world. Now, why would we consider——

Mr. WEIDENBAUM. I have difficulty with those numbers. If you look at the cost of living in New York City, it's very high.

Representative RICHMOND. The rise of inflation in New York City is always considerably below the national average. That you'll have to agree.

Mr. WEIDENBAUM. It's an artificially high base, of course.

Representative RICHMOND. Mr. Weidenbaum, I'm trying to say it's a high base, of course, but we give people a heck of a lot more than they get in Haverhill, Mass.

Mr. WEIDENBAUM. I'm not sure what you mean by "give."

Representative RICHMOND. People have an opportunity in New York City to experience a type of quality of life that they are willing to live and pay for.

Mr. WEIDENBAUM. As a native New Yorker who voluntarily emigrated and hasn't returned, I think I understand what you're saying.

Representative RICHMOND. Let's get back to mass transportation.

Do you think of all the President's cuts in this proposed budget—it's only proposed—and hopefully Congress won't be disposed to pass this budget.

Now, in the proposed budget do you think cuts in mass transportation right now, where we must save energy, where we must conserve or gasoline prices will be $2 this year and God knows what price next year, do you think cuts in mass transportation are a valid, sound, and intelligent cut right now?

Mr. WEIDENBAUM. Yes.

Representative RICHMOND. Would you say they would increase employment and growth and productivity?

Mr. WEIDENBAUM. Look at the amount of energy used in building and running mass transit. Look at what you get when you finish building it. Look at the small usage of mass transit and you will not find it cost effective.

Representative RICHMOND. Mr. Weidenbaum, wherever you have mass transportation people use it. That's been proven.

Mr. WEIDENBAUM. Look at the return on the Federal Government's vast investment in mass transportation. From the viewpoint of this economy they've not been a good investment.

Representative RICHMOND. From the viewpoint of the national economy, and you really can't divide the Federal and State and the urban economies quite that effectively, from the viewpoint of the national

economy this Nation must move to mass transportation. The Nation also must move to do something about its 40 million poor people. We're the only industralized nation in the world where 20 percent of our people live at or below the poverty level.

Mr. WEIDENBAUM. But what is the poverty level in the United States. It's luxury and splendor in most other places.

Representative RICHMOND. I'd like to see you bring up a family with two children at $160 a week, Mr. Weidenbaum. That's really a great deal of money this day and age with inflation what it is; isn't it?

Mr. WEIDENBAUM. Mr. Chairman, you speak to a guy who grew up in a very poor family in Brooklyn.

Representative RICHMOND. We all grew up in poor families.

Mr. WEIDENBAUM. I can remember those days, and I'm also aware of what took up out of poverty. It wasn't government. It was the growth of jobs in the private sector.

Representative RICHMOND. Helped along by President Roosevelt who was the man who came in with lots of programs to start stimulating industry.

Mr. WEIDENBAUM. If anything, those misguided efforts delayed recovery.

Representative RICHMOND. My time is up.

Senator ABDNOR. Let's talk about the tax cut for a second.

Mr. WEIDENBAUM. I'd be delighted to.

Senator ABDNOR. The idea is that it's good for money because it doesn't stimulate the economy. What is the largest revenue coming from taxes? It's mostly from the middle class, isn't that right?

Mr. WEIDENBAUM. That's right. It depends exactly where you draw the line. Certainly the top brackets represent a very small portion of the dollars coming from Treasury. They represent a very small portion of the national income.

Senator ABDNOR. We've already put in a negative income tax, as I recall, when we start paying people for not paying income tax. I guess that's what we call that operation. I kind of thought the idea of a tax cut was to stimulate the economy so we could be employing more. The overall end of things is to cut people's taxes, but the purpose of it is to try to get our country moving again. We have to generate some real growth. If someone asked you, isn't this a rich man's tax bill, what do you say?

Mr. WEIDENBAUM. No. That's the plain answer. The upper income classes get—I'm looking at the table right here in front of me—the higher the income, the less percentage tax cut you get. The lower your income, the bigger percentage tax cut you get. It's anything but a rich man's bill and I'd be delighted to make this table available for the committee. But, most important, I think you have to understand where this tax bill and the entire Reagan economic program leads us. It leads us to a major expansion of employment, of jobs, and I can't think of a more effective antipoverty program.

Senator ABDNOR. Thank you.

Representative RICHMOND. Thank you. Senator Hawkins.

Senator HAWKINS. One of my constituents called me last week, after just reading some of the testimony before this committee, and said he'd like to complain or register the novel thought that the 40-

80-476 O - 81 - 9

hour workweek is really crippling a lot of Floridians in that we're service oriented. We're oriented toward tourism and we're only allowed to work 40 hours a week at that restaurant.

The lack in tourism this year has hurt us somewhat, so what we do, is to work 40 hours on this side of the street, then we have to go across the street and maybe have a different uniform, a different color jacket, et cetera, to work the other 20 hours a week that's necessary in today's economy. I was thrilled to death that they wanted to work, period, and you know, he also wanted to pay that long-distance call to tell me that.

An incentive in his way to keeping his costs down and not to have two or three colored jackets to do his work would be just to work at that one restaurant the number of hours that he wants without having any time and a half. This would be helpful to his employer, who could then make a profit, and then have a profit-sharing plan at the end of the year at the restaurant where he worked.

I'd like to hear your comments on that.

Mr. WEIDENBAUM. The administration has not developed any position on a proposal to change those labor laws. As an economist, I've always been concerned that share-the-work approaches to unemployment are not really the productive way out. That, I take it, is the underlying motivation for that kind of restriction, that what we really need to do is to increase the total volume of productive jobs in the economy, which is precisely where we're trying to head the economy. That would reduce the need for restrictions like that.

I must say I find it very heartening that there are so many people that have powerful incentives. If we'd only give them the opportunity. I therefore think that it's very important to set priorities now, because there are a lot of good things that need to be done. There are a lot of bad laws that need to be changed, I think. But time is of the essence and I hope the Congress focuses on the urgency of the program that President Reagan has submitted for your consideration with the full knowledge that in future years we can turn our agenda, our thoughts, to other useful changes in the Government policy.

But I urge the Congress to act speedily on the current program because, as I say, the creation of millions of new productive jobs in the private sector will do more good, especially for our low-income people, than any alternative that comes to mind.

Senator HAWKINS. Thank you.

Representative RICHMOND. I know you have to leave at 11:45, but let me mention one subject on which I think we can agree.

Mr. WEIDENBAUM. Fine.

Representative RICHMOND. We know for a fact that unemployment in New York City is roughly equaled by open job opportunities. We have roughly 300,000 people who are unemployed, and roughly 300,000 open jobs. But, you can't find a bookkeeper, you can't find an accountant, you can't find a computer operator. We know that anything that requires any kind of skill at all is very difficult to find in a thriving service economy like we have in New York City at the moment. All right, we agree on that.

Mr. WEIDENBAUM. Oh, yes, I'm not sure if that's the total list.

Representative RICHMOND. No, no. Let's say that the same situation

more than likely exists in every other city in the United States. Certainly it exists in Dallas and Houston where they, too, have a terrible shortage of employees.

Mr. WEIDENBAUM. In St. Louis there are a lot of unfilled vacancies for clerks, accountants, relatively low-skilled opportunities.

Representative RICHMOND. Now, we both agree that the CETA programs have really not been as successful as the Congress would have hoped it to be. We agree that too much of the CETA program money has gone to maintain the municipal establishments and augment salaries of municipal employees, and that basically Comprehensive Employment and Training, that aspect of CETA, hasn't really been utilized. We know the city of Detroit and the city of Buffalo run virtually 10 to 15 percent of their total budget using CETA workers. They pay them CETA employee's salaries and then they pay the policeman's salary on top of that and they take a laid off policeman and put him right back on the force. That wasn't the idea of CETA.

Now, what would you think of a private sector program where corporations were given a full tax credit for a 1-year period to take an unemployable person, somebody living at or below the poverty level, either somebody employed in a very, very low-level job or another job, give them 1 year of training for a job which that corporation knows will exist in their own company a year from now, give them whatever education they require, evenings or mornings or what have you, give them thorough training for a year and then allow that employee to walk into an open job with which he or she is totally familiar.

We know in corporate life that because of retirements and relocations the best corporation has 10-percent turnover every year. That's a very well run company, so therefore we can say that, let's say, 5 percent of our employees in every corporation in the United States are pretty well earmarked for retirement or relocation a year from now.

What if Congress passed a bill requesting that all corporations allocate 5 percent of their open employment to the hiring of unemployed people, training them, giving them as much training as may be necessary for them to fill those jobs that will be open a year from now, and giving them a tax credit for that purpose. What do you do with that?

You allow that corporation to hire some employee trainees, which helps the corporation immensely, you give them a tax credit which will make it sufficiently attractive for them to do it and you then get to the root of unemployment which, we have to understand, Mr. Weidenbaum, is still one of the greatest problems in the United States. The fact that you do have 40 million people living at or below the poverty level who are not fully employed.

Mr. WEIDENBAUM. I think——

Representative RICHMOND. Do we agree on that?

Mr. WEIDENBAUM. Yes.

Representative RICHMOND. Would you think the administration would entertain a bill of that type with some type of positive action?

Mr. WEIDENBAUM. I'd be surprised, very frankly, because we already have a job creation tax credit right in the income tax system right now.

Representative RICHMOND. But it's not as sweeping as I envisioned.

It's not a full tax credit. It doesn't mandate that the corporation must give that employee 1 year of training along with such academic training as may be necessary.

Mr. WEIDENBAUM. Very frankly, I would oppose a 100-percent tax credit because that means that the U.S. Treasury is paying 100 percent of the costs.

Representative RICHMOND. But look what we get at the end of that by paying 100 percent of the costs this year, we get that person off the welfare roles next year. And you know what welfare costs in the United States.

Mr. WEIDENBAUM. Too much. What I really would like to see is the kind of economic environment in which that company voluntarily wants to expand its employment and that it pays to hire people with low or even zero skills and train them and give them on-the-job training.

Representative RICHMOND. Mr. Weidenbaum, you know that the average corporate manager is really not interested in alleviating poverty in his neighborhood. They have other problems.

Mr. WEIDENBAUM. What I do know——

Representative RICHMOND. I can tell you if we don't give them a 100-percent credit, they're not going to do it.

Mr. WEIDENBAUM. Adam Smith said it far more elegantly than I possibly can. It's not out of the benevolence of the businessman that we reduce unemployment, it's out of him following his own self-interest. But the system works. That is how we reduce unemployment, by creating the kind of conditions that private companies voluntarily, to meet consumer needs, expand their employment and we've set up the kind of situation——

Representative RICHMOND. You're being unrealistic, Mr. Weidenbaum.

Mr. WEIDENBAUM. On the contrary.

Representative RICHMOND. Go talk to presidents of the second level corporations, and find out how anxious they are to reduce unemployment in our cities. They don't play a part in their own cities anyway. These corporations usually are not even owned by a family in that town.

Mr. WEIDENBAUM. That's not true in St. Louis, which is where I now live.

Representative RICHMOND. Which has the most crushing problems of unemployment, the most crushing problems of infrastructure and the most crushing problems of government.

Senators, do you have anything to say before Mr. Weidenbaum leaves? Would you like to say goodby to him?

Senator HAWKINS. I'd just like to say for the record, if the quality of life in New York is that great, I want to know why they're coming to Florida.

Representative RICHMOND. Senator Hawkins, I think we're experiencing the most incredible renaissance in the city of New York that we've ever had. People are coming from all over the world to live in the city of New York because of our quality of life.

Mr. WEIDENBAUM. I wish you well.

Representative RICHMOND. The committee will recess until 2 o'clock this afternoon, when we'll meet in room 3110 of the Dirksen Senate Office Building.

[Whereupon, at 11:45 a.m., the committee recessed, to reconvene at 2 p.m. the same day.]

AFTERNOON SESSION

OPENING STATEMENT OF REPRESENTATIVE REUSS, CHAIRMAN

Representative REUSS. Thank you very much for coming. The Joint Economic Committee will be in session, with Herr Reuss presiding, to hear from Paulus, Lehrman, Dornbusch, and Brunner. [Laughter.]

Whoever arranged this had a marvelous ethnic sensibility.

We appreciate your coming. It was not originally timed that way, but as perhaps you know, this morning the Federal Reserve announced targets for 1981, in response to the various laws which Congress has set up to require such reporting. I think most of you may be familiar with Chairman Volcker's testimony. But in a nutshell, what they project is targets for 1981 which are considerably lower than for 1980.

For example, in 1980, the actual growth of MIB is something over 8 percent, and the new target is 3½ to 6 percent. Variables for the various other M's are similar.

No doubt, some of you will want to refer to this in your testimony, and no doubt, members will want to ask about that. But in the meanwhile, let me just say that under the rule, and without objection, any compendious statements which each witness has prepared will be received in full into the record.

I would now like to ask you each to proceed. We will start with Professor Brunner, an old friend of this committee, and we welcome you back.

If each witness would try to summarize his views in 10 minutes, that would be fine. Going over a little bit certainly doesn't bother us.

STATEMENT OF KARL BRUNNER, DIRECTOR, CENTER FOR RESEARCH IN GOVERNMENT POLICY AND BUSINESS, GRADUATE SCHOOL OF MANAGEMENT, UNIVERSITY OF ROCHESTER, ROCHESTER, N.Y.

Mr. BRUNNER. Mr. Chairman, ladies and gentlemen, I appreciate the opportunity to be here to talk about an issue which is of great importance for this country over the next 3 to 4 years. My theme is concentrated on monetary policy, and I would like to start in the following way.

Once upon a time there was a kingdom in which, for quite a substantial time, the prime rate was constant at 4½ percent, and the AAA bond yield was rather constant, fluctuating very little, at 4 percent. Mortgage interest rates were around 6 percent—well, a bit higher in California, but around in that general range. The economy was moving at a goodly pace in a good way. There was practically no inflation.

But just in case, for the younger generation, it may all look like an old kingdom which existed way back, it was the United States from 1960–61 to 1964–65.

Now what do we have? A legacy of prime rates up to 20 percent and highly erratically moving around, an inflation rate up to 10 percent, a mortgage rate up at 15 percent, and the dollar has been in trouble. It's a little better now, but in the last 3 or 4 years the dollar has certainly gone down quite substantially against the leading currencies.

Now, I submit to the committee that this record is a very sad record indeed. I also submit that this record which we have experienced over the last 10 years is not something which was imposed by irate gods or amused devils for their amusement and their benefit. I think it was created by our policymaking, and particularly by our monetary policymaking.

Under the circumstances, I think it is high time that we reconsider the nature of this monetary policymaking, and that we proceed in a different way, in order to get out of permanent inflation into which we have drifted over the last 15 years; that we do get interest rates down from the superb heights to which they have drifted now and again, more into the neighborhood which we experienced in the first half of the 1960's.

One of the major problems in our monetary policymaking, the way I perceive it, and I was very aggrieved to see how it came out this morning in the hearings with Chairman Volcker, is really the problem of public accountability of a very potent and a very important institution. The Central Bank can create all kinds of problems. The Central Bank can create a great depression. The Central Bank can contribute significantly to a great depression, and the Central Bank can contribute to a massive and persistent inflation, like we've had now in the last 15 years.

It affects the affairs of our everyday life. But I find very little public accountability built into the system; and that, somehow, I find very puzzling for a democratic society.

Now, there are two ways in which we can go under the circumstances. One is to create institutions of monetary arrangements which minimize the need for public accountability; or then, to face up alternatively and explicitly to the need for accountability with proper arrangements in the institutions which take care of that.

Now, the way to go in the first direction would be possibly to reinstitute commodity reserve standards in one form or the other. In my prepared statement I have some reservations about going that way. I do not wish to amplify here in this context. I simply mention that in order to go along the line to submit my proposal, which I would like to have discussed and explored possibly at various occasions. And this is the following:

The proposal, in my mind, has advantages relative to a gold standard solution or a commodity reserve standard solution. It tries to get things as automatical as possible, to remove the need for accountability. The proposal is to accept, as a matter of legislation, almost constitutionality, that there be a constant monetary growth subject to certain controls and variations which one can fix and specify, in order to make it very clear that this is beyond the sort of arbitrary changes from case to case.

This constant monetary goal, once we have it, should be fixed for the long run at a noninflationary level. That would mean at approxi-

mately, say, in terms of the monetary base, for instance, around 1½ to 2 percent growth rate in the average over time.

However, we also have to face up to the transition problem. How do we get from here to there? There the administration has made, I think, some proposals, as I understand it, which would bring down the growth rate of the monetary base or the growth of our money stock down somewhere to a range of 3 percent per annum over the next 4 years.

An alternative is to have sort of a "bang bang" approach, to have a "cold turkey" approach, instead of this more gradual approach. I can appreciate that, but I still would favor a clearly announced commitment to maintain a gradual build-down of monetary goals over the next 4 years, to the long run, noninflationary benchmark level.

In addition, however, something else is required, and that is public accountability. Now, I was very interested this morning to hear Senator Heinz, who in his questions was pushing in that direction. I'd like to actually take up this principle, which seems to be embedded in Senator Heinz's questions addressed to Chairman Volcker.

Once something like a constant monetary goal is institutionalized at the same time every year accountability must be given by the Board of Governors who run the Federal Reserve System. We should require that if they deviate substantially in a way which can be specified, say by a plus or minus percentage point over the year, that they submit their resignation to the President. He has then the right and the privilege to accept or reject the resignations according to a variety of considerations for which he is responsible.

Whatever the situation is now, our elected officials still have to bear the consequences of whatever our monetary authorities do. Congressmen have to bear the consequences; the President has to bear the consequences in this respect. At the same time there is not sufficient accountability by the Board, it seems to me. For 5 years they have basically disregarded Congressional Resolution 133 or it's counterpart in the Federal Reserve Act.

You see, we actually accelerated inflation and interest rises and so on, over the past 4 or 5 years.

So this is, in a nutshell, my proposal. I am not rigidly advancing it. There may be alternatives, based upon exploration, which may be better and more satisfactory for many purposes. That is fine with me. But I want simply to bring up the issue of public accountability of monetary policy, so that we really must ponder this very carefully.

What is the alternative? The alternative is that we simply continue the way we have been going in the last 15 years; that we continue the game, the strategy game, which the Federal Reserve has carried through for the last 15 years; and if I understand Chairman Volcker's statement this morning, essentially that's the game which will be continued over the future.

I think this is a very dangerous game. I think we have seen the record of this game, and I submit that it is really time that we reconsider very, very carefully what is going on in this respect, so that we can redress the direction of our affairs in fiscal spending.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Brunner follows:]

PREPARED STATEMENT OF KARL BRUNNER

A Time To Change Our Monetary Policymaking

I. THE LEGACY

We experienced for fifteen years an erratic and increasing inflation. We observed the rupture of a monetary system constructed with the deliberate intention to provide a stable framework for international transactions. The dollar declined moreover by a large margin relative to leading currencies. Interest rates became increasingly volatile and rose to record levels. The prime rate advanced in 1980 to more than four times the level prevailing over the first half of the 1960's. The mortgage rate more than doubled from the early 60's to 1980. The rates offered by prime lenders in the USA are moreover at least four times higher than in Switzerland, whereas US mortgage rates exceed the Swiss measures by "only" a factor of about three. The volatility exhibited by interest rates and exchange rates reveals the pervasive uncertainty imposed by our "policies" on the financial markets. An unreliably shifting course in financial policymaking maintained over many years threatens at this stage our financial industry and endangers the stability of our inherited financial structure.

II. TIME FOR A CHANGE IN MONETARY POLICYMAKING

The dismal legacy was not produced by events and actions beyond our control. It is the unavoidable result of an avoidable mismanagement of our financial policies. Inflation emerged from a gradual but persistent monetary expansion beyond a non-inflationary benchmark level. This policy raised the level of interest rates, lowered the value of the dollar on international exchange markets and also eroded the confidence in our financial system. The pervasive uncertainty associated with our monetary policymaking produced moreover the erratic movements observed on the financial markets. Our policymakers promised us repeatedly a reversal in the trend but hardly ever bothered to change the basic patterns of policymaking responsible for the legacy imposed on us. Shifts to an anti-inflationary course in 1966, 1969, 1971, and 1974 were abandoned and replaced with new inflationary thrusts within a few quarters. The promises of a determined anti-inflationary policy offered by the President on October 24 and November 1, 1978 remained empty words without any substance. The announcement made by the Chairman of the Board of Governors on October 6, 1979 attested to the emptiness of the prior promises. It also conveyed rather clearly that our monetary authorities essentially disregarded Congressional Resolution 133 addressed to them in early 1975 and also disregarded the subsequent inclusion of this requirement into the Federal Reserve Act. The announcement made by the Chairman promised, once more, a change in policymaking addressed to cope more effectively (or determinedly?) with the inflationary heritage. The subsequent behavior of our monetary authorities reveals however no basic change in conception of implementation of policymaking. The traditional pattern still prevails. And it is this pattern, determined by the members of our policymaking bodies at the Federal Reserve System, which is responsible for the sad and basically avoidable result produced over the last decade.

This record hardly offers much support for the traditional policymaking procedures of the Federal Reserve Authorities. We encounter here a serious flaw in our democratic institutions which increasingly attracted the attention of professional economists. The monetary authorities exercise a remarkable power over our affairs and affect the life of most citizens. Our monetary authorities are responsible for the trauma of the Great Depression and the inflationary legacy from the 1970's. But this power, so vividly expressed by events observed over the past decades, is not adequately controlled by institutions assuring public accountability. The accumulated record of intermittent major failures urgently suggests that we initiate new arrangements either providing a public accountability or removing its need. Two proposals were usually advanced with the rationale to lower the need for public accountability. A third proposal, which I strongly recommend to the Committee, directs our attention to some arrangements designed to recognize explicitly the social responsibility of our monetary authorities.

1. The gold standard

A return to the gold standard is often advocated as a solution to our problem. This arrangement imposes indeed some major constraints on the behavior of the monetary authorities. It does provide some anchor to the monetary system. The link between the monetary base and the balance of payments established by the commitment to operate a gold standard removes the longer-run evolution of monetary growth beyond the manipulative power of a Central Bank bureaucracy. All agents operating on the market place may form under the circumstances more reliable expectations about the price-level and the balance of payments over a longer horizon.

The gold standard remains however burdened with some important flaws affecting our evaluation of its usefulness. We note first that it does not assure a non-inflationary monetary evolution. The gold standard is quite consistent with long-run inflation within the gold standard system. This arrangement provides no anchor for the average inflation rate. It assures only that the inflation rates observed in participating member countries move in a cluster and cannot deviate persistently with large margins from the average inflation produced by the system. The gold standard anchors thus a country's inflation rate to an undefined average.

The second flaw addresses an important shorter-run aspect. Monetary growth proceeding under a gold standard regime reflects the emergence of unpredictable shocks operating all over the world. It also reflects any measure of "discretion" usually left to the monetary authorities bearing on the relation between movements of international reserves and domestic credit in the Central Bank's balance sheet. It follows under the circumstances that all agents will unavoidably face pervasive inference problems bearing on the nature of monetary evolution. The shocks operating via the balance of payment supplemented by the unpredictable margin of the Central Bank's domestic credit component render it impossible to judge reliably the composition of monetary changes. The inferences continuously made by agents concerning components of monetary changes which can be disregarded as a "transitory noise" and the components to be systematically considered in price-wage setting decisions will hardly coincide with the facts.

This uncertainty translates the unpredictable shocks operating on monetary growth within a gold standard regime into fluctuations of output and employment. A gold standard provides thus a partial anchor and compresses the deviation of future price levels from the system's average expected over a longer horizon within a tighter bond. It fails however to anchor the price-level adequately and it continues to generate substantial short-run movements in monetary growth affecting over shorter horizons the state of the economy.

2. A commodity reserve standard

A commodity reserve standard forms a natural generalization of the gold standard. The reserve function is extended beyond gold to a basket of commodities storable by the monetary authorities. This regime is less exposed to the factors shaping the rate of production of one particular commodity. The effects of special allocative forces modifying the state of a single industry are muted by the inclusion of other commodities in the reserve basket. The net effect of the shocks on monetary growth emanating from the supply of the reserve commodities is probably lowered in the average under this regime compared to the gold standard.

But it shares with the gold standard the inadequate anchoring of the price-level and the exposure to short-run shocks transmitted by the balance of payments under an international regime. It suffers moreover under an additional problem. It creates incentives for a variety of interest groups to have their product included (or excluded) in the reserve basket. These incentives built into the monetary regime raise over time the likelihood of intermittent and irregular changes in the money supply process in comparison to the gold standard.

3. A monetary control regime

The anchor function of gold or commodity reserve function can be improved with the aid of specific arrangements. It requires a definite commitment to a specific gold price maintained with certainty. It also requires rigid constraints on the Central Banks' total assets in relation to the reserves of gold or reserve commodities. These institutions can of course develop within a single country irrespective of the arrangements made in other countries. They were usually advocated however in the context of systems imposing an "international discipline" on the nation's money supply process. The operation of this international discipline depends however on the binding institutional commitment of all partici-

pating countries. The failure of such international commitment still leaves any particular country the choice of a commodity (or especially a gold) reserve regime operated in isolation in order to solve or moderate the monetary regime's accountability problem.

This indirect approach to impose social control over a nation's monetary evolution may approximately resolve the anchoring problem. It will not remove the shorter-run uncertainties built into the money supply process under these regimes. An approach directly geared to the control over monetary growth seems preferable however in my judgment. It will simultaneously anchor the price-level and offer much clearer information to agents in the market place over the shorter-run. The magniture of the monetary growth should coincide with a non-inflationary benchmark level.

This benchmark level is determined by the prevailing trend in monetary velocity and normal output growth. Its magnitude centers for the monetary base in the USA around 1½ percent-2 percent p.a. The transition to this non-inflationary level requires special attention at this stage. The Shadow Open Market Committee repeatedly advocated that the monetary authorities commit their operation in the strongest terms to such a strategy and also announce a transition regime lowering monetary growth over four or five years to the non-inflationary benchmark level.

It is frequently contended that our Federal Reserve Authorities are inherently unable to control monetary growth. But there is really no serious technical problem obstructing a policy of monetary control. Independent research by distinct groups beyond the range of members of the Shadow Open Market Committee unambiguously establishes the technical feasibility of monetary control. Such control can moreover be expected to operate with a realistically acceptable tolerance even over one or two quarters. The Swiss monetary authorities actually demonstrated the technical feasibility under much more difficult circumstances characterizing a small open economy with large exposure to foreign influences and most particularly to the Euro-Currency markets. Monetary control requires however a radical change in the Fed's approach and implementation to policy. The traditional procedure centered on the relation between the Federal funds rate and monetary growth derived from an estimated money demand magnimust be abandoned and replaced by a direct control over a major reserve magnitude, preferably the monetary base, in accordance with the Fed's stated objectives expressed by the target path for monetary growth. The technical detail for this procedure has been developed and proposed for some time by the Shadow Open Market Committee.

The Swiss National Bank proceeds in a similar vien. It was sufficient to lower inflation from 12 percent in 1972–73 to almost zero by 1975–76. We also note here that the controllability over monetary growth could be further improved by replacing lagged with concurrent reserve requirements and modifying the operation of the "discount window".

One more aspect of the monetary control approach requires our attention. The formulation of a policy framework addressed to produce a constant monetary growth requires a major institutional novelty. We need to provide for an explicit and regular accountability on the part of the monetary authorities. The regime of a constant monetary growth does not operate like an automatic machine just requiring the manipulation of a few levers. It will still involve people responding to their peculiar incentives and pressures. Public accountability would provide some incentives directing attention to the proper execution of a monetary control policy. It also contributes to locate explicitly the respnsibility for failure and success in our monetary management. I proposed last year in a position paper drafted for a session of the Shadow Open Market Committee that a serious failure to perform adequately justifies removal of the officials in charge. I suspect that there exists more flexible accountability procedures which should be seriously explored. Allan Meltzer offered in my judgment an important modification in a useful direction. Whenever monetary growth drifts over a year beyond an acceptable tolerance band the Chairman of the Board (and possibly the whole Board) must submit his (and their) resignation to the President. The President then decides in the light of whatever circumstances he wishes to consider whether to accept the resignation or not.

The ultimate responsibility is clearly and explicitly located where it belongs under the circumstances. In the context of the current arrangements the President will bear the consequences anyway without any clear accountability pro-

cedure bearing on the behavior of the Fed which imposes the consequences on the Presidency. This proposal is submitted for serious exploration of the accountability problem which has plagued our monetary policymaking. This exploration could produce better suggestions and alternative proposals worth pondering. The precise detail may ultimately be less important than some workable institution imposing accountability on the Fed's execution of non-inflationary monetary control procedures.

III. CONCLUDING REMARKS

The issue confronting us at this stage invloves more than considerations of particular actions by the Fed here and now, in the spring, summer or next winter. It involves a fundamental change in strategy expressed by a non-inflationary monetary control executed with an appropriate tactical procedure. Two objections are frequently raised in opposition to this change in strategy. Federal Reserve officials are particularly prone to argue that monetary control increases the variability of interest rates in the short-run. Another objection, advanced mostly in academia, argues that a constant monetary growth prevents an activist intervention designed to offset the destabilizing effect of many shocks operating on demand or supply. Both objections offer however no relevant grounds to oppose the proposed change in our monetary regime. The variability of interest rates occurring under a constant monetary growth will be concentrated on the shortest end and appear as daily and weekly fluctuations. Monthly changes will already be substantially muted.

The regime will actually contribute to lower the volatility of long-term interest rates. The experiences accumulated in other countries support this view. We need also to emphasize once more that it is precisely the "tight money" produced by a non-inflationary monetary control which produces the low interest rates observed over the first half of the 1960's. Any insistence to lower interest rates by means of an expansionary monetary policy produces with remarkable reliability ever higher and ever more volatile interest rates over the whole maturity range.

The withdrawal from activist policymaking implicit in the regime advocated may appear to involve a potential loss in social control. But this involves a pervasive delusion of prevalent policy thinking. The successful execution of an activist regime requires full and reliable information about the economy's detailed response structure. It can be shown that the consequences of any particular activist strategy are very sensitive to the specific response structure assumed for the exercise. The overriding fact for our purposes is however simply this: We do not possess the detailed and reliable information necessary to assure a positive net stabilizing contribution from any activist strategy. There emerges in the context of our diffuse uncertainty about the relevant detail of the economy's response structure a substantial likelihood that an activist disposition worsens the uncertainties and amplifies fluctuations imposed on the economy. In a world of diffuse uncertainty about the processes to be affected by monetary policymaking an optimal strategy requires that our monetary regime should not "raise the waves by trying without the necessary knowledge to smooth them". An optimal regime under the prevailing state of knowledge is best served by a predictable and reliable framework of monetary control addressed to produce a constant monetary growth. Whatever the imperfections of this regime may be, it would not produce the miserable record accumulated by our monetary authorities over the past ten years. I submit to the Committee that this record is sufficient grounds to justify a change in our policymaking.

Representative REUSS. Thank you, Mr. Brunner.
Mr. Dornbusch.

STATEMENT OF RUDIGER DORNBUSCH, PROFESSOR OF ECONOMICS, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MASS.

Mr. DORNBUSCH. I welcome the opportunity to share with this committee my views on monetary policy. I try to make five points, that are detailed more in my prepared statement.

First, in reviewing the experience with monetary policy in 1980, it

is my impression that on balance, the new style of monetary policy has set the economy back. Unemployment now is higher, inflation is as high as it was, and inflationary expectations, if anything, are more firmly embedded than they were before.

We note that the long-term bond rate on 10- to 15-year Government debt has increased a full 250 basis points since monetary targets were started. That either reflects a sharp increase in inflationary expectations, or else it reflects extremely high real rates of interest that cannot help invest returns.

The second point concerns the prospects under the announced 6-percent monetary growth for the year to come. It has become customary to expect 3-percent growth in velocity, which with 6-percent M–1B growth added to 9-percent nominal income growth. The current forecast for inflation of the GNP deflator, 10 percent, ends up very much independent of what the cause of monetary policy is.

Therefore, we should expect, on balance, a 1-percent decline in activity during the current year.

Is there any alternative? I think we have to think of two. One is the "high-noon" scenario where a very expansionary fiscal policy drives up interest rates substantially, thereby raising velocity, causing nominal income growth to be in excess of what is currently anticipated. But of course, that would occur at the cost of higher interest rates in the future, lower investment, and of course, at the cost of sharply higher inflation.

The other alternative is to hope for supply side economics to make an important difference in the short run, and there is really no serious expectation that within the year, even important supply side steps should increase productivity sufficiently to allow real wages to rise together with falling inflation.

On balance, then, I think the 6-percent rule for nominal money growth will do a lot of damage to real activity.

I come next to a point of my prepared statement that I want to give a lot of emphasis to, and that is to argue that monetary growth rates are really a poor guide for monetary policy, and that we should favor nominal income growth targets instead. I first would argue against monetary growth rates because we do know that in the shortrun, stability of velocity has become extremely poor.

In the 1960's, velocity was great, predictable, and a good guide for monetary policy. In the 1970's, if you look at the chart in my prepared statement, the velocity looks worse than a stock market chart. So in the short run, there is extreme instability. And more than that, unpredictability. The econometric equation of velocity has broken down.

More serious for monetary growth targets is the fact that if inflation actually should decline, people will want to hold more money. All the interest rates will be lower and it is less costly to hold money. Now, where is the money going to come from?

At 6 percent growth targets, with these targets falling over time, not enough nominal money is being created to satisfy the rising demand. More money should be created to meet this noninflationary increase in real money demand.

So is it big, that effect? Well, estimates we can make show that velocity may fall by as much as 20 percentage points. If that money isn't being printed, then the only way the real money increase can

come is through a reduction in inflation below the growth rate of money. That means inflation rates below 3 percent. Nobody expects those within the next 5 years. That means you have to expect extraordinary economic slack, or else you have to writeoff the belief that current monetary growth targets make any sense whatsoever.

I think the second will, in fact, occur if inflation should be coming down.

How would a nominal income growth target work instead? The Federal Reserve, presumably in agreement with the Treasury, announces a policy of nominal economic growth and sticks by that. The nominal income growth would be falling over the years. It has three advantages. The first is, everybody knows that the target is for inflation plus growth, and realizes there is an explicit tradeoff. If inflation comes down, we can have more growth. Otherwise we cannot. There will not be the need or cause for today's meeting, or any need to guess what velocity will be.

Today we have no idea what nominal income growth and velocity will be because we don't know what fiscal policies will do to interest rates, and therefore to velocity. Knowing that money will grow by, at most, 6 percent tells us that there will be a recession in all likelihood, but it doesn't tell us anything about inflation yet.

The nominal income growth target would avoid that substantially. But perhaps most importantly, the nominal income growth target forces the Federal Reserve and the Treasury to agree on the policy mix. But I will return to that issue in a moment.

By next point concerns the question, how rapidly should we try and reduce inflation? If I can direct your attention to chart 2 in my prepared statement, I show there the actual inflation rate and cyclical averages. The point that is being made is that in every postwar business cycle, inflation from one business cycle to the next has increased. Recessions have never, in the last 25 years, reduced inflation in any durable way.

This is so for two reasons. One, labor contracts are long-term, and they are overlapping. Nobody wants to take a cut in wages sufficient to get inflation down and to keep everybody else fully employed.

More importantly, everybody recognizes that policies are accommodative; that recessions don't last long enough to actually force wage-price discipline. If that is the actual wage process, two things will emerge. If we cut aggregate demand, of course, most of the effect will come currently in slack. Very little indisinflation. Evidence from hyperinflation which is now being quoted is totally irrelevant to the U.S. economy. It is frivolous to bring that into the U.S. context.

Second, we should worry about how much of the current inflation, in fact, is already predetermined. The fact is that with long-term labor contracts, most of current inflation was set in yesterday's wage contracts, and is not being made in today's independent of economic slack.

Slower deceleration of nominal income growth, or money growth, would be essential. And it is currently insensible to arguments, as has been done by a staff economist of this committee in the Wall Street Journal. that we should have half a year of zero growth, then half a year of 5 percent, then half a year of 2½ percent. I think there is very little merit to that proposal.

There are two important policy steps that can go with nominal income growth targets in achieving a sensible course of disinflation. The first is supply-side economics, and I think it is well recognized that changes in the fiscal structure can have an important effect on potential output. But it is also true that those effects are very small, indeed, in the short run. Less that half of a percent of GNP in the first year; maybe up to 2½ percent of GNP in 3 years. They cannot make an important contribution to decelerating inflation in the short run.

Where supply-side economics comes in, in the short run, is in the monetary and fiscal policy mix. What we need is a much easier monetary policy, defined as lower real interest rates, and a much tighter fiscal policy. That mix will stimulate investments in combination with a reasonably fully employed economy. That is good supply-side economics.

I think higher real interest rates as we have currently, and the threat of fiscal expansion is exactly the wrong thing. It's what happened in the late 1960's.

I come to the last point. Incomes policy is, I think, an important counterpart to nominal income growth targets. And it's a sensible way to help reduce inflation rapidly.

I was asked to comment briefly on the interest we should have in the coordination of international monetary policy. The EEC has urged that interest rate policy be coordinated between the United States and Europe.

I see very little reason for that, in part because interest rate movements have not had a significant effect on the exchange rates. The divergent behavior of the Deutschmark and the yen shows that it is unlikely to be U.S. interest rates that have moved exchange rates as much as they have.

But for the most part, it is really impossible to coordinate interest rate policy internationally. The same nominal interest rate means very different things in one place and in another, because inflationary expectations differ, and at one time in the cycle and another. We have enough trouble as it is with monetary policy. The last thing we would want to do is have foreign considerations influence domestic interest rate policy.

I conclude with a remark about the United Kingdom. That is becoming increasingly relevant to our experience. The aspect I would like to draw attention to is that a sharply aggressive disinflation policy will lead to extreme currency appreciation, and overvaluation. The pound, in real terms, or in competitiveness, has become overvalued by as much as 40 percent.

I think that is because of overly tight monetary policy, and it is one more argument why we should have a more sensible monetary-fiscal policy mix.

Thank you.

[The prepared statement of Mr. Dornbusch follows:]

PREPARED STATEMENT OF RUDIGER DORNBUSCH

In October 1979 the Fed shifted its operating procedures from interest rate targets to control of nonborrowed reserves. More, importantly monetary growth

targeting became the exclusive focus of policy and a gradual, firm reduction in money growth was, once again, adopted as the proper course for inflation stabilization. This review of the conduct of monetary policy provides an opportunity to assess the performance of policy, but also to question the ranges for money growth that have been proposed and the very notion of monetary growth rules.

In my remarks I shall raise five points: First, that the past year, as a first experience in monetary targeting has on balance set the economy back, inflation is higher and more firmly embedded and so is unemployment. Second, the outlook of 6 percent M1B growth for 1981 will lead to insufficient nominal income growth. There will be a decline in activity unless low money growth is offset by fiscal expansion. But a fiscal expansion raises interest rates, adversely affects the policy mix and threatens to worsen the inflation outlook.

My third point is that monetary growth targeting as a policy for disinflation is undesirable. This is so because the short run behavior of velocity has now become very unpredictable and in the long run there is no clear evidence of a tight relation between money growth and inflation. More importantly, a significant reduction in inflation will reduce velocity by as much as twenty percent. This reduction in velocity is entirely overlooked in monetary growth targeting but it is of such a magnitude that it is bound to put the money growth targets on a collison course with good sense or with credibility. An alternative, simpler and sensible policy is to set a target path for nominal income growth. Nominal income growth path has the advantage of focusing policy makers attention on the growth-inflation trade-off, to force consideration of the policy mix and to avoid the annual velocity-guessing that the public now must perform.

Fourth, I shall argue that the U.S. inflation process, based on long term overlapping wage contracts and a history of accommodating policies, implies that overly rapid disinflation is mostly reflected in output and very little in inflation, as the last year documents. Recognition of these facts implies that a significant deceleration of inflation can only start two or three years into the future, unless incomes policy is used as a complement to nominal income growth targets.

My fifth point is that international coordination of interest rate policy, as it is urged at present by the EEC, is a highly undesirable course of action. Such coordination will involve uncertainties, ambiguities and policy conflicts that cannot but detract from the best course of disinflation. A more stable pursuit of monetary policy in itself makes an important contribution to avoiding excess variations in currency markets.

MONETARY POLICY SINCE 1979

In the first three quarters of 1979 M1A and M1B had been growing at 7.7 and 10.4 percent respectively, the downturn in activity earlier in the year had been short-lived and very flat, output was near potential. Inflationary momentum was building up and the dollar had been plummeting in world markets. In this setting the Fed became monetarist, deciding to shift to money stock control both in operating terms and in terms of long range targets. These policies were immediately implemented, allowing the Federal Funds rate to rise and the growth of M1A and M1B to decelerate very sharply relative to their previous half-year trend. This monetary tightening continued through the first quarter until April with the Federal Funds rate rising a full four hundred basis points. The deceleration in money growth was accompanied by consumer credit controls. The package, as economists of any persuasion would agree, was designed to slow down inflation momentum, inflationary expectations and the pace of economic activity. It did so with overkill as the economy registered a near 10 percent decline, at annual rates, in activity in the second quarter.

TABLE 1.—MONETARY GROWTH

[Annual percentages rates]

	1979	1980				1979/IV to 1980/IV	
	IV	I	II	III	IV	Actual	Target
M1A	4.6	4.6	−4.3	12.0	8.4	5.0	3.5–5.0
M1B	5.0	5.8	−2.4	15.5	11.3	7.9	4.0–6.5
M2	6.1	7.5	9.0	14.8	7.3	9.6	6.0–9.0

In this first phase the policy was, I believe, much too tight. This was all the more the case since predictable increases in consumer prices, associated with substantially higher energy prices would interact with the reduced money growth to increase the depressive impact of the policy on economic activity.

In 1979/IV and 1980/I the policy of restraint had left the aggregates growing near the mid-points of the target ranges, at the cost of vast interest rate increases and a sharp recession. In the next quarter maintenance of the target path became impossible in view of the fall in real money demand. Partly in response to the contraction in activity, but more importantly in lagged adjustment to the huge interest rates real money demand fell so much that the Fed was unable to sustain nominal money growth along target paths even by allowing interest rates to fall precipitously. The second quarter was, of course, an instance where activists and monetarists would disagree on the proper course of policy. The chairperson of the Fed has rightly remarked that in a situation where both nominal money and nominal interest rates are falling rapidly it is hard to follow policies that score with every camp.[1] Sustaining money growth would require even larger movements in interest rates while sustaining interest rates would keep down money growth and retard the recovery.

TABLE 2.—1979-80 MACROECONOMIC EXPERIENCE

	1979	1980			
	IV	I	II	III	IV
Real GNP growth [1]	0.6	3.1	−9.9	2.4	5.0
10-yr Treasury bonds	10.4	12.0	10.5	11.0	12.4
Federal funds rate	13.6	15.0	12.7	9.8	15.9
Inflation [1] [2]	10.7	12.0	9.8	8.8	10.9

[1] Percent change at an annual rate.
[2] Consumption deflator.

With hindsight I would argue that the Fed's errors in this episode were two. First the overly fast deceleration in money in the previous two quarters, as well as the credit controls, provoked the fall in real output and money demand. They might have been avoided by a more stable policy. Second, once the downturn had occurred, the Fed was overly concerned to restore money growth and thus may have provided too rapid and explosive a recovery. The Fed's credibility in its commitment to inflation fighting that was earned in early 1980 may well have been wasted in the rush to restore growth of money and activity.

The last part of the year, of course, brought the need to bring in line money growth rates with targets. With money growth building up in the recovery, encouraged by the low interest rates, the Fed found itself toward the end of the year quite close to the upper end of the M1B and M2 target ranges. The Fed then, once again, lowered the growth of bank reserves, driving up interest rates and setting the stage for another decline in activity. The targets, though, were nearly attained.

Where does the new Fed policy leave us after somewhat more than a year of monetary targeting? Inflation is largely unchanged, unemployment has risen by more than one and one-half percentage points and interest rates are near their peak levels. Indeed, the long term interest rate (10 year Treasure Bonds) is a full 250 basis points higher than it was at the onset of monetary targeting. In good measure that rise in interest rates reflects the prevailing tightness, both actual and anticipated, in credit markets. It reflects though, too, the fact that the Fed's new policies have not made much difference to inflationary expectations.

It would be defficult to accept that 1979-80 make the case for monetary growth rules as an effective stabilization policy. But of course proponents of monetary rules have been quick to complain that the Fed is still doing things wrong by engaging in excessive accelerations and decelerations in money growth.[2]

---

[1] Paul A. Volcker "Recent Developments in Monetary Policy" Federal Reserve Bulletin, December 1980, p. 949.

[2] See Milton Friedman "A Memorandum to the Fed." Wall Street Journal, January 21, 1981.

TABLE 3.—ECONOMIC PROGRESS, 1979–80

	Inflation [1] (consumption exp. deflator)	Unemployment rate [1]	Federal funds [2]	Long-term rate [2]
1979	10.7	5.9	13.7	10.3
1980	10.9	7.5	18.9	12.8

[1] IVth quarter.
[2] October 1979 and December 1980.

How much accommodation and compromise?

Within the setting of monetary growth rules, how should the Fed respond to perceived shifts in the composition of money demand or to changes in the trend behavior of velocities? The basic premise of monetarism is, of course, that these shifts are not only modest, but that they are substantially predictable on the basis of a few invariant determinants of money demand. Financial deregulation and major changes in the relative costs and benefits of holding different financial assets complicate the task of predicting velocities and lead to larger errors. The appropriate response is to reduce the tightness with which monetary growth rates are implemented, widening the ranges and shifting the mid-points to accommodate anticipated shifts in the composition of money demand.

There is no reason, even from monetarist premises, not to accommodate demand shifts among the monetary aggregates since such accommodation does not create a rise in demand feeding inflation. The Fed has recognized this point and allowed a wider M1B range, making room for an expansion of NOW accounts. Whether the upper margin is adequate is wide open to question and the best prescription is to leave the growth rate of the more comprehensive M1B aggregate substantially free and untargeted.

The possibility of shifts between different monetary aggregates clearly suggests that the Fed should focus on the broadest monetary aggregate, thus not risking the confusion of shifts in the composition of money. But it is also clear that control over the wider aggregate, M2 or M3, is not tight by any means. In these circumstances it is appropriate to watch all aggregates. But of course the public watching the Fed, in turn, will lose some of the guidance monetary rules are supposed to set for inflationary expectations.

The proposed long run target for M1B money growth over the period 1980/IV to 1981/IV has been set in the range of 3.5 to 6 percent, unadjusted for nationwide NOW account expansion and at 5 to 7.5 percent, making allowance for NOW's. What will money growth buy? There is an assumption that velocity will rise, trendwise, by 2 to 3 percentage points per year. Taking the upper ends, there is accordingly room for nominal income growth of 9 percent. The rate of inflation of the GNP deflator, whatever is monetary policy now, will be 9 to 10 percent thus leading us to expect up to a percentage point decline in economic activity.

The key question for the year is whether velocity will indeed rise by 2 to 3 percentage points or perhaps even more. The historical pattern over the last two decades have been one of velocity increases of that order of magnitude. The rise in velocity reflects the fact that increasing inflation and interest rates reduce the demand for real money holdings but it also shows the reduction in money holdings per dollar income due to financial innovations. Both of these sources have nourished inflation beyond what the monetary authorities were dishing out, but neither source may be available to feed real growth as the economy adopts a course of disinflation.

While rising inflation has led to reduced real balance the converse will of course happen when successful disinflation sets in. At the same time the earlier trend that led with regulated banking and rising inflation to disintermediation may well find its way now into falling velocity as the banking system becomes more competitive. On balance then the historical 2 to 3 percent trend velocity gain may not come about as readily in the next year and years ahead. On the contrary it is quite conceivable that velocity, adjusted for real growth, should be falling.

There are two ways of looking at monetary policy. One is to consider long term monetary growth and to argue that only a successful deceleration in nominal money growth can ultimately reduce inflation and that therefore no

80-478 0 - 81 - 10

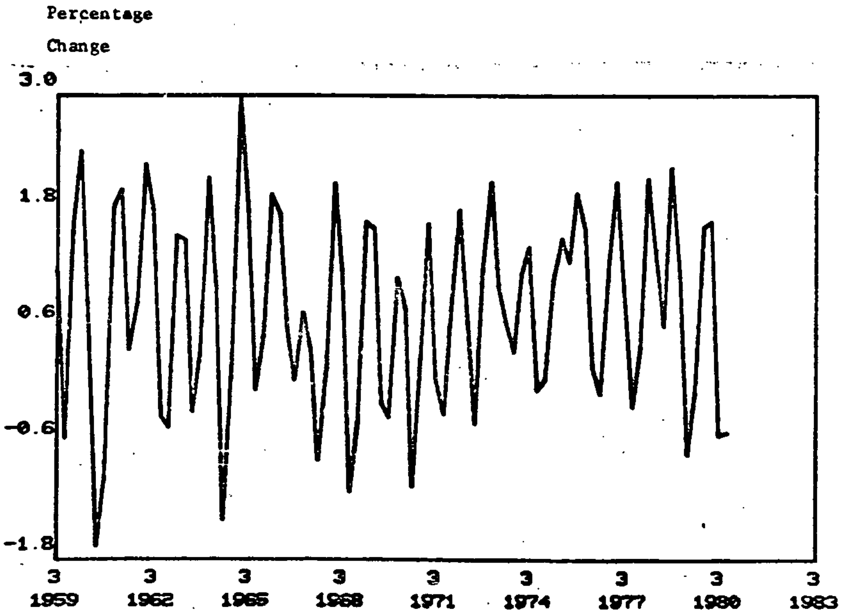
time should be lost in imposing monetary tightness. The other way recognizes that in the short term monetary policy works primarily by changing inflation adjusted or real interest rates, investment and thus capacity growth and growth in productivity. A policy of zealous monetary restraint may well make some inroad on inflation by creating slack, but as the United Kingdom example amply demonstrates, is no answer to the medium run need to sustain and enhanced profitability of investments and thus induce growth. It leads to stop-go patterns as in 1980 rather than to a steady deceleration of inflation in which productivity growth provides the crucial extra points between the growth in money wages and the growth in prices.

On the balance of these considerations I conclude that a 6 percent growth for M1B will not assure a satisfactory macroeconomic performance for 1981.

Nominal income growth targets

The case for monetary growth rules rests on the stability of velocity. With velocity stable, growth in nominal money translates in a predictable manner into nominal spending growth. The belief in a stable velocity, however, is no longer warranted. At present, it is widely accepted that velocity is highly unstable in the short run. Chart 1 shows the half-yearly percentage changes in velocity to reinforce a point that has already emerged from the breakdown of well established econometric equations. But the instability in velocity extends not only to the short run but in fact is as much present in a longer term perspective. Institutional reforms and other factors, not unrelated perhaps to the levels of money growth, imply that even over periods as long as twenty years money growth is not matched one-for-one by inflation.[3]

CHART 1.—HALF-YEARLY CHANGES IN M1B VELOCITY



[3] For a cross section of 21 industrialized countries I ran a regression of the 20 year average annual inflation rate of (1960–79) ($\dot{p}$) on nominal M1 growth ($\dot{m}$) real growth ($\dot{y}$) and the difference between the 10 year average rates of the 1960s and 1970s, ($\Delta\dot{p}$), where the latter variable stands as a proxy for the change in interest rates.

$$\dot{p}=0.04+0.42\dot{M}-071\dot{y}+0.22\Delta\dot{p} \qquad R^2=0.74$$
$$(5.4) \quad (4.7) \quad (-3.2) \quad (3.0)$$

Interestingly the coefficient of monetary growth is significantly less than unity. The downward bias suggests the possibility of systematic relationships between money growth and the random movements in money demand.

The most serious conflict arising for money growth targeting comes from a large predictable decline in velocity associated with a successful reduction of inflation. Monetarists, ever since Keynes' Tract on Monetary Reform, have recognized that successful stabilization of inflation will involve a large decline in interest rates and hence in the velocity of money. It is very difficult to forecast the precise magnitude of the decline in velocity, not only because of the instability of the velocity equation, but also because of the change in financial institutions that may persist after a possible return to a low inflation economy. In any event a decline in velocity of the order of 15 to 20 percent seems entirely possible. That order of a change in velocity, even if stretched over four or five years comes as a major challenge to the monetary authorities. It implies that they have to accommodate the velocity decline through money creation quite substantially in excess of the rate of inflation or else see protracted slack in economic activity. It is an issue that appears not to have attracted policy makers attention, but in fact is of the first order of importance.

The difficulty in implementing monetary growth targets in a satisfactory manner, given shifts between monetary aggregates and long run changes in velocities, suggests that no particular priority attaches to money growth targeting. An alternative that has been widely suggested is for the Fed to commit itself to an explicit path of nominal income growth. Implementing a particular path of nominal income growth, of course, carries all the problems of monetary control –including the choice between the role of interest rates and monetary aggregates as indicators of the growth in nominal income. In this respect it does not offer any advantages.

A nominal income growth path does suggest itself, however, in the following three respects: First, it is a very simple rule to understand, considerably simpler to interpret in terms of expectations and performance than target ranges for various Ms, with and without adjustment. Second, given shifts in velocity, under a nominal income growth target these shifts will not interfere with the job of achieving the path of decelerating inflation while under monetary rules the decision must be taken whether or not to accommodate the shift and thus whether to sacrifice credibility or growth. (I assume the only problem for the authorities is an insufficient growth in velocity.) Third, focusing on an explicit path for nominal income growth forces the monetary authorities to be clearer about the growth and inflation menu that they have chosen for the economy. A nominal income growth path implies a one-for-one trade-off between inflation and real growth. The present monetary targeting leaves substantial doubt about both growth and inflation.

A path for nominal income of course requires coordination of monetary and fiscal policies. It does imply that growth plus inflation are set by the authorities and that independently there is a determination of the monetary-fiscal policy mix and hence of interest rates and velocity. The policy thus seeks to avoid the very uncertainty that we are presently facing where a 6 percent M1B growth may mean anything from a recession with accelerating inflation to a boom with accelerating inflation, depending on fiscal policies. Monetary growth rules philosophy is fundamentally incompatible with an economy where there is uncertainty over the course of fiscal policy.

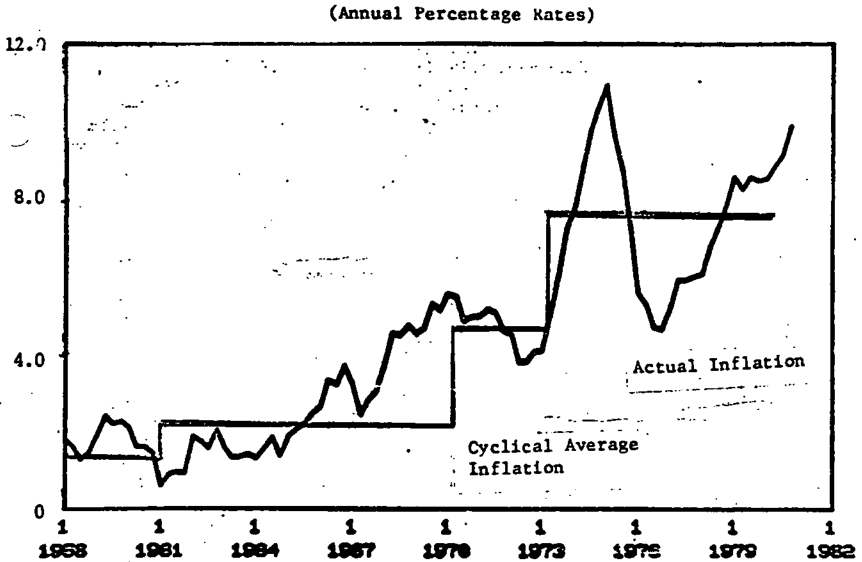
Another requirement for successful deceleration of inflation under a nominal income growth target (and indeed under any target) is a certain realism about the short term scope for reducing inflation. I turn to this issue now in more detail.

U.S. inflation

The accompanying chart shows the four-quarter inflation rates for the United States in the last 20 years. It also shows the inflation rate from peak to peak in successive business cycles. The striking fact is, of course, that inflation has risen in each successive cycle. A recession makes some inroad on inflation but does not stop inflation for very long. The policy of accommodation that has prevailed implies that there is little pay-off to wage-price discipline. With monetary and fiscal policies expected to stop any deep recession and turn economic activity around rapidly a decline in economic activity is reflected mostly in a slow down of cyclically sensitive prices, and has very little impact on wage behavior and core inflation.

The cyclical insensitivity of core inflation is not only due to the expectation of accommodating policies, it is reinforced by the presence of long-term, overlapping labor contracts. They imply that a substantial part of today's costs and prices is largely predetermined by previous settlement negotiated under conditions of high demand or rapid inflation and that there is large cyclical inertia in wages.

CHART 2.—U.S. INFLATION: ACTUAL AND CYCLICAL AVERAGE



These facts about inflation behavior imply that the behavior of current inflation is substantially predetermined and that accordingly any sharp reduction in nominal income growth would be reflected primarily in reduced activity, not in reduced inflation. There is no evidence available that the sheer fact of restrictive monetary growth should, in the short run, bring about reduced inflation without recession. Nor is there evidence that recessions have an important effect on core inflation unless they be longer and deeper than we have experienced.

Just in case there was any doubt that these are the facts describing the U.S. economy consider 1980. Nominal income growth decelerated leading to a decline in activity accompanied by a slight rise in inflation and a rise in labor compensation.

TABLE 5.—U.S. INFLATION AND GROWTH

	Nominal income growth	Inflation GNP deflator	Real growth	Labor compensation
1979	12.0	8.5	3.2	8.9
1980	8.9	9.0	-.1	9.8

The idea that inflation should be reduced through economic slack operating on wage settlements and from there on costs and prices is made more difficult for two reasons. First economic slack devastates productivity growth and therefore raises rather than lowers unit labor costs. Second, real wages (in terms of the consumption expenditure deflator) have been declining at very substantial rates over the last two years. Hence it appears doubtful that there is substantial room for wage discipline to precede a significant deceleration of inflation.

TABLE 6.—GROWTH AND INFLATION IN GERMANY

	1975	1976	1977	1978	1979	1980	1964–74
GNP	4.9	8.7	6.4	7.5	8.3	6.5	8.9
Real GNP	−1.7	5.3	2.6	3.5	4.4	1.8	4.0
Deflator	6.7	3.3	3.8	3.9	3.8	4.7	4.7

The difficulty in reducing inflation and maintaining inflationary discipline is well illustrated for the case of Germany. The table shows that variations in nominal GNP are primarily reflected in changes in the growth rate of output, not in inflation. This is particularly the case when supply shocks, as in 1975 or 1980, directly raise the inflation rate. The table also reveals that the failure to accommodate supply shocks by increased nominal income growth helps stabilize inflation, but that it does so at the cost of sharply reduced growth in real output. Finally, while inflation is enviably low it still is of the order of 4 percent. The costs of bringing inflation to zero are, one assumes, not worth the additional reduction in inflation.

The above consideration suggests that disinflation must start with a sufficiently high nominal income growth to avoid slack of a proportion that puts in question the entire policy as appears the case in the United Kingdom. That means nominal income growth of 10 to 11 percent for 1981 followed by a gradual phasing down. Wage contracts in the pipeline already exert a substantial effect on inflation well ahead to 1983. Accordingly the major part of the deceleration in nominal income growth should not come before then.

Two factors can significantly favor the deceleration of inflation. One is a restoration of productivity growth which allows both rising real wages and falling inflation. There is, however, no expectation of early help from productivity growth to reduce unit labor costs: less slack means higher wage growth but better productivity, conversely severe slack means poor productivity performance but lower wage growth. The other is supply economics which promises in the medium term an improved productivity performance. But these benefits cannot be expected to help in the critical initial stage where the upward trend in labor cost and price inflation must be reversed for 2 or 3 years to establish credibly a path of disinflation.

What can policy do to support a smooth course of disinflation? Beyond the setting of a realistic course for nominal income growth two additional considerations are paramount. The first is that the monetary fiscal policy mix should be one of easy money—defined as low inflation adjusted interest rates. In this context one does have to recognize that current levels of the long term interest rates, in conjunction with an expectation of 5 percent inflation in 1984 as argued by the administration, imply extraordinarily high real interest rates and a massive disincentive to investment. Therefore, tight fiscal policy and easy monetary policy is the proper trend setting for a stable disinflation path. The other major, and perhaps more controversial aid that policy can bring is in the form of incomes policy.

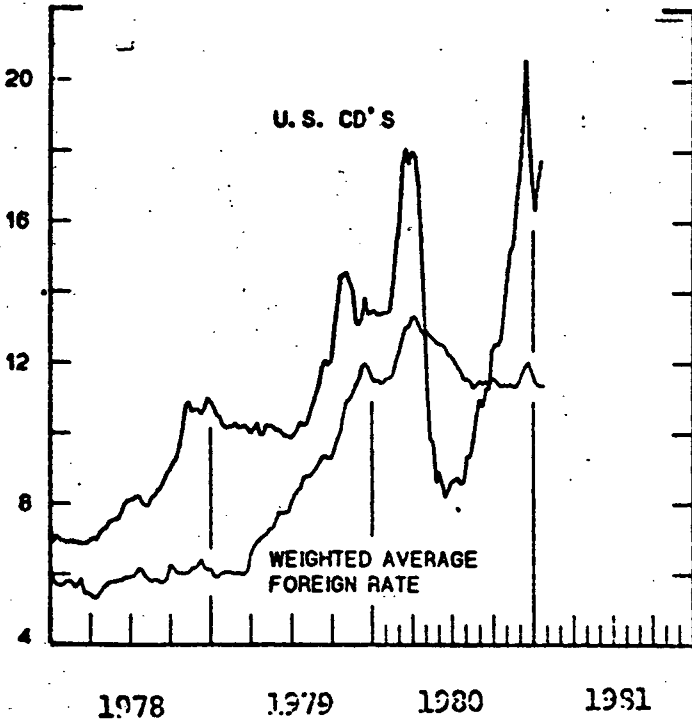
The argument that any kind of wage-price controls are not only costly to society but always fail is erroneous in two respects. First the argument fails to make a serious comparison between alternative courses of action. The alternative to incomes policy is an increase in economic slack. even fools are hard pressed to argue that a decline in activity is a good thing. The second reason the argument against incomes policy is less than persuasive is that it never has been done right. (Of course, the same is being argued for monetary deceleration and hence I avail myself of that style of argument.) Incomes policy accompanied as in 1972–73 by a large expansion must quite inevitably lead to subsequent inflation catch-up once the controls come off. It is therefore essential that the incomes policy be accompanied by something in the nature of nominal income growth targets to ensure consistency of the package. But the case for an incomes policy remains the following. In an economy where decisions and guesses about inflation are made in an unsynchronized and decentralized manner there is a large social cost—foregone output and distortions in relative prices—that are induced by achieving disinflation through economic slack. If we are willing to induce economic slack on a significant scale to reduce inflation we can only

gain by accompanying such policies by wage-price measures to avoid an experience as extreme as that of the U.K., for example.

International considerations

The turmoil in capital markets associated with the implementation of monetary growth targeting brought about substantial variations in international interest rate differentials. The accompanying Chart 3 shows that peaks in U.S. rates in early 1980 and again at the end of 1980 moved U.S. interest rates significantly above the rates prevailing abroad. The mid-year slump in rates, by contrast created a differential against the United States.

CHART 3.—INTERNATIONAL INTEREST RATE DIFFERENTIALS



While these movements in relative interest rate levels certainly had some effect in currency markets they surely did not cause havoc. This is quite apparent from Table 7 that shows the DM and Yen price of the dollar as well as the real dollar exchange rate which is a measure of U.S. competitiveness in manufacturing. Note especially the divergent behavior of the DM and the Yen.

TABLE 7.—EXCHANGE RATE INDICES [1979/IV=100] [1]

	1979	1980				1981
	IV	I	II	III	IV	January/February
Deutsche marks/per dollar	100	100.3	102.5	100.5	108.1	127.3
Yen per dollar	100	102.1	97.3	92.3	88.7	85.3
Real dollars	100	102.5	103.6	100.9	103.8	

[1] A rise in the index indicates an appreciation of the dollar.

The fact that exchange rates moved relatively little reflects in part the fact that other considerations, in particular current accounts, exert an important effect on exchange rates. For the rest there has been substantial exchange market intervention that may have contributed to dampening rate movements. Sterlized intervention is, indeed, the proper means of dealing with international portfolio shifts and it is a procedure that does not require much if any coordination.

There is no reason to believe that coordinating interest rate policies is desirable. As it stands monetary policy is already very complicated, taking into account international constraints would hopelessly confuse policy intentions and performance. The macroeconomic performance and potential at inflation stabilization varies substantially across countries and given nominal interest rate movements have very different implications for real interest rates in one place and in another, and indeed at one time and at another. Pursuit of less volatile monetary policies—and that may mean less unstable implementation of monetary growth targets—is by and large the only sensible coordination that can be considered. Beyond that, sterilized intervention by foreign countries can serve as an additional shock absorber, should the need arise.

A course of serious inflation stabilization through monetary growth targets or through a nominal income growth target will inevitably raise the attractiveness of the dollar as an asset in internationally diversified portfolios. In combination with the exceedingly high nominal and real interest rates prevailing at present the United States is bound to experience the problem that the United Kingdom has been with for some time: Rapidly appreciating nominal and real exchange rates as currency appreciation moves the exchange rate further and further away from a purchasing power parity level. From an inflation stabilization point of view the appreciation is of course welcome in that it helps cool down inflation and, through terms of trade improvements, gives some room for growth in real wages. It is also welcome in that it may slow down the eagerness of oil producers to see real price increases to offset the real depreciation of their dollar assets. But there is a very distinct cost in terms of a loss of competitiveness which I believe more than dominates these benefits. This is one more argument against a disinflation program that emphasizes tight money.

Representative Reuss. Thank you, Mr. Dornbusch. Having heard from two primarily academic witnesses, we will now hear from two from the investment community. First, Mr. Lewis Lehrman of the Lehrman Institute.

STATEMENT OF LEWIS E. LEHRMAN, CHAIRMAN OF THE ECONOMIC ADVISORY COUNCIL, NEW YORK REPUBLICAN STATE COMMITTEE, AND PRESIDENT AND CHAIRMAN, LEHRMAN INSTITUTE, NEW YORK, N.Y.

Mr. Lehrman. Thank you, Mr. Chairman. Distinguished guests.

Contrary to monetary orthodoxy, there is no single monetary policy which all reasonable men and women will ever agree upon, even given the best statistics, the most unimpeachable econometric model, and certainty about one's own particular priorities. In truth, there are many acceptable monetary policies, and each has to be evaluated in terms of the goals by which a social order determines its most important priorities in a free and open society, in our particular case, the United States.

Now, in a free and open society, we hold elections very often to determine what these goals are. It strikes me that it is no exaggeration to say that President Reagan was elected to end inflation. Indeed, it was the burden of most of his speeches.

And two-thirds of the people in this country, in almost every poll which is now taken, endorse unequivocally the end of inflation as the

most important public policy issue—above crime, above unemployment, above those many issues which are paramount in the conduct of the Legislature here in Washington.

Second, I think that goal by which our particular social order must be judged was also made clear in the election. That is the goal of sustaining economic growth. Joining the two together, the goals of monetary policy should somehow be related to those which are consistent with the election, and, it seems to me, with the very nature of a free and open society—noninflationary, sustained economic growth.

Now, I think in general most people agree upon these goals. I think it is also fair to say that throughout the world today there is an agreement among all—Communists, Socialists, Democrats, and Republicans—that we must end inflation.

There is no longer a debate over whether the fundamental issue is unemployment or inflation. The issue arises over, what are the appropriate means to bring inflation to an end, while at the same time determining those underlying economic conditions which will give rise to the kind of economic growth which will employ all those working people in this country who wish to be employed. The means to that end, I think, are five in number.

Briefly and oversimplified, we know that all economic growth throughout the industrial revolution is directly related to the volume of capital invested per worker in the labor force.

As a matter of fact, the industrial revolution is unthinkable without an increasing capital investment per worker throughout the Western World. It is that which distinguished the ascent of the Western economies above all of those in the Orient and elsewhere.

To do so, one has to generate an ever-increasing level of savings, for it is the market for savings which provides those demanders of capital with that investment capability to raise the productivity of each working person in the work force.

The volume of savings today is insufficient for achieving just that economic growth, that noninflationary economic growth for which President Reagan was elected. It is suggested, if the statistics are believed, that presently the rate of savings is approximately 6 percent, and to some extent, falling on a secular basis.

Certainly in the past decade the most profound deterrent to savings is the permanent deficit in the accounts of the budget of the Federal Government.

Growing inexorably as it does, more and more the deficit absorbs the available savings which we in the capital markets observe were formerly reserved for entrepreneurs, individuals, businessmen who have ideas, innovations, machines, plants they wished to build by drawing on these accumulated savings in the current market period.

Some numbers, I think, are appropriate here. These numbers, I take from Henry Wallich's speech of February 13, and from the latest OMB data.

The total demand for Federal credit this year is a stunning number. The direct unified budget deficit could approximate $55 to $60 billion; $20 billion will be borrowed by agencies. In the Federal credit programs—offbudget agencies, and Federal guarantee programs, when summed with the deficit—there's approximately a $141 billion Gov-

ernment demand for credit in the capital market. To that, one must add the $30 to $35 billion which will be demanded in the credit markets by State and local governments.

The sum of those can be forecast at approximately $175 billion, plus or minus. The total volume of credit which will be raised in the market this year is estimated by most reliable sources to be about $400 billion, a fourth part of which will be new bank credit—that is to say, credit provided, in the absence of bank credit of $100 billion, will amount to $300 billion.

As you can see, upward of 40 percent—indeed, more—of the total amount of credit will be coerced by the intervention of the Federal Government into the capital markets for its particular purposes, most of which have to do with consumption.

Therefore, I conclude that an indispensable condition, of meeting the goal of economic growth, is to reduce rapidly the level of Federal spending, and to balance the budget promptly, so as to leave in the capital market those savings which are necessary to rebuild American industry.

Second, after-tax incentives to save must be substantially raised. No monetary policy is adequate for achieving noninflationary economic growth in the absence of the willingness of a free people to reserve a portion of their current income—rather than for consumption, and chasing the tail of inflation—to lay them up in savings banks and in the capital markets, and in the equity markets in order to restore sanity and health to the capital markets which are presently immobilized.

I might mention that a triple-A telephone security came to market yesterday at the astronomical rate of 14.80 percent. The capital markets in New York and around the world, in dollar securities, are utterly immobilized. All but III securities and the Federal Government are virtually banished from the capital markets.

For no one wishes to risk an investment on the long term as a result of inflation. Savings are no longer offered in the capital markets on long term.

Third, systematic deregulation is necessary because so much of the savings of the market is now immobilized in order to invest in those aspects of our economy, which the regulators determine to be optimum, rather than by the test of their equity or efficiency.

Fourth, there is no question but that in the absence of an internal institution by which to regulate the volume of money and credit issued by the Federal Reserve System, there cannot be an expectation in the capital markets that in the future we will have that steady rate of money and credit growth to which Professor Brunner and Professor Dornbusch alluded.

Finally, there is no question but that this is an integrated world market through the mechanism of arbitrage. Securities prices, traded goods prices, and prices for merchandise in all national economies are equalibrated very promptly through both efficient communications and transportation.

As a result, no economic policy found wanting in Washington can be expected to have anything but a deleterious effect in markets abroad, and the effect of uncertainty of our capital markets here on those

abroad has also had a profound effect on immobilizing savings and capital from all around the world—formerly relied on by a growing and prosperous U.S. economy.

On the specific questions that you mentioned, Mr. Chairman, in your letter, I would like to make just a few brief comments. And I risk, again, oversimplifying. You queried the assessment of the conduct of monetary policy, since the Volcker "démarche" of October 6, 1979, and the quality of that conduct.

I believe that under the circumstances of a permanent unbalanced budget and a rapidly rising level of Federal spending, the Federal Reserve System did about as well as a ship adrift in a cyclonic ocean can be expected to do.

Second, you asked for an evaluation of the Federal Reserve System's prescriptive course for 1981 and beyond.

It appears that the Fed's conduct of monetary policy, according to the testimony of the chairman himself, is in the future to be consistent with the conduct of monetary policy, and their targets, as in the past. Under those circumstances, if you have the same causes under the same conditions, as the physicists are likely to say, you are likely to have the same consequences. I would predict instability, unreliability, and uncertainty in the capital markets.

On the Federal Reserve System and its monetary growth targets, I deny that the Federal Reserve System, a central bank in Washington, has either the totality of information, the providential foresight, or the adequacy of statistics, the clarity of the definition of the money supply, or the reliability of the revisions which it often relies upon, to achieve its monetary growth targets.

You ask whether the Fed should adhere rigidly to its longer run growth targets, and some recommend that very course. Were the Federal Reserve System to adhere to rigid money growth targets, under economic conditions in the capital markets where all savings are virtually absorbed by total Federal credit demands, I believe we could experience a profound economic contraction.

Finally, you ask about the synchronization of monetary policies with those of our allies and our trading partners abroad.

The indispensable element of any synchronous monetary or world economic order is a monetary institution which is beyond the manipulation of any sovereign political power. Therefore, it cannot rely upon the reserve currency status of the dollar, nor of the Deutschemark, or the yen, or any national currency.

Such an institution has to have a coordinating mechanism beyond the reach and control of politicians who may not uphold, in the shortrun, the common interests of the world economy, nor indeed, sometimes, of the national economy.

It is for that reason that I recommend a reconsideration of a modernized international gold standard, and the conformation of American domestic policy to the establishment of a gold standard here in this country. Thank you.

[The prepared statement of Mr. Lehrman, together with appendixes A to E, follows:]

Prepared Statement of Lewis E. Lehrman

I. The Goal of Monetary Policy: Stable Money and an End to Inflation

"The budget should be balanced, the Treasury should be refilled, public debt should be reduced, the arrogance of officialdom should be tempered and controlled. * * *"—Marcus Tullius Cicero, 106 B.C.

Inflation is the transcendent issue of our times. Inflation is to our generation what depression was to our parents and grandparents. Inflation, if not stopped, will revolutionize our nation and its social institutions.

There are at least two separate schools of thought about how to end inflation:

First, there are professional policy analysts who believe that overdemanding working people create inflation by spending too much money. President-elect Reagan captured the perversity of this elitist view when he asked why it is inflationary when working people spend money -but not inflationary when the government spends it. In the past, these same analyses have recommended a remedy for inflation: simply reducing the number of working people, i.e., recession and unemployment, in order to reduce or "fine tune" private demands for goods and services.

A true understanding of inflation begins with a second and entirely different view of its causes and origins.

In this view, the correct one, the government causes inflation. Not the oil shieks, not the oil companies, not greedy labor or avaricious big business. Inflation is a monetary and a financial disorder, engendered by the federal government. This interpretation explains why working people voted on November 4, 1980, to reduce the size of government, not to restrict further the world of work and enterprise.

In this view of inflation, the remedies logically follow from the analysis of the defects. The remedies constitute a coherent economic policy:

(1) Reduce as rapidly and humanely as possible the federal budget deficit, especially on current account. Reorganize the government capital account, including federal credit programs, such that government demand for credit is substantially less than the volume of total savings available in the market.

(2) Reform the tax structure and restore work incentives in order to encourage the production of new goods, which will help to balance supply and demand conditions and thereby to mitigate inflation. The tax legislation must reduce marginal income tax rates and capital gains rates. Tax reform must abolish the inane distinction between taxes on savings and taxes on wages (so-called "unearned" and earned income). Savings are, in part, stored wages and must be taxed the same way, or savings will evaporate.

(3) Renovate the regulatory policy. Decontrol of energy prices would be the symbol of serious intent to sweep away excessive impediments to commerce and economic growth.

(4) Encourage the Federal Reserve System to moderate creation of money and credit, such that the supply of new credit is strictly consistent with the demand for credit by producers who need it to create new goods and services during the same market period.

(5) Commit, publicly and unequivocally, to a free and open world trading order under American leadership. The indispensable conditions for achieving such an open world order are twofold. At the earliest possible moment, perhaps January 1982, the President should announce his intention to restore a stable dollar to the world by creating a gold-based currency. Second, the President should call for an international monetary conference, to be held in January 1983, to reform the world monetary system, to uphold an open trading system, to contain the rising tide of protectionism.

Each of these five policies is, by itself, necessary. But, alone, each will be unavailable. Therefore, all should be done together, for only together will the new economic policy be sufficient.

The new financial policy to end inflation would rely on the creation of real economic growth and more jobs—not on unemployment and reduced demand—in order to produce more goods, not less.

In Britain, Prime Minister Marget Thatcher has chosen instead the course of austerity—restrictive monetary policy, public sector deficits and timid tax policies—along with the painful consequences of unemployment and bankruptcy. What pathos there is in this apostle of the free market, presiding over the dis-

assembling of British industry and almost 9 percent unemployment—the worst level since the Great Depression.

President-elect Reagan can avoid the Thatcher trap. But he must move soon and with profound understanding and conviction about the course to be followed.

There are six months in which to decide and to act. There is a way out of the maze of inflation. But in this particular crisis, the economic stabilization plan must not be characterized, as in past emergencies, by price and wage controls. On the contrary, the new program for economic renewal will deal with the crisis by a systematic reformation of economic institutions. Economic recovery must rely upon a reawakened nation, market institutions, free prices, mobile factors of production and a stable currency.

It is true that, in the absence of sound policy, we shall survive this crisis too. It is the lot of businessmen and working people to accommodate and to survive. But to what end? Eight percent unemployment? Twenty percent interest rates permanently? Ten percent inflation rates? Bankruptcy? Wage and price controls?

It cannot be that these are the results we desire. Our goal is an end to inflation. President Reagan was elected to do it—and now he must.

II. THE MEANS BY WHICH TO END INFLATION

Recently, Milton Friedman wrote: "Despite vigorous efforts by the Fed to implement the [October 6, 1979 Volcker] policy, monetary growth has varied over a wider range since October 6, 1979, than in any period of comparable length for at least the last two decades. That fact is recognized by the Fed itself, by its defenders and by its critics." Professor Friedman's remarks go to the heart of the problem of the Federal Reserve System.

The Fed's governors honestly believe they can attain a goal that is not within their reach—namely, to fix the specific quantity of money in circulation. They also believe they can fine-tune the world's most complex economy by changes in credit policy and monetary base manipulation. Monetary base manpulation leads to the Fed's daily interventions in the open market for government securities, creating uncertainty and disorder in the credit markets. In recent years Fed open-market operations have led to the systematic expansion of its portfolio of government securities. Not only has this process indirectly financed the government deficits; but, along with reduced reserve requirements, open-market operations have been the primary source of the perennial 8% to 9% increase in total adjusted Federal Reserve Bank credit—about three to four times the average growth of output. Through this mechanism of open-market operations, the Fed has become the engine of world inflation.

It is important to understand that in a free market order neither the amount of money in circulation, nor its growth rate, can be determined by the central bank. For, quite simply, the Fed does not possess all the necessary market information, the proven operating techniques or the foresight to bring about a predictable rate of growth of money now or in the future. It is true that the Fed does influence conditions governing the supply of money; but it is the users of money in the market who alone determine their demand for it.

Indeed, the money supply cannot be precisely defined or measured. How can the Fed control such an elusive abstraction? Moreover, no money-supply growth rate during a specific market period is necessarily correlated with a specified rate of inflation, deflation or with price stability. For example, during part of 1978 the quantity of money in Switzerland grew approximately 30 percent, while the price level rose about 1 percent. Conversely, in the U.S. in 1979, the money supply grew about 5 percent while the consumer price index rose 13 percent. In 1980, M1A grew at 5 percent, M1B grew 7.3 percent, while the CPI rose 13 percent. It is clear that the Fed cannot precisely control the relationship between the rate of growth of the money supply and the rate of inflation.

This should come as no surprise. Consider the institutional constraints on the Federal Reserve System. First and foremost, it is a bank. More precisely, it is a monopoly—the "bank of issue." The Fed has a monopoly over the issue of paper currency; that is, Federal Reserve notes. But it also has a balance sheet, which limits even the actions of a government monopoly. The Fed buys assets (Fed credit) with the resources created by its liabilities (largely the monetary base). Total Federal Reserve credit is a precise magnitude which regulates the rise and fall of credit supplied by the Fed to the rest of the banking system. If the credit supplied is actually desired in the market, the price level will tend to be stable. If the new credit created by the Fed is forced on market

participants, it will quickly be spent by them at home and abroad, thus tending to cause inflation and a depreciating dollar.

Therefore, in the future, the Fed should allocate credit by using the superior technique of the price mechanism—not the mechanism of open-market operations, a blunt and unwieldy quantity technique. If we must have the central bank, then remobilize the discount rate, which is the price of credit for loans from the Fed to the commercial banks. Recently, the amount of this type of Fed credit has ranged from $1 billion to $3 billion—5 to 10 percent of bank reserves held at the Fed. At 13 to 16 percent the present discount rate constitutes a subsidy rate to substantial commercial bank credit expansion—because it is below market rates. During periods of inflation, the discount rate should be above market rates, for example, the rates on Treasury bills or Fed funds. Thus the subsidy would be eliminated. The discount rate, as a market-related technique of central banking, was repudiated long ago by the money supply fine tuners; and not coincidentally, so was a stable value for the dollar.

The problem of equalizing the supply and demand for credit by means of the discount rate illustrates the fundamental issue of monetary policy and central banking. Instead of fixing a specific quantity of money, the goal of the central bank should be reasonable price stability, or even better, a stable value for the dollar. The means by which to achieve this goal is a remobilized discount rate joined to a true international gold standard.

When excess credit causes inflation, the Fed, by raising the discount rate above market rates, should promptly eliminate the subsidy to bank credit expansion, thus removing the stimulus to inflation. As a result, excess money and credit will be absorbed in order to hit the correct target: the volume of money in circulation should always be equal to the amount of money actually desired in the market. Inflation is caused by excess money. If there is none, there can be no inflation. Such a monetary target can be hit so long as the government does not finance its inflationary deficit spending by continually demanding new money at the Fed and at the banks. That is why a balanced budget is crucial. It keeps the government from demanding new money at the Fed and the commercial banks.

To establish financial order, a sound Fed credit policy is a necessary condition of financial order; but is not sufficient. History and classical economic analysis show that the policy best-suited to ensure stable money over the long run is to define the dollar as a weight of gold. But a domestic gold standard is not enough, because our national economy is fully integrated with the free world economy. It follows that only a world monetary system can provide an impartial, common currency, not subject to sovereign political manipulation. Such a world monetary system is the international gold standard. This is the classical monetary policy.

As a monetary standard, the value of gold compared to other goods in the world economy is determined by its relative costs of production, while the costs of production of one more unit of a paper currency is almost zero. Zero production costs explain why most government currency monopolies have overproduced paper money and thereby destroyed its value. On the other hand, gold is an ideal monetary standard because its real costs of production cause it to have a relatively inelastic supply curve. It cannot be overproduced. Its rate of growth of production over centuries has been about 1.5 percent to 2 percent—proportional, that is, to the rate of long-term economic growth and population growth in the industrial world. It is this unique and stable long-run relationship between the rates of increase of the supply of gold and of economic growth which, among other reasons, makes gold the optimum monetary standard.

Unlike paper and credit money, the supply conditions of gold cannot be fundamentally and swiftly altered by politicians. Supply conditions for gold depend upon the real-world economics of gold production, which are, in general, not susceptible to scale techniques of mining. When scale techniques of production are applied to other, more easily mass-produced commodity money standards, oversupply results and the monetary standard depreciates. In an imperfect world, the gold standard is, therefore, the least imperfect of the monetary standards. That is why over the centuries a gold currency was freely selected as money by the market.

Under conditions of modern central banking, a disciplined discount policy at the Fed is only useful for providing elasticity to the supply of credit in the short and intermediate term. But a gold currency is an independent long-run stabilizer of the supply of money and credit in the world economy—the gyroscope, if you

will, of a free world-market-order. The true gold standard rules out excessive manipulation of money by politicians and bureaucrats. Therefore, in order to end inflation and to restore trust in the U.S. currency, the dollar must be defined in law as a weight unit of gold. A modernized gold standard would be a guarantee of the purchasing power of money and, therefore, of the future value of money savings. And we know that in the absence of increased savings there can be no long-term economic growth.

Thus, given President Reagan's unequivocal commitment to stable money and a policy of economic growth, it is time for the United States to offer the free world a real money, and to call for monetary reform based on the international gold standard.

III. MONETARY POLICY, THE FEDERAL RESERVE SYSTEM, AND GOLD

I: A brief history of the monetary system

World War I ended the preeminence of the classical European states system. It also decimated the flower of European youth and destroyed the continent's unparalleled industrial productivity. No less significantly, on the eve of war, the gold standard—the proven guarantor of one hundred years of price stability—was suspended by the belligerents. The onset of war and the prospect of inflationary war finance made untenable the maintenance of currency convertibility into gold. In order to stem a run on the gold supplies of the central banks, the governments of Europe ceased to honor the gold clauses backing their currencies. Between 1914 and 1924, the monetary policies of the European central banks destroyed most national currencies. The Age of Inflation was upon us. Writing as early as 1919, while attending the Paris Peace Conference, John Maynard Keynes argued that there was no surer means of "overturning the existing basis of society than to debauch the currency." The process of inflation, he warned, "engages all the hidden forces of economic law on the side of destruction, and does it in a manner which not one man in a million is able to diagnose."

The suspension of the prewar gold standard in 1914 led, during the next decade, to the great paper money inflations in France, Germany and Russia—among other European countries. The ensuing convulsions of the social order, and the virtual obliteration of the savings of the middle class, led directly to the rise of Bolshevism, Fascism and Nazism. Revolution, during and following the Great War, was closely associated with the ruination of inconvertible European paper currencies.

Over fifty years later, one observes—at home and abroad—the rapid disintegration of the value of the dollar. Inflation is again upon us; but today it is simplistically described as "too much money chasing too few goods." In fact, inflation represents a decline in the value of money. Similarly, the astronomical rise of the price of gold is merely the other side of the same coin—i.e., the fall of the dollar. This entire process gradually got underway after the early phases of the Great Depression (1929–32), when Franklin D. Roosevelt abruptly terminated the domestic gold standard (1933) and subsequently (1934) reduced the value of the dollar by raising the price of gold from $20 to $35 per ounce. Constitutional questions arose over the authority of the President to violate the value of dollar contracts stipulated in gold. The doubtful power of the Congress subsequently to pass law prohibiting gold clauses in U.S. contracts gave rise to landmark legislation. Congress was challenged in the Supreme Court, which then upheld Roosevelt and the legislature. Gold contracts were pronounced dead: they were declared by the Congress to be "against public policy." As a result. American citizens were prohibited by law from owning gold, a right recently restored in January 1975. The dollar was, the phrase went, no longer "as good as gold." Rather. the dollar would in the future be a managed currency, whose value would be substantially determined by the opinions of the Board of Governors of the Federal Reserve Bank.

Ten years after Roosevelt's devaluation of the dollar, the Bretton Woods Agreement in 1944 codified the central bank decisions taken at the Monetary Conference of Genoa held in 1922. The gold-exchange standard had been confirmed in Genoa where the dollar and the pound sterling were defined as de facto official reserve currencies. Gold was to be economized. To do so, dollars and pounds, instead of gold, were in the future to be exchanged by central banks to settle balance of payments deficits. The Bretton Woods Agreement merely re-established the dollar as the post-War War II "official" reserve currency. There-

after it would be the "numeraire" of all world monetary values. The values of foreign currencies were to be determined by their relationship to the dollar. In turn, the dollar derived its value, under the agreement, by virtue of its convertibility into gold—for foreigners, but not for American citizens. Thus the Bretton Woods Agreement wrote into international law the "official" reserve currency status of the dollar which, as a practical matter, had prevailed for the preceding 22 years.

During the 1940s and 1950s the world lived through a "permanent dollar scarcity" as Europe struggled with its inflationary disorders. During this period the dollar remained the epicenter around which other fluctuating currency systems orbited. But after 1958, the western European governments restored the mutual convertibility of their currency systems. From that very day, when the once prostrate nations of Europe hardened the value of their national moneys, the U.S. has experienced virtually a "permanent" balance-of-payments deficit. Overnight, the "permanent dollar scarcity" of the 1950s become "the permanent dollar glut" of the 1960s and 1970s.

Throughout the 1960s the external deficit of the dollar, generated by expansive U.S. monetary policies, led to annual foreign exchange crises. The Bretton Woods system groaned under the flood weight of excess U.S. dollars, awash in financial markets abroad, where perforce they were accumulated in the official foreign exchange reserves of our trading partners. Since the U.S. dollar was now the primary reserve currency, foreign central banks were in effect required to purchase the excess dollars against the creation of their own moneys. It was during this period that Special Drawing Rights (SDRs), so-called paper gold, were invented in order to avoid a "potential liquidity shortage" in world reserves. Indeed, it was argued that the SDR, an artificially created reserve asset allocated by the IMF, was necessary to finance growing world trade. But as one commentator remarked, the creation and allocation of the SDRs reminded him of irrigation plans during a flood.

More was to come. When President Johnson decided simultaneously to expand the Vietnam War and to build the Great Society, he moved, with the consent of Congress, to avoid the statutes which limited, by virtue of a stipulated gold cover, the amount of currency and credit which the Bank of Issue, the Federal Reserve System, could create. In a word, the gold cover for dollars was terminated. And, predictably, with the discipline of a legally required gold cover brushed aside, the balance-of-payments crises intensified. The Federal Reserve System simply created the money to finance the President's war budgets and his Great Society deficits, now unimpeded by any statutory rule limiting the growth of the money supply.

Lyndon Johnson even put an end to the use of silver in the production of U.S. coins. The vast silver hoard of the U.S. Treasury, part of the patrimony of every American taxpayer, was liquidated in the market at about 90 cents per ounce. Next, in March 1968, Johnson suspended the London Gold Pool. For almost a decade, the Gold Pool had underwritten the shaky Bretton Woods convertibility agreements by selling gold to redeem foreign dollars at the fixed $35 per ounce.

These dramatic changes were welcomed by the academic and policymaking communities. Gold and silver were "outdated," declared the "experts." Professional economists—Keynesians and Monetarists alike—proclaimed the coming of a new era of central bank "managed money." Monetarists promoted a steady growth in the money supply, a fixed "quantity rule"—to be achieved through open market operations by the Fed in the buying and selling of U.S. government securities for the portfolio of the central bank. Keynesians offered "countercyclical" monetary management, a variable quantity rule, largely to accommodate their hyperactive fiscal policies. Within these same schools of thought, the Bretton Woods fixed exchange rate regime was also found wanting. But what both Monetarists and neo-Keynesians sought was not the reform of Bretton Woods, but rather, its demolition. They advocated managed currency, floating exchange rates and the demonetization of gold—in a word, an end to fixed-exchange-rate regimes. These monetary doctrines soon became the fashionable credos propagated by academic economists and policy makers. Henry Reuss, Chairman of the House Banking and Currency Committee, went so far as to predict that when gold was demonetized, it would fall to $6 per ounce.

Nixon followed Johnson and gradually went through his own conversion to Keynesian economics ("We are all Keynesians now"). But he also absorbed some of the teachings of the Monetarist School—floating exchange rates in place of the Bretton Woods fixed rate system. On August 15, 1971, Nixon defaulted at the

gold window: he refused to redeem excess dollars for gold as the British government had demanded a few days earlier. Thus Nixon globalized in 1971 the demonetization of gold, begun—on the domestic front—by FDR in 1934. The last vestiges of an official domestic and international gold standard had been abrogated by the undisputed leader of the free world.

Most of the conventional economic forecasts of the day predicted a secular fall in the gold price. Lenin had once observed that gold should henceforth adorn the floors of latrines. Since, according to the experts, gold was no more than a "barbarous relic," its value must decline. The price of gold remained below $40 until 1972. It rose to $200 in 1974 as Watergate, inflation and war upended the Nixon administration. In 1974, monetary policy was abruptly tightened: thereafter, gold gradually declined to a low of $106 in 1976. It then fluctuated under $150 as President Ford prepared to leave office and Jimmy Carter took over in the White House.

This brief history is important for several reasons. Neo-Keynesians and Monetarists, if they concurred on nothing else about monetary policy agreed (1) on the superiority of a central-bank-managed currency (a quantity rule, variable or fixed) over a currency with a fixed real value (a price rule); (2) on the superiority of a floating exchange rate system over a fixed rate system; and, finally, (3) in an era of modernity, they agreed on the irrelevance of old-fashioned gold to contemporary monetary theory and policy.

II: The economic consequences of central bankers

Our present predicament resembles the last act of an unfolding drama which has been underway for two generations.

During the past three years, President Carter, Secretary of the Treasury William Miller, and Chairman of the Federal Reserve Board Paul Volcker have become the principal actors on the stage of monetary history. The actors posture and declaim their intentions to control the price level, but their policies and deeds are, it appears, without substance and effect. The nation is engulfed by inflation. No policy seems to work.

President Carter inaugurated his administration in 1977 with an appeal to the rhetoric of austerity—pledging, among other things, to balance the federal budget. The price of gold promptly rose to over $150. A year later Carter replaced Arthur Burns with William Miller as Chairman of the Federal Reserve Board. But by the autumn of 1978 the dollar had collapsed and gold was approaching $250. Then, on November 1, 1978, new policies—designed to control the money supply and to arrest the fall of the dollar—were announced. Gold fell to $200 within 30 days. But by the middle of 1979 gold was once again rapidly rising to $300, and into the summer the dollar continued to fall on foreign exchange markets.

Thereupon, and amid much fanfare, Paul Volcker was summoned from the New York Fed to replace Miller, as Fed Chairman Miller in turn replaced Michael Blumenthal at the Treasury. Surely, said the experts, this change would work. After all, Paul Volcker was a "conservative Democrat" and a professional central banker. Nevertheless, speculation dominated all the financial and commodity markets during August and September 1979. Gold vaulted to $450 in September. Volcker returned from the International Monetary Fund meeting at Belgrade in time to announce new monetary guidelines on October 6, 1979. The new rules, acclaimed by many as truly "conservative," included, it was said, a tight monetary policy and dramatic new operating procedures sufficient to achieve a stable dollar, slow the rate of money and credit growth, and stop commodity speculation in general and gold speculation in particular.

Three months later, as the gold price touched $850 on January 18, 1980, Henry Wallich, a former Yale Economics professor and now a Fed Governor, reaffirmed the new Fed policies in an article appearing in the Journal of Commerce:

The core of the Federal Reserve's Oct. 6, 1979 measures, more important than the rise of the discount rate and the imposition of marginal reserve requirements, is the new technique of controlling the money supply. Basing this control upon the supply of bank reserves gives the Federal Reserve a firmer grip on the growth of the monetary aggregates. * * * The Federal Reserve's only lasting and fundamental power over interest rates is through the effect of its policies upon inflation.

Chairman Volcker himself stated at the National Press Club in early January that he had not changed his principal policy goals—which were: (1) to reduce unhealthy gold, commodity, and takeover speculation; (2) to operate more to control bank reserves at the Fed and less to control interest rates; (3) to generate a steady growth of money at a lower rate; (4) to insure stabil-

ity in the foreign exchange markets; and, (5) of course, to reduce the inflation rate.

At that same meeting Volcker observed that the gold market was going its own way and had little to do with the Fed's monetary policies. The gold market is but "a side show," added Henry Wallich, while Secretary Miller allowed that the Treasury would sell no more gold during these "uncertain and uncharacteristic times." (Presumably this meant that whereas over half the vast U.S. gold stock had been a "good sale" at prices ranging between $35 and $200, now, in the manner of the proverbial odd-lotter, the Secretary considered gold a "strong hold" at $800.)

To recapitulate: between October 6, 1979, and January 18, 1980, the price of gold had catapulted from approximately $440 to $850. Moreover, on January 18, long-term U.S. Treasury bonds—i.e., pure interest risk securities most sensitive to inflation expectations—collapsed to all time lows, even below those prices prevailing in the demoralized Treasury markets following the October 6, 1979, monetary policy changes.

On January 21 Henry Wallich observed in the Journal of Commerce: "To the extent that interest rates are determined by inflation expectations, which is highly plausible at least for medium and long term rates, the expectation of its continuance would become directly operative as a factor holding up interest rates." Between January 21 and Friday, January 25, the medium and long term U.S. government bond market was shattered, falling to prices unmatched in the history of U.S. government securities markets.

If we use Mr. Wallich's long term interest rate indicators, as defined above, it would appear that inflationary expectations have risen to unprecedented levels not quite four months after the announcement of the Fed's October 6 stabilization policies.

Finally, also on January 18, commodity futures prices, following the gold lead, closed at a record high index of 290.0—up from 280.2 a week earlier, and up 25 percent (from 232.6) since one year ago. (It should be noted that the Commodity Research Bureau's index of future prices does not include gold among its 27 farm and industrial commodities.) On January 25, the gold price stood at $634 and the CRB index was 287.6.

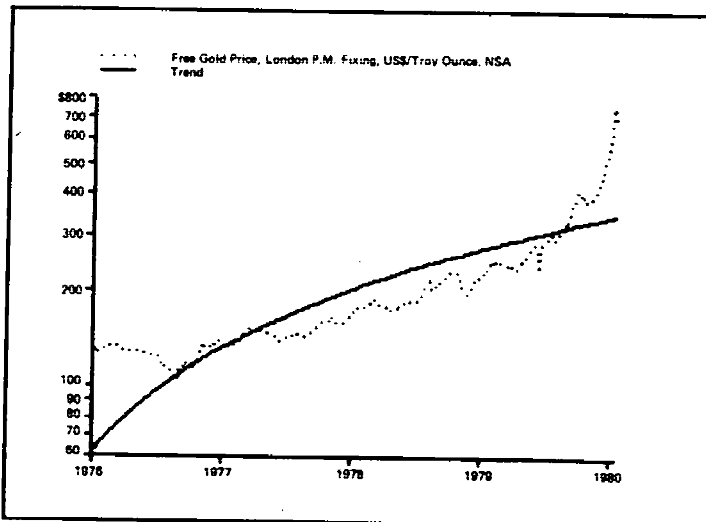
What caused the exponential rise and the violent fluctuations of the price of gold and the simultaneous collapse of the U.S. government securities market between early December 1979 and January 25, 1980? Indeed, the surging prices for asset-based equities and commodities suggest that the new monetary policy proclaimed on October 6 has intensified rather than quelled speculation. The contradiction between goals announced and results achieved requires explanation.

To begin with, can it really be true that the Fed's monetary policy has little or nothing to do with the gyrations in the gold market?

Let us start by considering some pertinent statistical information:

Figure I shows the fluctuations in the price of gold during the past few years.

FIGURE I



Source: Chase Econometric Associates Data Base

Figure II shows the annualized rates of growth of certain monetary aggregates during the past 18 months.

FIGURE II

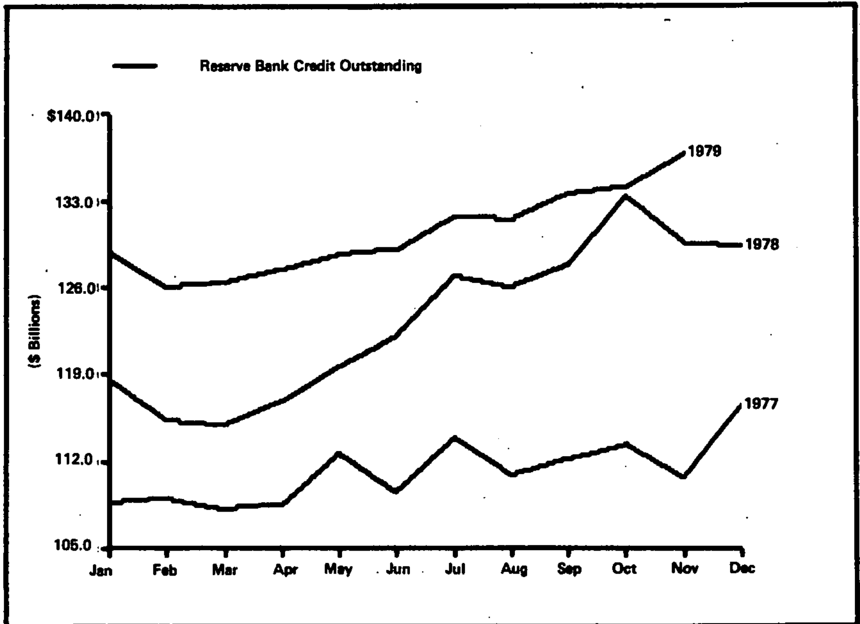
	July 5, 1978 to July 4, 1979	July 4, 1979 to Oct. 3, 1979	Oct. 3, 1979 to Jan. 2, 1980	Dec. 5, 1979 to Jan. 2, 1980
Monetary base	7.7	11.8	7.8	10.7
Bank reserves [1]	3.0	11.1	11.7	19.5
Currency	9.9	12.2	6.1	7.0
Federal Reserve credit [1]	8.3	13.6	11.7	13.7
M-1	4.8	10.6	2.7	7.0

[1] Adjusted.

Source: Merrill Lynch.

Figure III shows the rate of growth of Federal Reserve bank credit in 1977, 1978 and 1979, in billions. (Note that the curve rises even more rapidly toward year-end, after October 6, 1979, under Volcker than it did under Miller after November 1, 1978.) The numerical points on the curve are the averages of daily figures of the last week of the month, as published in the Wall Street Journal.

FIGURE III



Source: Chase Econometric Associates Data Base

Figure IV shows the average weekly growth in total Federal Reserve Bank credit from August 1979 to January 1980, roughly coterminous with Volcker's tenure. The second column shows the magnitude of growth over the comparable week of the preceding year. The next column gives the average monthly figures for total FRB credit during 1976.

FIGURE IV

Date	FRB Credit	Annual change from preceding year
	In millions of dollars	
Aug. 29, 1979	131/926	+4,077
Sept. 5, 1979	133,126	+7,008
Sept. 12, 1979	131,823	+7,921
Sept. 19, 1979	133,799	+6,950
Sept. 26, 1979	134,244	+1,852
Oct. 3, 1979	135,472	+2,689
Oct. 10, 1979	133,231	+1,492
Oct. 17, 1979	135,424	+1,150
Oct. 24, 1979	135,321	+1,233
Oct. 31, 1979	135,949	+2,453
Nov. 7, 1979	134,508	+5,497
Nov. 14, 1979	135,412	+8,416
Nov. 21, 1979	138,651	+8,234
Nov. 28, 1979	138,114	+7,460
Dec. 5, 1979	137,906	+8,463
Dec. 12, 1979	138,552	+12,855
Dec. 19, 1979	139,100	+9,456
Dec. 26, 1979	141,458	+10,151
Jan. 2, 1980	143,528	+10,850
Jan. 9, 1980	140,979	+12,062
Jan. 16, 1980	139,663	+10,044
Jan. 23, 1980	138,077	+10,361
	In billions of dollars	
1976:		
January	100.2	
February	101.4	
March	101.3	
April	100.3	
May	103.0	
June	103.1	
July	104.8	
August	105.4	
September	105.9	
October	107.3	
November	106.5	
December	107.8	

Source: Federal Reserve Bank of New York.

Figure V shows a typical summary of the basic Federal Reserve balance sheet, as it is published in the Wall Street Journal every Friday. A different format is published by the New York Times on the same day. Both lack the necessary detail to analyze precisely the weekly operations of the central bank. The detail may be obtained on Friday directly from the New York Federal Reserve Bank.

FIGURE V.—CHANGES IN WEEKLY AVERAGES OF MEMBER BANK RESERVES AND RELATED ITEMS DURING THE WEEK AND YEAR ENDED JAN. 16, 1980

[In millions of dollars]

		Changes from week ending—	
	1980	Jan. 15, 1980	Jan. 9, 1979
RESERVE BANK CREDIT			
U.S. Government securities:			
Bought outright	118,713	−76	+11,582
Held under repurchase agreement			
Federal agency issues:			
Bought outright	8,216		+324
Held under repurchase agreement			
Acceptances (bought outright):			
Held under repurchase agreement			
Member bank borrowings	1,149	+478	+351
Seasonal bank borrowings	74	+13	−24
Float	6,192	−1,461	−3,162
Other Fed assets	5,319	−309	+933
Total Reserve Bank credit	139,663	−1,355	+10,004
Gold stock	11,172	−51	−437
SDR certificates	1,800		+500
Treasury currency outstanding	12,973	+17	+1,109
Total	165,608	−1,286	+11,176
Currency in circulation	123,375	−1,469	+10,776
Treasury cash holdings	440	+10	+193
Treasury deposits with Federal Reserve banks	3,281	+469	−21
Foreign deposits with Federal Reserve banks	283	−89	+6
Other deposits with Federal Reserve banks	321	−111	−465
Other Federal Reserve liabilities and capital	5,012	+271	+522
Total	132,712	−919	+11,011
Member bank reserves with—			
Federal Reserve banks	32,896	−368	+165
Cash allowed as reserve	13,506	+2,147	+1,515
Total reserves held	46,573	+1,766	+1,713
Required reserves	45,988	+1,420	+1,532
Excess reserves	585	+346	+181
Free reserves	−564	−132	

Source: Wall Street Journal.

Figure VI shows the long term bond yields since the October 6, 1979 measures.

FIGURE VI

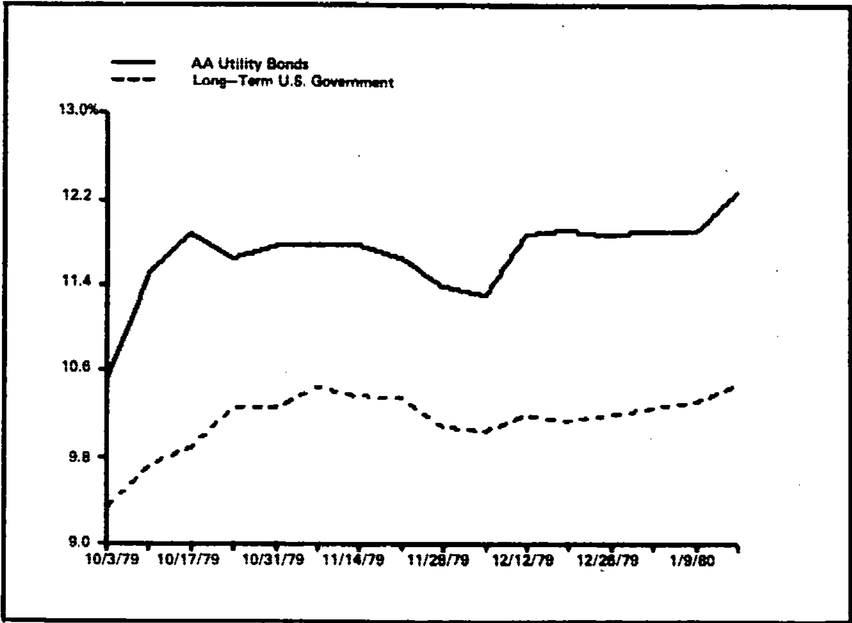
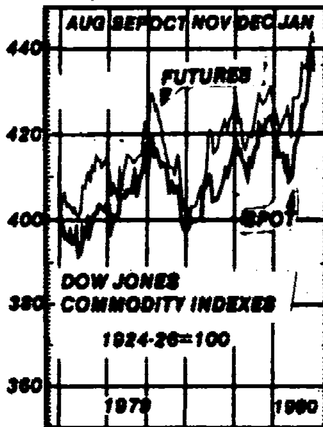


Figure VII shows the Commodity Market's direction since Volcker's appointment as Chairman.

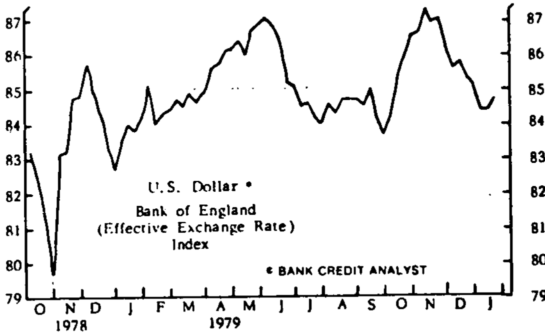
FIGURE VII



Source: Wall Street Journal

Figure VIII shows the fluctuations in the exchange rate of the dollar. Compare the rise and fall in the value of the dollar with the rise and fall in total Federal Bank credit. With modest leads and lags there is an unmistakable association between the movements of the two curves.

FIGURE VIII



Source: © Bank Credit Analyst, BCA Publications, Ltd.
1010 Sherbrook St. West, Montreal, Canada H3A 2R7

A more detailed analysis of this statistical evidence yields some interesting comparisons.

Let us look first at the curves of Figure III which show the direction and rate of growth of total Federal Reserve Bank (FRB) credit, FRB credit is the amount of government securities, acceptances, advances, float, and other financial assets owned by the Fed. FRB credit (the Fed's financial assets) is essentially the counterpart of the monetary base, i.e., commercial bank reserves and currency (the financial liabilities of the Fed). The balance sheet of the central bank is not unlike that of any other bank. Its financial assets consist primarily of gold certificates, loans or advances (to commercial banks), and securities. The central bank's liabilities are its capital accounts, its "promissory" notes (currency) and its deposit liabilities (so-called bank reserves, which are the cash balances maintained by commercial banks). Now if the Fed intends to achieve its October 6 goal of restraining the growth of credit, presumably the Fed should begin with what it can directly control, namely, the amount of credit it extends to the commercial banking system.

The point to be made is that total FRB credit accelerated, as Figure III shows, during the last few months of 1979 compared to the same period of 1978. And so did the price of gold. But is this the only correlation one observes in the charts, between the rise in total Federal Reserve Bank credit and the rise in the price of gold? Let us go back to 1976 and look. During 1976 total FRB credit remains steady at about $100 billion during the first four months. Note that the gold price is steady to falling. But between May 1976 and December 1976, total FRB credit rises to over $107 billion. With a short lag the gold price stops falling at $106 per ounce and starts up, reaching $135 by year-end. FRB credit peaks at year-end and then remains steady, oscillating around $110 billion during the first half of 1977. Similarly, in the summer of 1977, the gold price is only a little above where it was at 1976 year-end. During the second half of 1977 total FRB credit rises toward the $120 billion mark. Up goes gold toward $175. Fed credit peaks at year-end and, with a short lag, so does the gold price in late winter. In March 1978, total FRB credit starts up again, this time to reach over $130 billion at year-end. The gold price rushes upwards to $250. FRB credit peaks after the Miller monetary policy changes of November 1, 1978 and so does the price of gold. FRB credit declines and stabilizes through the winter of 1978–1979 and so does the gold price, remaining under $250 from November 1978 to early spring of 1979.

Beginning in April of 1979 total FRB credit advances rapidly from just over $125 billion, reaching $143.5 billion during the week ending January 2, 1980. During this same period FRB credit is steady for only six short weeks, between

October 3, 1979 (immediately before the Volcker moves) until November 14 (just about the time of the Iranian deposit freeze). Between November 14 and January 2 total FRB credit rises from $135 to $142 billion. In parallel, and after a short pause, the gold price takes off from $250 in the spring of 1979, tops out at $450 with the October 6 Volcker moves, declines and steadies under $450 for a few weeks in October and early November (at a lot of $372) and then vaults to $850 by January 15. Total FRB credit then declines for two weeks from its peak of $143.5 billion on January 2, 1980 to $138,077 during the week ending January 23, 1979. On January 25, at the time of this writing, the gold price has declined to $634.

I do not claim that the lagged correlation between the rise of total FRB credit and the rise in the gold price is perfect. But there is a compelling association of the two. Indeed, almost every reacceleration of FRB credit between January 1976 and January 1980 tends to be accompanied, after a varying but short lag, with a logarithmic acceleration of the rise in the price of gold. Indeed, this more than proportional rise in the gold price may be explained by the increasing sensitivity and reaction speed of market participants to information which suggests that the Fed is expanding credit, rather than, as the chairman of the Fed says, contracting or stabilizing credit. This increasing sensitivity of market participants suggests a confirmation of the much discussed theory of inflationary expectations. That is, in response to each new injection of Fed credit, individuals and businesses move ever more decisively to protect themselves against inflation in general. Each successive protective move gives rise to disproportionate rises in the prices of the protective mechanism in particular, in this case gold, the ultimate hedge against credit inflation from time immemorial.

Next, a look at Figure II shows that M–1 (currency plus demand deposits) exploded upward at a 10.6 percent rate during the six months before October 6, 1979. So did the price of gold (see Figure I).

This raises a very simple question. Does one observe in the more conventional monetary aggregate, say M–1 and bank reserves, any correlation with gold price variations? In fact, after October 6, M 1 growth slowed down for several weeks. The price of gold stabilized during the exact same period. Similarly, during the last six weeks of 1979, M–1 growth accelerated noticeably. And the price of gold doubled.

Now one might conceivably argue that the rate of change in M–1 and the rate of change in the price of gold are only approximately correlated and are therefore not entirely convincing. Perhaps larger positive variations in monetary magnitudes are required to explain the gold price changes. Let us, therefore, observe the rate of change in bank reserves. After all, Chairman Volcker and Fed Governor Wallich have remarked that these reserves are now directly the target of central bank operating techniques. Therefore, the trend growth of bank reserves should indicate changes in Federal Reserve operating policies, as they are actually implemented by the open-market desk at the N.Y. Fed.

To begin with, it can be seen in Figure II that bank reserve rates of gain accelerated almost four-fold, from 3 to 11.1 percent, during the 13 weeks before October 6. During the steady 3-percent growth period—from the summer of 1978 until the late spring of 1979—the price of gold oscillated in the modest range (at least by today's standards) between $200 and $250. As bank reserve growth accelerated from 3 to 11 percent between July and September 1979, the gold price curve, with only a short term lag, arched exponentially toward $450. This rise then stopped, coterminously with the October 6, 1975 announcements.

For about two months, bank reserve growth seemed to have stabilized—and so did the price of gold—below $450. Then, once again, bank reserve growth rates almost doubled, from 11.7 to 19.5 percent during December 1979. At that point, the price of gold headed into the wild blue yonder—toward $800.

Focusing on the bank reserve component of the monetary base makes sense because market participants largely determine the volume of the other component of the monetary base—namely, currency. The users of money in the market demand the quantity of currency they desire to hold, while the central bank, through open market operations and the discount window, substantially determines the level of bank reserves at the margin.

The change in composition in the monetary base during the past six weeks, i.e., the decline in currency accompanied by rapid bank reserve growth is especially alarming. As we know, bank reserve growth has a much more dynamic impact on

the potential growth of credit and of the money supply. Moreover, by the Fed's own declarations since October 6, 1979, it tends to indicate the direction of Federal Reserve monetary policy.

Imagine for a moment a foreign gold speculator who has read the various Volcker and Wallich statements as well as the October 6 "prospectus" and who has also been observing recent bank reserve growth rates. Certainly he would conclude that one should not look at how a U.S. central banker moves his lips, but rather how he moves his feet.

In this particular case he would watch the growth in the "footings" of the central banker's balance sheet. After all, the foreign gold operator may also operate in the foreign exchange market. Consider Figure VIII which charts the movement of the dollar on foreign exchange markets. There, too, one sees that the value of the dollar, on a trade-weighted basis, had been falling before October 6, 1979, paralleling the rapid growth in bank reserves. The fall of the dollar terminated abruptly following the Fed announcements on October 6. The dollar then rose in foreign exchange markets by approximately 3.25 percent during the next six weeks, a period corresponding precisely with the steadiness of Total Federal Reserve Bank Credit (at around $135 billion) during October and early November (see Figure IV, October 3 to November 14). But as "total federal credit" expanded once again, beginning in the third week of November. the dollar resumed its decline and fell approximately 2.75 percent by early January. Since January 2, 1980, total Federal Reserve Bank credit has fallen from $142 billion to $138 billion at January 23. During the market week ended January 25, the dollar stabilized and began to rise modestly on the foreign exchanges.

Like any commercial bank, the central bank largely determines the volume and composition of its particular financial assets, i.e., total Federal Reserve credit, even if it influences only indirectly the monetary aggregates, M–1 and M–2, in general. Between November 14 and January 2 observe the path of growth of total FRB credit indicated in Figure IV. Figure II (above) shows acceleration to a 13.7 percent rate of growth in total Federal Reserve credit between December 4, 1979, and January 2, 1980. Taken together with the 19.5 percent growth of bank reserves during December (and even considering seasonality requirements), one may deduce from these rates of growth an alarming inconsistency with the stated goals of Chairman Volcker's October 6 monetary policy. It appears that hyperactive open market operations by the Fed only succeeded in amplifying substantially its portfolio of securities, thereby expanding credit at a varying but escalating rate until January 2. 1980.

Several other indicators of Federal Reserve policy should also be noted. First, note the discount rate which stands today at 12 percent (where it has been since October 6, when it was raised 1 percent). The discount rate is, of course, the rate at which the central bank lends reserves ("discounts") to commercial banks in order for the banks to meet their statutory reserve requirements. Upon these "loaned" reserves, the banks expand credit. During the week of October 10, 1979, right after the Volcker announcement, these "discounts at the window" (loans) to the commercial banks averaged $938 million (including seasonal). Yet on the weekly settlement day, January 16, 1980, these same loans to commercial banks had expanded to $1.718 billion, having risen to approximately 4 percent of all the required reserves of the banking system.

Consider what it means that the discount (or central bank lending) rate is still at 12 percent (January 26). But the prime rate is 15¼ percent. Commercial paper rates are over 13 percent: 6 month CD rates are over 13 percent in the after market. Coupon equivalent yields on 6 month U.S. Treasury bills are close to 13 percent. Bankers acceptances, prime financial assets, are over 13 percent. Now, compare these rates in the market to the discount rate at the central bank. We conclude that, in effect, the Federal Reserve system is subsidizing the commercial banks—with taxpayers' dollars—by loaning them money at 12 percent, which the banks then relend at 15 percent and more, at different levels of risk. Indeed, if the banks desire no loan risks, they can still maintain and increase their government securities portfolios which yield more than a subsidized marginal borrowing rate, i.e., 12 percent (the discount rate) at the Federal Reserve System. If a banker can make a profit on a government subsidy, he will—he would be foolish not to do so. Thus, the government, while proclaiming tight money, is subsidizing the expansion of credit by maintaining the discount rate, on marginal borrowings by the banks, below market rates of interest.

One should keep another set of relations in mind: The central bank lends to the

commercial banks at 12 percent; the commercial banks lend to market participants at 15¼ percent. But the annualized inflation rate in December was about 14 percent. Now, the "real" rate of interest is the market rate minus the inflation rate. Therefore, the real prime rate of interest is about 1¼ percent, 15¼ percent minus 14 percent. At this price, 1¼ percent interest, there is a surfeit of borrowers who think they can earn more than the cost of new credit. Ineluctably, they borrow and credit expands.

The fact that the Fed raised the discount rate to 12 percent on October 6 was an empty gesture. The new rate is still a subsidy to credit expansion. Indeed, the Fed's discount rate policy is perverse. It gives rise to increasing credit creation, the consequences of which are diametrically opposed to the stated goals of the Federal Reserve Bank as proclaimed by its Chairman on October 6.

Moreover, the Fed's November 1, 1978, and October 6, 1979, policies of raising marginal reserve requirements on incremental sources of commercial bank funds have also proved to be ineffectual. By raising the cost of funds to domestic banks, the Fed has merely succeeded in driving more of our banking system offshore or into the hands of foreigners.

In sum, the Fed's discount rate policy is a non-starter. It is a subsidy to credit expansion. The higher reserve requirement policy is ineffectual. The higher cost of funds may decrease the demand for credit, but the Fed has not reduced the supply. Moreover, increasing marginal reserve requirements causes the export of the U.S. banking system to lower cost banking centers. Surely, open market operations have failed. They have not stabilized the growth in bank reserves according to the October 6 goal. Rather, open market operations have merely added to the central bank's portfolio of securities, thereby creating excess cash balances in the market which intensify the rise in the price level at home and the fall of the dollar abroad.

Furthermore, if the point of the Fed's dramatic announcement on October 6 was to underline its intention to shift policy from interest rate targeting to a supply-side control of bank reserves, then we can draw only one of several conclusions: (1) Chairman Volcker had good goals and noble intentions in mind, but he does not actually know how to achieve them. (2) The Chairman believes in the goals he announces, but the Federal Open Market Committee (FOMC) staff and the staff at the N.Y. Federal Reserve Bank open market desks are pursuing different goals. (3) The Chairman does not study his own balance sheets. Therefore, the central bank is a ship at full sail with no rudder: the helmsman has no compass; he does not know where he is headed. (4) The Chairman is about to change course and will actually achieve his original objectives in the coming months, even though the evidence suggests he has failed during the past 15 weeks. (5) The Chairman has been dissimulating all along. I rule out opinion (5) because I know and respect Paul Volcker. Any one—or a combination of all four—of the other options might be correct. About (4) especially we can only speculate; one can go long, short, or stay out of the bond market. To guess wrong is to suffer losses.

There have been many plausible "political" interpretations of the rise in speculation in markets for commodities, stocks and gold during 1979. U.S. policymakers especially have attributed the "side show" of the gold price rise to, among other things, the Iranian deposit freeze, fear of global war, and additional oil price rises. But the truth is that, by itself, the prospect of serious confrontation with Russia and/or Iran and OPEC would not necessarily intensify inflation—in the absence of an expansive U.S. monetary policy. But, naturally, worrisome international events do cause the owners of dollars in world markets to focus ever more closely on the monetary policies of our central bank and of our commercial banks. Reading the balance sheets of our banks, they observe only relentless credit expansion even while—on November 1, 1978, and October 6, 1979—our leaders proclaimed new policies of credit restraint. Dollar owners will also reason that, if President Carter amplifies defense budgets and other vote-buying expenditures, then these new federal budgetary demands, superimposed on the existing deficit and accommodated by an already expansive credit policy at the Federal Reserve, will raise inflation and inflationary expectations to a new and higher level.

Thus, the speculation in gold originates in fundamental financial considerations. The exponential rise in the price of gold has been a function of accelerating rates of credit growth, as shown in the Fed's own balance sheet. War scares, oil prices hikes and Iranian asset freezes are merely the proximate events which trigger

new advances in the price of gold. If these proximate causes did not exist, but the same credit policies prevailed, there would still be other plausible events to trigger the same advance in the price of gold and to provide convenient rationalizations to policy makers who ignore the price revolution going on before their very eyes.

The incredible rise in the price of gold is no "side show." On the contrary, it is the main event. It symbolizes defective U.S. leadership in the areas of monetary, economic and foreign policy. The mutation in the gold-dollar relationship is a concrete economic event; it is also a metaphor for the decline of U.S. prestige in general, and of its currency at home and abroad.

Caught up in the specious present, U.S. policymakers ignored the fact that gold is the oldest money of civilized man. Today, gold price calculations still dominate large segments of the global trading system. Until a mere generation ago gold was at the core of the fractional reserve banking system of all of Occidental civilization. The definitive rupture of this gold-backed monetary system in 1971 can be closely related to the price inflation of the past 10 years. The thirty to forty-fold rise in the price of gold since 1932 is sufficient commentary on the effectiveness of the experts who ushered in the era of central bank-managed currencies. It bespeaks the termination of the fashionable monetary doctrines of our age, preeminently the age of inflation.

There is now one crucial economic issue before us: What monetary policies must we embrace in order to restore sound money to our children and to our children's children?

III: Towards true monetary reform and a sound currency[1]

First, some general observations on central bank policy and the measures of money supply.

The Federal Reserve System does not determine the money supply, all superstition to the contrary notwithstanding. It influences indirectly the volume and composition of the total money stock; but the central bank does not determine it. The money users—consumers and producers—are sovereign. Consumers and producers demand currency and bank deposits in the market; the central bank and commercial banks supply them. M–1, M–2 (and all the other M's which bankers and economists use to measure the money supply) are, at best, first approximations of the money stock. Moreover, definitions of the M's change, as the staffs and chairmen of the Fed change. The statistical data, used to define the M's, are unreliable, as we know from experience, and subject to constant and substantial revisions. Even after defining the money stock and revising the data, one must cope with the variable relationship between the quantity of the money stock, M–1, and the rate at which it turns over in order to finance a given volume of economic transactions at a specified price level. The rate of turnover of money, its velocity (V), is as much beyond the control of the Fed as the money stock itself. Finally, all the M's have a supply and a demand side. These M's are thereby only in varying degrees influenced by (supply-oriented) central bank exhortations, open market operations, reserve requirements, and discount rate policies. Ultimately, the demand for money is determined in the market by the users of money.

If the Federal Reserve does not alone determine the level of M–1 and M–2, it determines, within limits, as do all enterprises, the amplitude of its own balance sheet. A balance sheet has assets and their counterpart, equal liabilities. The Fed largely determines the volume and composition of its own financial assets, the monetary counterparts of which are, among others, commercial bank deposits and currency, that is to say, the Fed's liabilities. The Federal Reserve is, first and foremost, a "bank." It is not the experimental laboratory of the Department of Economics at Yale University. Nor is it a classroom at the University of Chicago. More precisely it is the "Bank of Issue." It has a balance sheet and it has an income statement. As a banking institution it can perform no magic. It buys assets with the resources provided by its liabilities. Within limits, the central bank varies the composition of its financial assets, Federal Reserve Credit, as it pleases. Unlike the M's, there is nothing imprecise about Federal Reserve credit. It is a fixed and measurable item to be determined in the footings of the balance sheet.

In these respects, the central bank is just like every other bank. But it is unique in that, among other things, it is the clearing bank for commercial bank members.

---

[1] This entire section draws its inspiration and some of its basic definitions from the works of R. G. Hawtrey, Walter Bagehot, and especially from those of Jacques Rueff.

It is the Bank of Issue for legal tender currency which it supplies upon demand. Moreover, it has certain monopoly powers delegated to it by the Congress under the Constitution. These monopoly powers are euphemistically referred to as "regulatory authority over the banking system."

During the past twenty years, the relationship between the Federal Reserve, the rate of inflation, and the variations in the money stock has engendered much discussion. It is generally agreed by modern bankers and economists that the quantity of money and the rate of inflation are related. In various forms, they resurrect the classical quantity theory of money. If M is the quantity of money (or M–1, or M–2), it is generally argued that its rapid increase leads to inflation. But M is not a measure only of the supply of money. What of the demand for money? During part of 1978 the quantity of money in Switzerland grew approximately 30 percent while the price level rose only about 1 percent. Even if inflation rates in Switzerland have accelerated with a lagged effect, inflation persisted at a modest fraction of the growth in the quantity of money. In the U.S. in 1979 the quantity of money, M–1, grew about 5 percent while the CPI inflation rate rose 13 percent.

Now, what kind of close correlation between the growth of the money stock, M, and the price level, P, do these dramatically opposed examples provide, even if one assumes a monetarist lag? Certainly too loose a correlation to use for forecasting accurately. And especially too loose to gauge with precision the crude operating techniques of the central bank which intervenes in the market for cash balances to bring about results which can only be known one to two years in the future under new and different circumstances. Under these conditions, reserve requirement adjustments, hyperactive open market operations, or other central bank operating techniques geared to the monetary aggregates, M–1 or M–2, may achieve results. But only fortuitiously. The Swiss and U.S. examples, among others, show that they do not produce a specific level of money supply growth consistent with a predictable inflation rate. One observes in the real world, with or without lags and during whichever short or long intervals chosen, substantial variations between a certain quantity of money, M, and a price level, P.

Accordingly, one can have little faith in the ability of the Federal Reserve to determine the quantity of money in circulation. This is no criticism of the Fed. On the contrary, it is merely to acknowledge the limits of the human mind and the paucity of precise and ready information. This problem of imperfect and rapidly changing information illustrates the problem of monetary policy and central banking. To conduct the operations of the central bank, there must be a goal. If the goals are both price stability and a certain supply of money, M, one must know, among many other things, not only the magnitude of the supply of money but also the volume of demand for money in the market. If individuals, businesses and other entities largely generate the demand for money, the Fed must have providential omniscience to calculate correctly, on a daily or weekly basis, the total demand for money, even if it could gather reliable statistical information and even if its definitions of money were correct and constant.

The fundamental problem can be stated quite simply. Because the money stock cannot be controlled effectively by the Fed, the goals of the Fed's monetary policy must not be to control them. The Fed simply cannot determine accurately the demand for money. Neither does the Fed possess the information, the operating techniques or the perfect foresight to bring about a certain level and rate of growth of M. As we know from experience, open market operations are blunt instruments. Moreover, no stipulated level of M during a specific market interval—in the U.S., Switzerland, Germany, or elsewhere—is necessarily correlated with a specified rate of inflation, or deflation; nor is it with price stability.

Yet we do know that the Fed does determine the footings of its own balance sheet. By purchasing securities or by providing discounts (advances), it does increase credit to the commercial banks. Now if these open market operations unwittingly create excess cash balances in the market, the price level will thereby rise. But if the goal of the central bank were price stability, then the Fed must promptly reduce the volume of credit it has made available to the commercial banks. As credit contracts, so does the money stock. As a result, excess cash balances will be absorbed until the level of actual cash balances is strictly equal to the amount of desired cash balances. At that moment excess demand, created by undesired cash balances, will dissipate and the price level will gradually stabilize.

In this context, one defines cash balances in the market as currency and checking account deposits, i.e., the money held by participants in the market. Consider

now that new cash balances, under the present monetary system, can be provided only from "outside" the market. In concrete terms, it is the commercial banks and the central bank, given our existing set of monetary institutions, which create new money for the market. In this specific sense banks are financial institutions outside the market, as it were, away from the market participants holding existing cash balances. One distinguishes therefore between the bank rates of interest outside or away from the market and the interest rates in the money market, namely, the interest rates for commercial paper or banker's acceptances among others. Under changing conditions of supply and demand, the intersection and divergence of the bank rates and the rates in the money market first join and then disengage the rates in the money market and the rates at the banks. When joined to the rates in the market, the bank rate may be conceived as the threshold rate outside the market, at which level the market participants may gain access to new cash balances.

As I have argued, if the goal of the central bank is price stability the operating target of monetary policy at the central bank must always be to make the supply of cash balances equal to the demand for cash balances—demand as it is determined in the market place at prevailing interest rates. To achieve this goal, the central bank must simply hold the discount rate above the market rate when the price level is rising, providing money and credit only at the discount rate, as it is demanded. This is the correct target of monetary policy. It is a correct policy because it can succeed. If the target of Fed policy is the money stock, then as we have seen, it fails, because the Fed cannot determine the supply and the demand for money. It can only determine its own assets. But to supply only the new cash balances demanded by the market (our correct Fed policy) means simply that the Fed adds new assets to its portfolio (securities and discounts) while simultaneously it increases equally its liabilities (bank reserves and currency). Under the rigorous new target of monetary policy, the Fed will supply those bank reserves and currency in an amount which is strictly equal to the demand for them from the market. Now, if the supply of cash balances is strictly equal to the demand for cash balances, the price level must tend toward stability. That is to say, there can be no excess cash balances. If there are no excess cash balances, there is no inflation.

Such a remobilized discount rate is an artful instrument, properly proportioned to the limited knowledge and intelligence of mortal man. Its effective use requires little discretion on the part of central bankers and economists. Moreover, the discount rate merely requires for its effective use the limited information available to all participants in the market for cash balances. To oversimplify but to briefly demonstrate this point, consider that the discount rate is a bank rate. It is the threshold level at which some buyers of cash balances (in this case, the banks) may gain access to new money "outside" or away from the market (that is, at the central bank).

Now, in a given market period, if acutal cash balances are equal to desired cash balances, market interest rates must be stable. If in a subsequent period the demand for cash balances exceeds their supply in the market, money market interest rates on bankers' acceptances and commercial paper begin to rise toward the level of the bank rate outside the market. If the demand for cash balances in the market remains unsatisfied, money users will eventually graviate to the bank, when the market rate finally intersects with the bank rate. If the demand for money persists, then the bank rate will begin to rise in tandem with the market rate. But under a correct monetary policy, the discount rate hovers slightly over the bank rate, as the bank rate itself hovers slightly over the market rates. As soon as the banks exhaust their ready cash balances, the commercial bank rate itself will levitate toward the discount rate of the central bank. At the point where the commercial bank rate intersects with the central bank discount rate, creditworthy commercial banks may then cross the critical threshold. Thereby, they gain access to new cash balances at the central bank outside the market. The central bank's willingness to discount eligible paper as the "banker of last resort" provides the necessary cash balances still demanded but previously unavailable in the money market outside the banks. There is still no inflation, because the banking system, as a whole, supplies a quantity of money strictly equal to the amount demanded in the market. The money stock goal is met, because market participants obtain all the money they need.

In the context of the new Fed target, as defined above, reserve requirements are therefore inocuous and may be abandoned. More importantly, one terminates

open market operations because the central bank cannot know all the data in the market and therefore cannot know in what precise volume and at what precise interest rate it should supply credit by buying and selling securities. Open market operations are a crude intervention; and, as experience has shown, generally result in a surfeit or paucity of cash balances supplied to the market. As a result, open market operations in the past have tended to cause unpredictable variations in the price level. In fact, history shows that open market operations lead to secular extension of credit and a sustained rise in the price level. Is there really so great a difference between neo-Keynesian fiscal fine tuning—through tax and budget policy—and Monetarist fine tuning—through continuous open market operations in the market for cash balances? What are continuous open market operations if not an effort to fine tune the money stock, according to a predetermined rule, a rule which may or may not give rise to an equilibrium level of cash balances during a given market period?

Previous experience in the market gives one little confidence in central bankers who, even following a fixed quantity rule, have the monopoly power to manipulate—on a day-to-day basis—the interventionist tool of open market operations. First, each market period is unique. Does the Open Market Committee know enough about the peculiar origins of disturbances in the market for cash balances in a given market period? Second, financial information is neither perfect, nor is it instantaneously available. Nor are the causes and effects of the variations in the demand for cash balances, in any one market period, sufficiently well-known. Open market operations, even in the hands of intelligent men of good will, are at best nothing more than poorly educated guesses and at worst rank speculations. These guesses are hardly the stuff of a responsible monetary policy. They will not give rise to an "efficient tool" for the implementation of monetary goals, even if the rule or goal itself is efficient and simple.

Therefore, the correct policy prescription is to cease open market operations and to require the Treasury to finance its cash needs in the market, away from the banks, except for authentic self-liquidating tax anticipation bills of less than a year's maturity, made eligible thereby for rediscounting. As a result, monetary regulation in the banking system would henceforth be achieved through the supremacy of the central bank discount rate. If we wish to avoid the evils of an overly "managed currency," then it is uniquely the discount rate mechanism, alone among the tools of central banking, which achieves this goal. The discount rate is a tool scaled to the wit of men. It requires little of central bank "currency managers" who might otherwise desire to fine tune the money stock growth, according to a quantity rule, with the full panoply of their powers. The monetary policy of the future will therefore distinguish between ends and means, calibrating the latter to the former.

If we seek an end to inflation, then we seek a stable price level. We do not seek a specified quantity of money. But if the supply of money equals the demand for money at prevailing interest rates, then the price level must remain stable, and people and businesses will have all the money they desire—because, in a free and open society, the demand for money is determined by the sovereign users of money, the consumers and producers. How many solvent consumers in a market economy make a demand for money which is not supplied? None. The participants in the market create the demand for money. The commercial banks and the central bank, by guiding the bank rate and the discount rate and deftly hovering over the market, must simply be prepared to supply credit-worthy borrowers without limit; and, *in extremis*, to be the banker of last resort.

As a result of this new policy target, the supply of cash balances in the market must always be gradually adjusted to the demand for them. Then there can be no inflation. The reason being that since the quantity of actual cash balances supplied is made strictly equal to the amount of money desired, the market for cash balances as a whole will be stable. Excess cash balances, the cause of inflation, have been ruled out. The money market, under these conditions will tend toward equilibrium; and, under the new operating target, will tend to remain there. The consequences of such a monetary policy will have pervasive effects throughout the economy. Since the supply of cash balances tends to equal the demand for them, no one in the market will desire to make a purchase with existing cash balances until the first produces a new sale in exchange for additional cash balances. In a word, no one will demand without first making a supply. When the market for cash balances tends toward equilibrium, no one

will consume anything more unless he first produces something more. Under such conditions the price level will vary moderately around unity. That is to say, there will be no inflation arising from excess cash balances created by the central banking system through open market operations, since the banks will supply only the money which is demanded in the market.

As defined here, such a monetary policy comes to grips with, indeed it modifies, Say's Law of Markets and the inadequate Quantity Theory of Money. One reformulates: aggregate demand is equal to the value of aggregate supply, augmented (+/—) by the difference between the supply of actual cash balances and the level of desired cash balances.[2]

The new monetary doctrine for a sound currency is now clear: First, Fed open market operations must cease. Second, the discount rate of the central bank must be remobilized so that it ceases to be a subsidy rate, which in the past gave rise to credit expansion, excess cash balances, and inflation. The discount rate becomes instead a market-related rate and generally hovers, during periods of economic growth, above the bank rate, thus providing no profit (or subsidy) incentives to commercial banks to expand cash balances (credit) beyond the demand for them.

To be sure, Monetarists would claim to fix the total quantity of money, through a specified money stock rule, in order to regulate the government monopoly (the Federal Reserve Board) which supplies cash balances to the market. Yet the simpler, market-related technique would be to make the value of a unit of money equal to a weight unit of gold, in order to regulate the same monopoly. Some would argue that such a monetary "regulator" absorbs an excess of real resources, namely the laborious process of gold production, in order to sustain it, and is therefore, in social and economic terms, too costly. Whatever the minor incremental social cost of a convertible currency, it is nevertheless a superior stabilizer and a more efficient regulator of price stability in the long run. One test is history, and Roy Jastram's scholarship proves, in "The Golden Constant," that convertible currencies yield price stability in the long run. For that matter, the goal of an enduring social order, unlike that of the individual, must not be to maximize welfare in the short run, but rather, in the long run. It is not an excessive cost to society to allocate a minor share of its real resources to the regulating mechanism of its money supply. Nothing else will assure the indispensable virtue of long trust in its monetary unit.

Therefore, in order to bring about long-run stability in the market for cash balances, the dollar must be defined in law as equal to a weight unit of a real commodity, such as gold, at a statutory convertibility rate which insures that nominal wage rates do not fall. Nothing less will yield a real fiduciary currency. Such a gold convertibility plan at a fixed rate is virtually a constitutional guarantee of the purchasing power of money and therefore of the future value of savings.

The legal framework of a convertible currency makes of money an enduring political institution. As the U.S. has the oldest written political constitution, it is now time to offer the world a real money, underwritten by the constitutional guarantee of gold convertibility.

As a result, no bank, not even the central bank, could expand credit beyond the demand for it in the market. An excess supply of money would cause the general price level to rise, but the gold convertibility price would remain the same. Therefore, the fixed gold price would fall relative to the rising general price level. Elasticity of demand for the relatively cheap gold would create an increasing demand for a limited supply of it in exchange for the excess cash balances now offered for gold to commercial banks and the central bank. The failure to redeem these excess dollars for gold would, under convertibility rules, threaten the bankruptcy and dissolution of a commercial bank. A default by the Federal Reserve System would result in the breach of a solemn legal obligation and therefore violate the Constitution of the U.S. Depreciation of the currency would follow, and inflation would be a direct result. Constrained, therefore, by law to redeem excess dollars with specified weight units of gold, the central bank, as the price level rose, would have to reduce the growth of credit and money—until once again it supplied no more money than the market demanded. As the banks contracted credit, excess cash balances would be reabsorbed, and demand for gold at the banks would cease. Convertibility would prevail. And, the threat of bankruptcy would be forestalled. The price level would descend; inflation gradually would end. Stable

[2] This formulation of the quantity theory of money expresses the basic theorem of Jacques Rueff's monetary economics.

prices would not prevail, even though the banking system, in order to increase profits, may have wanted to expand money and credit faster than the rate of growth of production.

At all times these institutional arrangements under the new monetary regime will assure that the supply of cash balances will be made equal to the demand for cash balances, at varying interest rates determined by participants in the market for cash balances. What matters is that the level of cash balances and the level of interest rates is determined in the open market, not in the Open Market Committee of the Federal Reserve System. So long as the discount rate hovers above the bank rate, and the bank rate above the market rate for eligible paper, the market for cash balances will yield in any given period a closely related cluster of interest rates. The variations in these market rates, as they intersect with and disengage from the bank rates, will tend to create an equilibrium level of the money stock. There is little need in such a market for trying to fine tune the money stock through continuous open-market operations. An efficient money market, and simple institutional rules governing banking system discount rates, will tend to give rise to the necessary rate of growth in the supply of cash balances. Above all, this growth rate would be consistent with the rate of real economic growth (say 4 percent) and with changes in the velocity of money as determined by economic activity and the technology of the payments mechanism—because the new target of monetary policy is to supply only the quantity of money demanded in the market. As the target is hit, the goal of monetary policy will be fulfilled: namely, a stable price level.

In sum, the present inflationary impasse requires a number of specific remedies: (1) Remobilize the discount rate. (2) Admit that the central bank cannot control the money supply, even though it can control Federal Reserve Credit. (3) Therefore, abandon hyperinterventionist open market operations, as they cannot achieve a stable money supply. (4) Stand ready at the central bank to supply, at an unsubsidized rate, all the money demanded by solvent commercial banks. (5) After achieving the first four goals, herald the restoration of dollar convertibility (in 12 to 18 months) at a fixed rate, to be determined over time largely in the market; but at a level which, under no circumstances, will reduce nominal wage rates. (6) Finally, convoke an International Monetary Conference, under the leadership of the U.S., with the goal of establishing a true gold standard, one which would rule out the special privilege of official reserve currencies and thus remedy the most profound defect of the Bretton Woods exchange-rate regime.

The effects of true monetary reform would appear immediately. The price of gold would fall to its equilibrium level, emptied of a value based on inflationary expectations. The price level would stabilize rapidly. Long term interest rates would fall 700–800 basis points. At lower interest rates there would be a vast demand for investment capital. With a stable price level, a stable dollar, and lower relative tax rates the sluice-gates would open and a flood of savings would flew into the market. Equity and debt capital would once again pour into business enterprise. The nation's productive plant would be rebuilt. Therefore the demand for labor would rise. Unemployment would decline.

The true onset of the "American Century" will have arrived, coincident with the end of inflation in the Western World.

APPENDIX A

WALL STREET JOURNAL

WEDNESDAY, FEBRUARY 20, 1980

Gold Is Not a 'Side Show'

By LEWIS E. LEHRMAN

Lenin once observed that gold should adorn the floors of latrines. Keynes labeled it a "barbarous relic," and Milton Friedman has recently been saying that for a monetary standard you may as well use pork bellies.

When President Nixon demonetized gold in 1971, Henry Reuss, chairman of the House Banking and Currency Committee, predicted that the price of gold would fall to $6 per ounce. It is true that gold remained below $40 until 1972. But it rose to $200 in 1974 as inflation engulfed the final months of the Nixon administration. After monetary policy was abruptly tightened in 1974, gold gradually declined to a low of $106 in 1976.

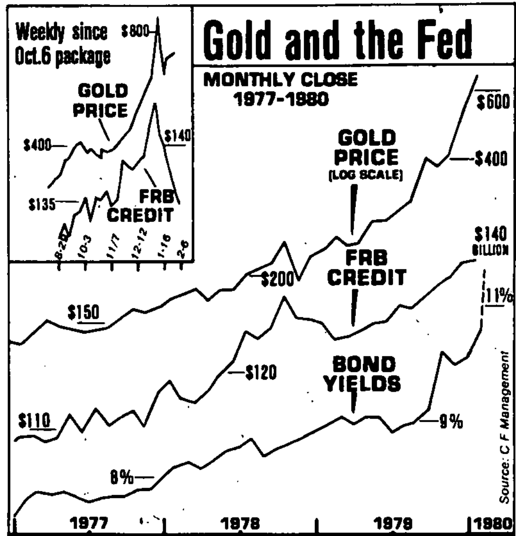
President Carter inaugurated his administration in 1977 with the rhetoric of austerity—pledging, among other things, to balance the federal budget. The price of gold promptly rose over $150. Mr. Carter replaced Arthur Burns with William Miller as Chairman of the Federal Reserve Board. By the autumn of 1978 the dollar was collapsing and gold was approaching $250. Then, on November 1, 1978, new policies to control the money supply and defend the dollar were announced by Chairman Miller. Gold fell to $200 within 30 days. But by the middle of 1979, gold was once again rapidly rising to $300.

In July 1979, amid much fanfare, Paul Volcker was summoned to replace Mr. Miller. Gold vaulted to $450 in September. In a crisis atmosphere, Mr. Volcker returned from the International Monetary Fund meeting at Belgrade to announce his new monetary guidelines on Oct. 6, 1979. They stressed a new method of targeting on bank reserves, and focused on the goals of a stable dollar, a slower rate of money and credit growth and an end to excessive commodity speculation in general and gold speculation in particular. Over the next few weeks, the gold price fell to $372.

Going Its Own Way

Three months later, as the gold price soared over $800, Mr. Volcker observed that gold was going its own way and that its movements had little to do with the success or failure of his Oct. 6 monetary policies. Treasury Secretary Miller allowed that the Treasury would sell no more gold during these "uncertain and uncharacteristic times," evidently meaning that gold is a good sale at prices ranging from $35 to $200 but a strong hold at $800. Fed Governor Wallich said the gold markets were no more than "a side show."

Yet on February 5, 1980, commodity future prices, following the earlier gold lead, closed at a record high, up 26% from a year earlier on the Commodity Research Bureau futures index. The market for U.S. government securities has suffered a devastating collapse. Gold closed around $665 on Feb. 15, more than 20% below the early January peak but 83% above its bottom of October 1979. It has since risen back above $700.



The price of gold in dollars, total federal reserve bank credit in billions, and the yield on long-term U.S. Treasury Bonds.

What caused the exponential rise and violent fluctuations of the gold price? The surging gold price, commodity prices and interest rates suggest that the so-called anti-inflationary money policy proclaimed by Paul Volcker on Oct. 6 has intensified rather than quelled speculation. The contradiction between Mr. Volcker's goals and the results achieved requires explanation.

An explanation for the Volcker contradiction—and for that matter the earlier monetary problems of Arthur Burns in 1972-74 and the failure of Mr. Miller in 1978 and 1979—has to start with a determination of what policy the Fed has *actually* pursued, as opposed to its announced goals. The economists have focused our attention on monetary aggregates such as M-1. Laying aside the problem of how to define these numbers—the Fed switched definitions only last week—the fact remains that the Fed does not actually control M-1, however measured. The money stock depends partly on Fed policy and partly on events elsewhere in the economy. Consumers and producers in the market largely determine the demand for money, while the Fed influences its supply.

For any real understanding, we must remember that the Federal Reserve is above all a bank, though a bank with the monopoly powers to issue legal tender currency and to regulate the banking system. It is not a magical government agency, nor should it be confused with the Yale Economics Department or a classroom at the University of Chicago. To study the policies of a bank, you study its balance sheet, to see what its officers are actually doing. The only things its managers control, within limits, are the volume and composition of its assets and liabilities. The Fed's balance sheet will show the amount of credit it is extending to the commercial banking system.

The Fed's credit operations are re-

vealed in the balance sheet item called Total Federal Reserve Bank Credit. FRB credit is the Fed's financial assets—the amount of government securities, acceptances, advances, float and so on. Changes in FRB credit reflect the net operations of the Fed's open-market desk, foreign-exchange desk and discount window—the various ways the Fed influences the expansion and contraction of credit in the economy.

To achieve its announced Oct. 6 goal of restraining the growth of credit, the Fed would have to restrain the growth of FRB credit. But as the accompanying chart shows, total FRB credit growth *accelerated* between Oct. 6 and year-end. *And so did the price of gold.*

Let us go back to 1977 and look at recent history. Both FRB credit and the gold price were relatively calm in 1977, but in the second half of 1977 FRB credit rose toward $120 billion and gold toward $175. As expected FRB credit peaked seasonally at year-end; the gold price topped out two months later. By October of 1978, FRB credit had expanded above $130 billion, while the gold price rushed to $250.

FRB credit peaked after the Miller monetary changes of Nov. 1, 1978, and so did the price of gold. FRB credit declined and stabilized through the winter of 1978-1979, and so did the price of gold, which remained below $250 through the winter.

Beginning in April of 1979, total FRB credit advanced rapidly from $125 billion, reaching $143.5 billion during the week ending January 2, 1980. During this period FRB credit did stabilize for six weeks, starting with the week of Oct. 3, reflecting the Volcker Oct. 6 moves. But it started to rise again by Nov. 14, about the time of the Iranian deposit freeze. From Nov. 14 to Jan. 2, total FRB credit startled most Fed watchers by rising from $135 billion to nearly $144 billion.

In parallel, the gold price took off from $250 in the spring of 1979, and topped out at $450 with the Oct. 6 Volcker moves. Promptly the gold price declined to under $450 and steadied along with FRB credit, which remained steady in October and early November. Gold then vaulted to $850 on Jan. 15, peaking just two weeks after FRB credit. FRB credit declined from its high of $143.5 billion on Jan. 2 to $134.5 billion during the week ending Feb. 6. By Feb. 15, the gold price fell to $665.

The lagged correlation between the rise and fall of FRB credit and the rise and fall of gold is not perfect, but there is a compelling association between the two. Indeed, even taking into account seasonality, almost every reacceleration of FRB credit between January 1977 and January 1980 tends to be accompanied, after a varying but short lag, with an acceleration in the price of gold.

The relationship is logarithmic: a rise in FRB credit causes an exponential rise in the gold price. This relationship reflects the impact of expectations, well known to classical economists. Market participants are increasingly sensitive to information that suggests the Fed is expanding credit rather than, as the Fed chairman says, contracting or stabilizing credit. In response to each new injection of Fed credit, individuals and businesses move ever more decisively to protect themselves against inflation.

It is essential to point out that the price of gold seems to respond directly to the monetary policies *actually pursued* by real people at the Federal Reserve open market desk. But the gold market does ignore what the Chairman says or others think the Fed will do. In a word the rise of the price of gold is just one more reflection of excessive credit growth, as shown by the Fed's own balance sheet. If war-scares, oil-price hikes and Iranian asset freezes did not exist but the same expansionary credit policies prevailed, Fed apologists would find other plausible political events with which to rationalize the advance in the price of gold.

The Fed managers do not deceive us intentionally. Instead they deceive themselves. They believe they can achieve what is not within their power to achieve—namely, a certain quantity of money. Thus they create uncertainty and disorder in the financial markets.

The Fundamental Problem

The fundamental problem of Federal Reserve monetary policy can be stated quite simply. Because the quantity of money cannot be controlled effectively by the Fed, the goal of the Fed's monetary policy must *not* be to control it. The Fed simply cannot determine *precisely* either the demand for money in the market or its supply. Nor does the Fed possess the information, the operating techniques or the perfect foresight to bring about a certain rate of growth of money and credit, especially through its chosen technique, open market operations. As history shows, open-market operations succeed only in destabilizing interest rates and the money markets.

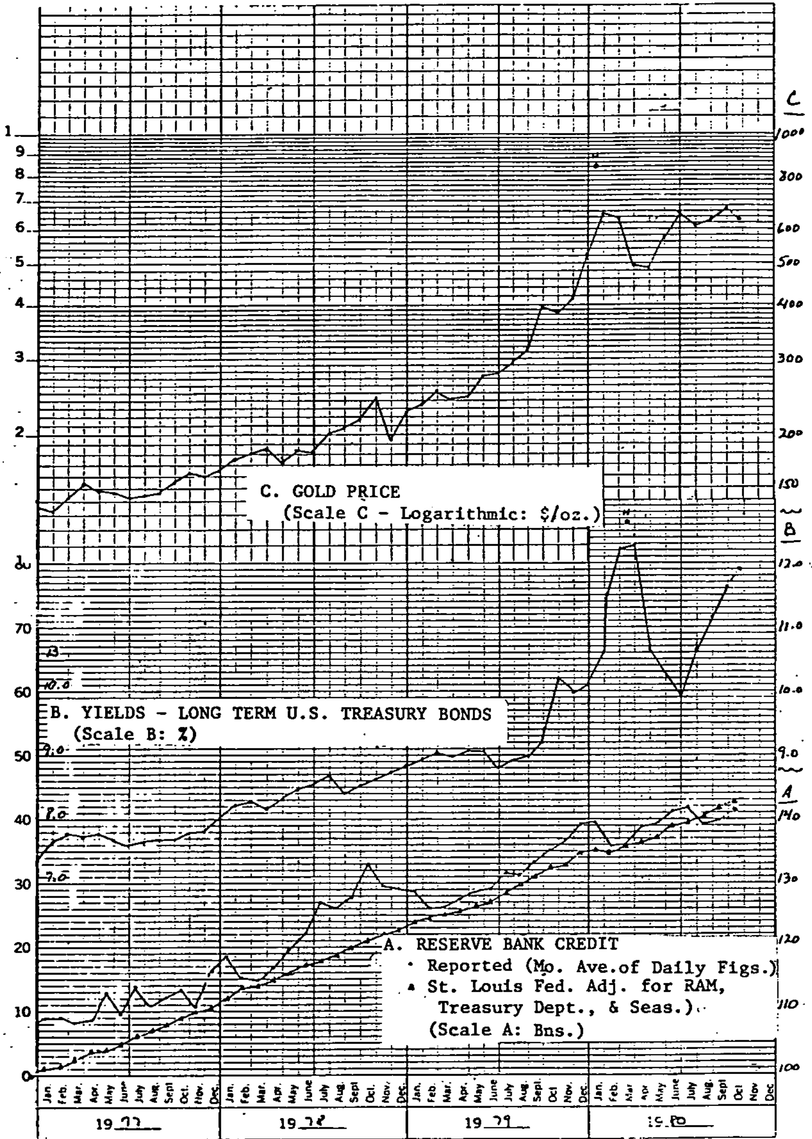
It is not the gold price which is unstable. On the contrary, it is the Fed's volatile monetary policies which are unstable. Steady monetary policies would produce different effects. It follows that the price level, like the gold price, can be brought down. The government bond market can be stabilized. But the monetary authorities must actually pursue the stabilizing policy which they proclaim—for more than a few weeks.

Ultimately, achieving the goal of price stability will require comprehensive reform of the monetary system. But for now, in their efforts to sustain a managed currency, Fed policymakers often misunderstand market data and the effects of their own hyperinterventionist open-market operations. They even have difficulty insuring that announced policies of the Fed governors are actually implemented by the staff at the open-market desk. Still, in the absence of comprehensive reform, it would help if the men at the Fed and Treasury stopped belittling the importance of the gold price. Their policies since Oct. 6 would have been better if they had recognized that it is no "side show," but a highly sensitive scoreboard for the main event.

Mr. Lehrman is former president and currently chairman of the executive committee of Rite Aid Corp., and president of the Lehrman Institute, an institution dedicated to economic and foreign policy research.

APPENDIX B

RELATIONSHIP OF GOLD PRICE, TREASURY BOND YIELDS AND RESERVE BANK CREDIT



APPENDIX C

GROWTH OF FEDERAL RESERVE BANK CREDIT

Date	FRB Credit*	Change from Preceding Year*
8/29/79	$131/926	+$4,077
9/5/79	$133,126	+$7,008
9/12/79	$131,823	+$7,921
9/19/79	$133,799	+$6,950
9/26/79	$134,244	+$1,852
10/3/79	$135,472	+$2,689
10/10/79	$133,231	+$1,492
10/17/79	$135,424	+$1,150
10/24/79	$135,321	+$1,233
10/31/79	$135,949	+$2,453
11/7/79	$134,508	+$5,497
11/14/79	$135,412	+$8,416
11/21/79	$138,651	+$8,234
11/28/79	$138,114	+$7,460
12/5/79	$137,906	+$8,463
12/12/79	$138,552	+$12,855
12/19/79	$139,100	+$9,456
12/26/79	$141,458	+$10,151
1/2//80	$143,528	+$10,850
1/9/80	$140,979	+$12,062
1/16/80	$139,663	+$10,044
1/23/80	$138,077	+$10,361
1/30/80	$135,842	+$9,176
2/6/80	$134,984	+$9,176
2/13/80	$137,720	+10,507
2/20/80	$135;521	+9,632
2/27/80	$134,907	+8,428
3/5/80	$134,979	+10,068
3/12/80	$137,227	+10,184
3/19/80	$137,285	+11,326
3/26/80	$137,068	+10,651

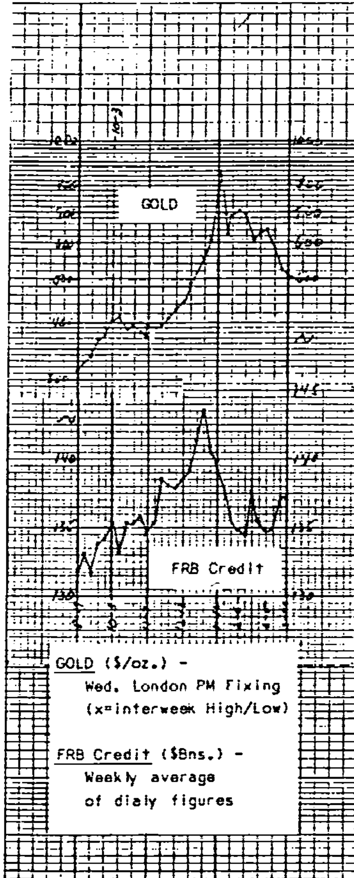
* In millions

Source: Federal Reserve Bank of New York

APPENDIX E

WEEKLY GOLD PRICE AND FEDERAL RESERVE BANK CREDIT

AUGUST, 1979 - APRIL, 1980



Representative REUSS. Thank you. Mr. Lehrman. Mr. Paulus is the vice president and economist of Goldman, Sachs.

STATEMENT OF JOHN D. PAULUS, VICE PRESIDENT AND ECONOMIST, GOLDMAN, SACHS & CO., NEW YORK, N.Y.

Mr. PAULUS. Thank you. Mr. Chairman.

Inflation has many hidden costs. Among them is the disruption of the relationship between certain key financial indicators and the the real economy; that is to say, between potential targets of monetary policy—money and interest rates—and real economic activity. This disruption increases the difficulty of interpretating the effects of any given Federal Reserve policy on the economy, and can lead to prolonged periods of unintended policy stimulus or restraint.

Take the case of money demand. Until half a dozen years ago, the demand for money was relatively stable. That is to say, the relationship between money and economic activity was relatively stable. If the Fed controlled the rate of growth of money, it could control, to a reasonable degree of accuracy, the rate of growth of nominal GNP.

During the last half dozen years, we have experienced accelerating inflation and record high interest rates several times. Those record high interest rates provided a very strong incentive for cash managers to fundamentally alter their cash management practices.

This, in turn, makes it possible, by adopting very sophisticated practices, to economize on non-interest-bearing balances. This permits the financing of a fairly rapid rate of growth of nominal GNP, for a time, with very slow growth in money.

From the third quarter of 1974 to the end of 1976, for example—a 2½-year period—M-1 grew at a 5-percent rate and nominal BNP grew at a 10-percent rate. All the models that I know of suggest that in order to finance that 10-percent rate of growth of nominal GNP, given what actually happened to interest rates, we would have needed, ordinarily, about 9-percent growth in money. Instead we got 5 percent.

That 5-percent money growth, I think, misled the markets. It misled the Federal Reserve. I was at the Fed at that time. I don't think we felt, or we recognized, that we were pursuing a stimulative policy—as we were, I think, in retrospect.

We've had two other periods of artificial slowing of money growth due to very high interest rates: One in early 1979; another one last spring. Both of those episodes followed periods of record high interest rates. We have just passed through another period of record high interest rates. I believe the prospects for a breakdown of the relationship between money and economic activity are very great in the months ahead.

Thus, we are likely to experience more instability in the relationship between transactions balances and economic activity.

The textbook response to this problem is: Switch your target to interest rates. But the very high inflation and high interest rates over the past several years have also, I believe, disrupted the relationship between interest rates and economic activity.

Following the credit crunch in 1974, usury ceilings and regulation Q ceilings were increased. Those actions by and large removed credit

availability constraints as a means of slowing down the economy. We have to rely more on high interest rates to weaken the economy today. That means that it is necessary to permit rates to move high enough to choke off the demand for credit—because supply constraints are no longer present. But that also means the relationship between interest rates and economic activity has shifted.

We have also observed in recent years the introduction of new financial instruments designed to take the sting out of high nominal rates. I would cite graduated payment mortgages and shared equity mortgages as two recent innovations. These instruments make it more desirable to borrow at a higher nominal rate of interest than in the past. They also shift the relationship between interest rates and GNP.

On this basis I think it would be a mistake for the Fed to shift to an interest rate target: It would be a mistake to give significantly greater weight to interest rates in the months ahead because the relationship between interest rates and GNP is breaking down or has broken down to some extent.

An important implication of the disruption in these relationships is the Federal Reserve cannot adopt a fixed-rate target or a fixed-rate targeting scheme. After all, if you can't rely on the relationship between the target and the goal, it makes little sense to religiously target on some variable and insure at all costs that the target is achieved.

A related conclusion is that the Fed should not rigidly follow its short-term goals when the monetary aggregates deviate for a time from their short-term targets. It would be a mistake to initiate policy actions to bring the aggregates back into line over short periods at whatever cost.

Now what can we say about the positive side of targeting, given all these uncertainties?

I believe the Fed should continue to target on M–1B, but, should abandon targeting on M–2, M–3, and L. My first objection to the multitude of aggregate targets is that is creates a good deal of confusion in the market. We can never be quite sure which aggregate the Fed is looking at.

More importantly, the interest-bearing components of M–2, M–3 and L are inversely related to changes in real household net worth, which happens to be a good indicator of spending. During periods such as 1973 and 1974, the fourth quarter of 1979 and the first quarter of 1980, when the Fed is tightening up, real household net worth was destroyed—that is, was being reduced at a significant rate. The destruction of net worth was related to a lowering of the capital value of long-term securities; stocks and bonds. But at the same time the interest-bearing components of the monetary aggregates—small time savings deposits, money market funds, short-term Treasuries and so on—were rising during every one of those periods.

Thus, the interest-bearing portion of the higher M's was giving a misleading picture of the degree of monetary restraint during those periods when policy was being tightened. As a result, the higher M's sent out misleading signals. Consequently, I don't think the Fed should target any longer on the higher M's.

The monetary base is controllable with considerably more precision than M–1B or any of the other aggregates, but it, like the higher

M's, is not related in a meaningful way to the final goals of policy. You can inspect, for example, the behavior of the base and nominal GNP during the last 7 years. From 1973 to 1975, nominal GNP was declining sharply. The monetary base grew at an 8-percent rate during that period. From 1975 to 1978, nominal GNP was rising sharply. The monetary base grew at an 8.5-percent rate during that period. Over the last 2 years, there has been a downtrend in the growth of nominal GNP. But the monetary base grew at an 8.25-percent rate. I don't think fluctuations in the base tell us very much about the ultimate goals of policy.

Finally, on the matter of the level of targets. I firmly believe that it is very important that the Fed adopt targets which are consistent with their goals; targets that are achievable.

During the last 5 years, the M–1 target—after 1979, M–1B—has been missed during all but four quarters. In the last 5 years, we've hit the targets basically in 1 year. And the cost of continually missing those targets is growing.

For example, in the last year, I would judge monetary policy as having been restrictive. Nominal GNP growth dropped from a little over 11 percent to under 9 percent. Yet market participants have judged the Fed's performance last year as being a failure because the monetary targets were not hit. Thus, even when the Fed did something right—and although they made some mistakes last year, on balance, policy was restrictive—they did not get the credit that they deserved. As a consequence, the favorable effects on inflationary expectations of having the public perceive a toughness in the Fed is lost. I repeat: The targets must be realistic and they must be achievable.

That concludes my remarks, Mr. Chairman.

[The prepared statement of Mr. Paulus follows:]

PREPARED STATEMENT OF JOHN D. PAULUS

I am pleased to have the opportunity to present my views to the Joint Economic Committee of Congress on the past and prospective conduct of monetary policy. My comments will emphasize the difficulty of conducting monetary policy in a highly inflationary environment, when past relationships between economic activity and both money and interest rates appear to have broken down. Because inflation is a cause of the breakdown in these relationships, intermediate instrument targeting—whether on money or interest rates—will continue to pose serious problems far the Federal Reserve so long as high inflation persists.

In compliance with House Concurrent Resolution 133, passed March 24, 1975, the Federal Reserve began announcing target ranges for several monetary aggregates in May 1975. The rationale was simple: the publically announced ranges would provide guidance to the Congress and the markets on the longer range policy intentions of the Fed, and, equally important, the glare of publicity focused on the aggregates would induce the Fed to steer monetary growth toward a level consistent with price stability.

The results of this experience, now beginning its 7th year, have been mixed. The Fed has regularly announced 1-year ahead target ranges for a multitude of monetary aggregates and bank credit. The markets often have been confused by the large number of targets, not knowing which, if any, the Fed really was following. Monetary growth, moreover, consistently has exceeded the top of the aggregate target ranges, especially for M1. This has raised concerns, sometimes unfounded, that the Fed was not really serious about fighting inflation. The principal benefit of the targets, on the other hand, has been to focus the attention of the Fed and the markets on the monetary aggregates.

Several important questions arise from the targeting experience of the last half-dozen years. Should the Fed continue to announce targets for monetary

aggregates such as M2, M3, and L which appear to be poor indicators of the effect of monetary policy on the economy? Why has actual growth not fallen within the target ranges with more regularity, and just how costly is it for the Fed to continue to miss its targets? How should the Federal Reserve adjust its monetary targets to shift in the relationship among money, interest rates, and economic activity? Indeed, should the Fed continue to target on money?

These are the principal questions examined in my remarks.

I. SUMMARY AND CONCLUSIONS

In the next two sections two questions are addressed: (1) for which aggregate (or aggregates) should the Fed announce targets; and, (2) at what level should the targets be set? It is concluded that M2, M3, and L should be abandoned as targets, and the Fed should announce a target range only for M1B. This range should be realistic—i.e. it should be achievable. This would probably require that the M1B target for 1981 be raised to take account of the near doubling of inflation in the last half-dozen years.

The next two sections deal with shocks to both the demand for money and the relationship between interest rates and economic activity. The source of both of these shocks, it is argued, is the inflation spiral of the last decade. It is observed that downshifts in the demand for money (i.e. temporarily slower growth of money due to an abrupt improvement in cash management (practices) have occurred several times since 1974 following periods of extraordinarily high inflation and interest rates. Such a shift is probably underway now and the Fed should acknowledge it by adjusting its target range to take account of the resulting speedup in the rate of turnover of money.

It is commonly asserted that when the relationship between money and economic activity shifts, the Fed should switch to an interest rate target. However, it appears that because of the deregulation of financial markets and the introduction of new financial instruments, both a direct result of high inflation and record interest rates, the relationship between interest rates and economic activity is also shifting. Thus, interest rate targeting probably does not provide an attractive alternative to continued targeting on M1B.

In the final section the question of how monetary policy ought to be conducted in an unstable world is raised, but not really answered. How policy should not be conducted is clearer: as long as instability in the relationship among money, interest rates, and economic activity continues, the Fed must eschew fixed-rule targeting. Almost as a corollary, rigid adherence to targets for short periods of time should also be avoided.

II. SELECTION OF TARGET AGGREGATES

To be useful, a target variable must be related to some final goal of policy, such as GNP, unemployment, or inflation. Intuitively, M1B is an appealing target aggregate. Its largest components are relatively homogenous in that neither currency nor demand deposits bear interest and both are held principally to make transactions. Research by Federal Reserve Board staff,[1] moreover, has established a causal relationship running from changes (more specificially, deviations from trend) in M1 to changes (again, deviations from trend) in nominal GNP. Despite increasing problems in interpreting fluctuations in M1B arising from legislative and regulatory changes and from occasional abrupt changes in payments practices, this aggregate can still serve as a useful indicator of the effect of monetary policy on spending.

None of the higher aggregates, M2, M3, or L possess the favorable characteristics of M1B—homogeneity and a causal linkage with a final goal. The degree of heterogeneity of some of the components of M2 can be seen in the table on the next page, which displays annual rates of turnover of demand deposits and savings accounts.[2] As can be seen, turnover rates for these components of M2 range from about 200 for demand deposits down to about four for "other," or

[1] See P. A. Tinsley and P. A. Spindt with M. E. Friar, "Indicator and Filter Attributes of Monetary Aggregates: A Nit-Picking Case for Disaggregation" Special Studies paper no. 140, Division of Research and Statistics; Board of Governors of the Federal Reserve System, Washington, D.C.

[2] "Turnover" is measured as the dollar value of debits to an account divided by the average balance in the account. For example, if withdrawals totaling, say, $10,000 are made during a year against a savings account which had an average balance for the year of $2,000, turnover would be five times per year.

personal savings accounts. Turnover rates for small time deposits, also included in M2, would no doubt be far lower.

Annual turnover rates of demand and savings accounts (September 1980)

Demand deposits:	
All commercial banks	202
Major New York City banks	818
Other banks	134
Savings accounts:	
ATS/NOW's	9
Business	8
Other	4

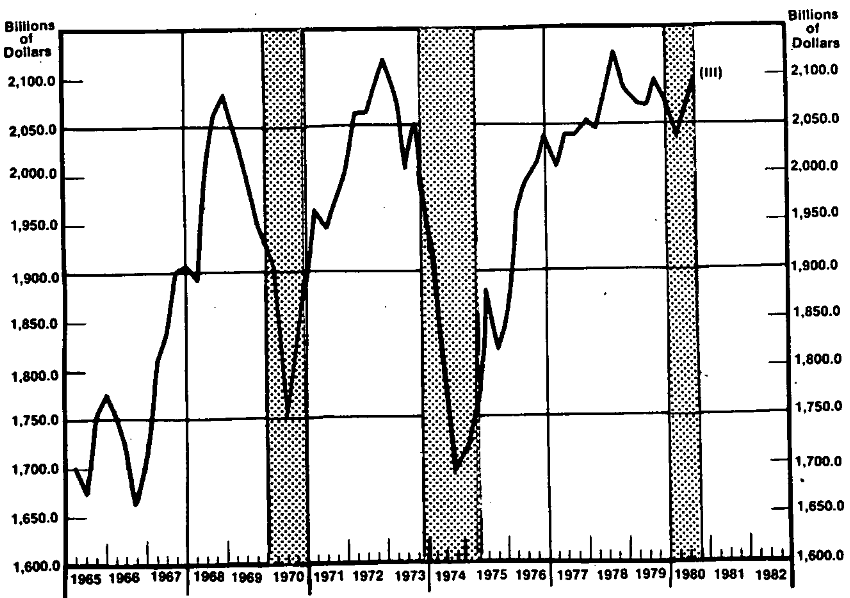
Source: Federal Reserve Bulletin.

So what is the rationale for combining such a wide array of financial claims in the higher M's? It is, quite simply, that the components of the higher M's represent a significant proportion of financial wealth in the economy, especially of households. For example, small time and savings deposits account for one-third of total financial assets held by households. It is reasoned that fluctuation in these components and, thereby, in household net worth are an important determinant of the rate of consumer spending.

Such reasoning is half right. Fluctuations in household net worth do play an important role in determining the rate of spending. This relationship is shown in the following chart. During periods when monetary policy became restrictive, as in 1969, 1973 and 1974, and late 1979 and early 1980, real net worth of households declined. The recessions of 1970, 1974, and 1980 followed in the wake of these declines in real household net worth. The importance of real net worth as a fundamental determinant of spending seems indisputable. But what of the contribution of the components of the higher M's to the overall fluctuations in household worth?

Real Financial Net Worth of Households

($ 1967)



NOTE.—Shaded areas represent recessions.

Even a casual inspection of the cyclical behavior of the principal components of the higher M's reveal a perverse pattern: i.e. during periods when real household net worth was contracting, the real value of time and savings deposits, money market mutual funds held by households, and certain other household owned claims included in the higher M's was increasing. This perverse behavior is displayed in the table below.

In 1973 and 1974 when interest rates were pushed to then record levels, real net worth of households declined by almost 20 percent. The major contributor to this decline was a collapse in the market value of long-term securities owned directly by households. Principally reflecting the 1973–74 plunge in the stock market, the real value of these securities, which represent about one-third of total financial assets of households, declined by almost 50 percent. But the real value of small time and savings deposits and money market mutual funds, all included in M2, more than kept pace with the rate of inflation. Moreover, the value of open market paper, savings bonds and short-term treasuries owned by households, which are included in the broadest aggregate, L, rose substantially in both nominal and real terms in both 1973 and 1974. It might also be noted that large time deposits of commerical banks and thrift institutions, the principal addition to M3, also rose sharply in 1973 and 1974. During this period of rising real values of the interest bearing components of the higher M's, economic activity contracted sharply.

REAL GROWTH RATES OF PRINCIPAL COMPONENTS OF HOUSEHOLD NET WORTH

Component	Included in—	1973	1974	1979(IV)–1980(I)
Small time and savings deposits plus money market mutual funds.	M-2	3.4	−2.4	1.0
Open market paper plus savings bonds plus short-term treasuries.	L	28.2	4.8	1.4
Long-term securities		−21.6	−27.4	−13.2
Real household net worth		−7.8	−11.2	−7.8

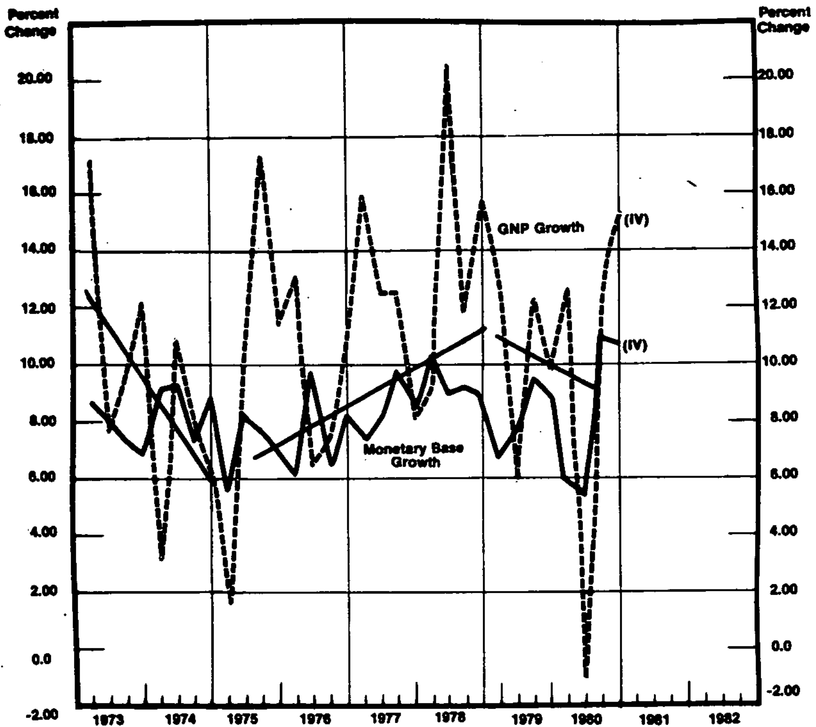
Note: Nominal values are deflated by the consumption deflator to obtain real values.

In late 1979 and early 1980 the Federal Reserve again pushed short-term interest rates to record levels. Real net worth of households contracted, largely in reflection of a sharp decline in the real value of long-term securities. But, as in 1973 and 1974, the interest bearing components of the higher M's again expanded in real terms. Nevertheless, economic activity contracted during the first half of 1980.

It is, of course, true that growth rates of M2, M3, and L slowed in 1973 and 1974 and in late 1979 and early 1980. But this slower growth reflected in part a slowdown in the real rate of growth of currency and demand deposits. The interest-bearing components of the higher M's did not reflect adequately the moves toward restraint in monetary policy. The Federal Reserve should abandon targeting on the higher M's.

What about the monetary base, which has not yet served as a target? Unlike M1B and the other aggregates it can be controlled by the Federal Reserve with considerable precision even over short periods of time. Like the higher M's, however, the monetary base does not appear to be significantly related to changes in GNP. The lack of correlation between changes in the monetary base and changes in GNP is demonstrated in the following chart, which displays quarterly average growth rates of the monetary base since 1973 and the rate of growth of nominal GNP.

Growth in the Monetary Base and Nominal GNP



In this chart, growth in nominal GNP can be divided into three sub periods: 1973 and 1974 when nominal spending was declining; 1975 to 1978 when it was rising; and 1979–80 when nominal spending was again slowing. The monetary base, however, expanded at a relatively steady pace during the entire period from 1973 to 1980: at an 8 percent average rate in 1973 and 1974, an 8½ percent rate from 1975 to 1978, and an 8¼ percent rate in 1979 and 1980. This evidence, admittedly casual, suggests that fluctuations in the growth rate of GNP are not related in a meaningful way to changes in the rate of growth of the base.[3] Despite its controllability the base does not appear to be a useful target aggregate. The Fed should announce targets only for M1B.[4]

III. SETTING TARGETS

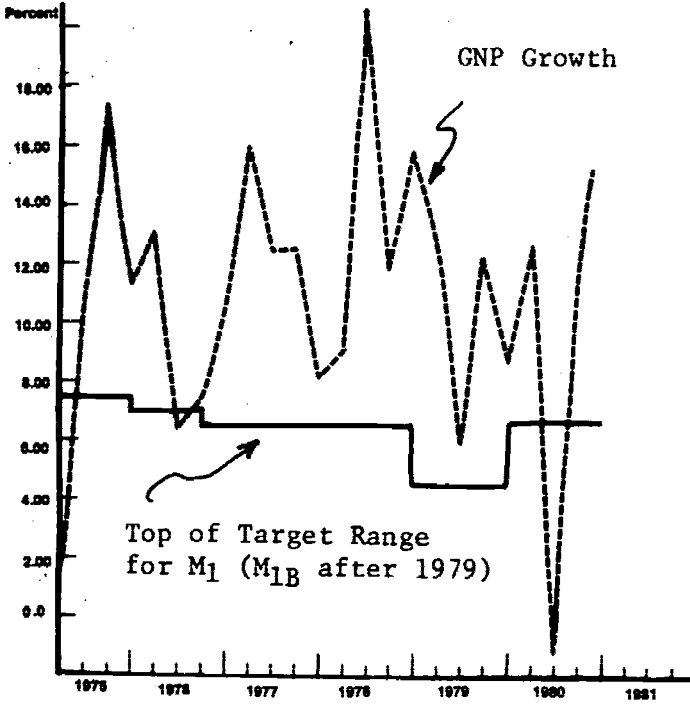
The specific levels of the supper and lower target range for any given aggregate target should, of course, reflect both the target rate of growth of nominal GNP

[3] For a rigorous demonstration of this proposition and of the irrelevance of the relationship between changes in nominal GNP and the interest bearing components of the higher M's, see Tinsley, Spindt, and Friar.

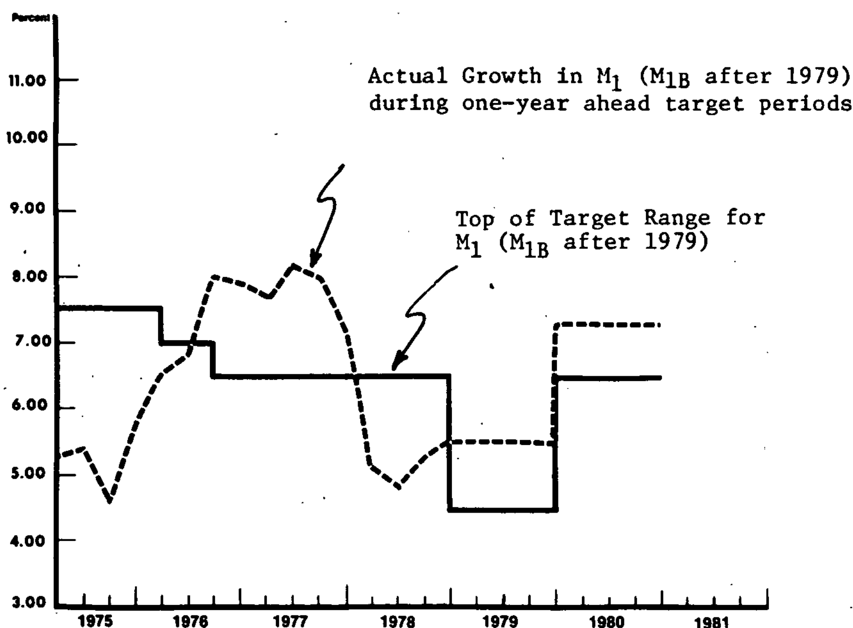
[4] To improve the accuracy of targeting on M1B, the Fed ought to eliminate reserve requirements on all bank liabilities except demand deposits and NOW accounts. This would establish a tight relationship between growth in reserves and in demand deposits.

and a projection of changes in the velocity (the rate of turnover) of money. For example, suppose the monetary authority wishes to slow the growth in nominal GNP to 11 percent during the target period. If, given the authorities projection of interest rate movements during the target period, velocity is projected to rise by, say, 4 percentage points, the mid-point of the target range for the chosen aggregate should be 7 percent.

Federal Reserve target setting for M1 does not appear to have followed such a procedure, certainly not between 1975 and 1978. As shown in the chart, growth in nominal GNP, if anything, was rising during that period. The target range for M1, nevertheless, was lowered twice in 1976 and held constant in 1977 and 1978.



The problem of setting unrealistic monetary targets can be seen in the next chart. This chart compares the actual growth rate of M1 (M1B after 1979) with the top of the M1 target range. As can be seen, with the exception of a three quarter period in 1978 (when automatic transfer accounts were artificially slowing M1 growth), growth in M1 (later M1B) has exceeded the top of its target range for every targeting period since mid-1976.



Such overshoots of monetary growth are not costless. Economic decision-makers, observing a consistent pattern of monetary growth outstripping the top of the target ranges, have become increasingly cynical about the policy intentions of the Fed. Last year for example, when nominal GNP growth slowed to 8.7 percent from 11.3 percent in the previous year, the Fed followed a relatively restrictive policy on balance. But in evaluating the performance of the Fed, financial market participants generally have compared actual growth in money with targeted growth. Instead of giving the Fed credit for slowing nominal spending, many Fed watchers have concluded that 1980 was just another year in which the monetary targets were exceeded. Whatever favorable effects on longer run inflationary expectations that might have resulted from the tightness in Fed policy last year have been lost in the disappointment of market participants over the inability of the Fed to hit, even with a sizable drop in nominal GNP growth, an unachievably low target.

The evident importance of hitting targets for establishing a credible anti-inflation policy implies that even if the aggregate targets have to be raised on occasion, the Fed should always announce target ranges that are consistent with their projections of nominal GNP and velocity growth over the target period. For 1981, a reasonable target rate of growth of nominal GNP would be something like 10 percent to 11 percent. Though larger than the increase in 1980, such a slow rise in nominal spending would permit only a small increase in real GNP over the year and might conceivably produce an improvement in longer run inflationary expectations. Using a simple velocity equation for M1B[5] and the

[5] The equation is $V=1.5+.35y+.05$ RCP—i.e. the percentage change in velocity is equal to a constant 1.5 plus .35 times the percentage change in real GNP plus .05 times the percentage change in the commercial paper rate. This equation is fit with annual data from 1960 to 1980. It also includes a "dummy" variable, (equal to 2.6) for 1975 and 1976 to capture the effects of the massive downshift in money demand during those years. All coefficients of this equation are statistically significant at the .05 level of significance. The equation is reported in more detail in Essay "The Fed's Creditability Gap" in the October 1980 Financial Market Perspectives (Goldman Sachs Economic Research).

Goldman Sachs forecast for interest rates and real growth, it might be expected in the absence of NOW accounts and shifts in money demand, that M1B velocity would rise by about 3 percentage points this year. This would imply that the mid-point of the M1B target range for 1981 should be 7 to 8 percent.

Of course, the introduction of NOW accounts will bias M1B growth upward for the year. In January these accounts grew by $19.8 billion. A portion of this growth, perhaps one-fourth to one-third, represented funds transferred from assets held for nontransactions purposes, such as savings accounts and maturing small time deposits. For the year the addition of such funds to what heretofore had been a purely transactions aggregate will probably bias M1B growth upward by some $10 to $15 billion. This represents between 2½ percent to 3½ percent of M1B and will therefore artificially inflate growth in this aggregate for 1981 by 2½ to 3½ percentage points.

Ordinarily such growth would have to be added to the midpoint of the M1B target range for 1981, raising it to 10 percent to 11 percent. However, these are not ordinary times. Interest rates, for example, have again reached record levels, and if history is a guide, the relationship among money, interest rates, and economic activity might well be subjected again to a major downshift. Under these circumstances, the full 2½ percent to 3½ percent increment to M1B growth arising from NOW accounts cannot be added to the target range.

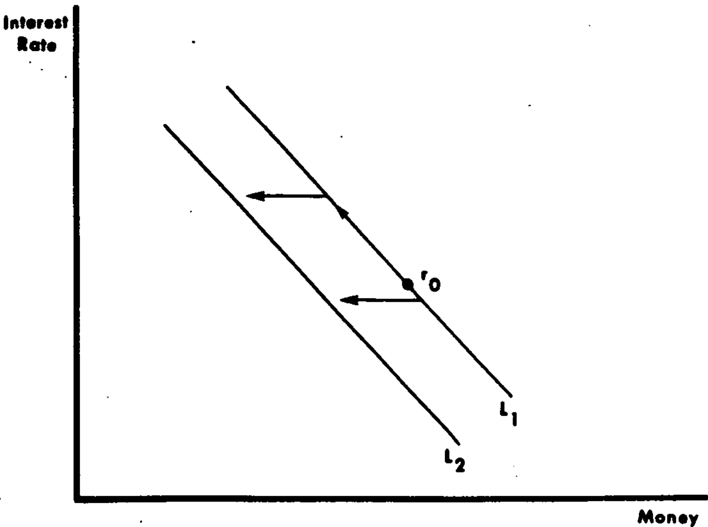
IV. SHIFTS IN MONEY DEMAND

Until the mid-1970's the relationship among M1, interest rates and economic activity (i.e. the demand for money) had been relatively stable. Thus, if the rate of growth of money and the level of interest rates were known—and both come under the influence of monetary policy—the growth rate of nominal GNP could be predicted with reasonable accuracy. This stability was an important reason cited by academic economists in the early seventies for targeting on the monetary aggregates.

The close linkage between M1 and economic activity had been based upon stable, or only gradually changing, cash management practices. Abrupt changes would alter the desired money stock for any given level of economic activity, thereby breaking at least temporarily the linkage between money and spending. Although cash management practices could change abruptly for many reasons, high interest rates accompanying high inflation, such as that of 1974 and 1980, provide a particularly compelling inducement for such changes.

It has long been recognized that increases in interest rates encourage cash managers to hold lower money balances for a given level of transactions. In economic jargon, this could simply reflect an upward movement along a stable downward sloping money demand curve. Shown in the figure below is a standard downward sloping money demand function labeled "L1." If interest rates rise above the rate "r_0" shown in the chart and if the cash management technology were not radically altered, the demand for money would ordinarily decline, moving upward and to the left along L1, and money growth would drop. The rationale for such an action is simple: high interest rates raise the cost of holding money relative to other assets and thus induce a movement out of money and into higher yielding assets.

But extraordinarily high interest rates can create incentives for cash managers to fundamentally alter their cash management practices. By dramatically increasing the efficiency of cash management, these changes can lower the desired money stock for any given level of output, thereby shifting the money demand curve. Such a shift is illustrated in the figure where, as a result of a major change in cash management techniques, the money demand function has shifted backward, or downward, to "L2." In this case, a smaller stock of money is needed to finance a given level of transactions for each interest rate level. If the monetary authority does not lower its monetary targets to reflect this shift, a highly inflationary policy could inadvertently be followed.



-14-

The incentive for cash managers to alter basic payment practices when interest rates reach extraordinary levels is based upon an improvement in the relationship between the marginal, or additional, cost of investing in a more efficient cash management technology on the one hand and the increased revenues arising from utilizing that technology on the other. There is always a wide array of technique, differing in cost and sophistication, available to households and, particularly, firms for managing cash balances. A cash manager deciding on any given set of practices must balance the cost of implementing more efficient, or sophisticated, cash management techniques against the potentially higher earnings from reducing cash balances and holding a larger share of his liquid assets in higher yielding money market instruments. While the cost of implementing more efficient techniques is largely independent of the level of interest rates, the earnings gain from shifting a given amount of funds out of cash balances and into higher yielding market instrument increases linearly with interest rates. Thus, the trade-off between the fixed cost of improving cash management techniques and the higher revenues from the resultant greater interest-bearing balances that had been shifted out of cash improves with higher interest rates.

For most firms there is some critical level of interest rates beyond which this trade-off becomes favorable enough to introduce more sophisticated devices to manage cash balances. When interest rates are well below previous peak values, few firms will find it in their interest to make such major changes. But when interest rates reach or exceed previous record levels, increasing numbers of firms and households should find it advantageous to implement a more efficient cash management technology.

This is what appears to have happened several times in the last few years in response to a series of interest rate peaks at ever higher levels. It began in 1974, when many short-term interest rates broke through previous record levels by wide margins. Large nonfinancial corporations reportedly increased their use of balance reporting, wire transfers, depository transfer checks, zero balance accounts and payable through drafts, lock boxes, remote disbursing, and other devices to minimize cash balances. According to Federal Reserve Board staff who monitored cash management practices in 1975 and 1976, the accelerated implementation of more sophisticated devices, beignning with the peaking of interest rates at record levels in mid-1974, proceeded through the end of 1975 and perhaps longer.

Coinciding with this abrupt change in cash management techniques, money

demand began to shift downward. Put differently, money grew much more slowly from mid-1974 to the end of 1976 than the historical relationship among money, economic activity and interest rates would have predicted.

Shown in the table are periods of artificial slowing in M1B growth that might be attributable to extraordinarily high interest rates and the consequent abrupt changes in cash management practices.[6] From mid-1974 until late 1976—a 10-quarter period—M1 grew at only a 5.1 percent average annual rate. Gross national product, meanwhile, expanded at a 10 percent average rate and interest rates declined dramatically. Under normal circumstances, M1 would have had to grow at an average rate of about 9 percent per year to finance the level of spending that occurred during this period given the sharp decline in interest rates. The difference between actual growth and that predicted by the pre-1974 relationship between money and economy activity is the estimated shifti n money demnad. This shift averaged almost 4 percent at an annual rate from the third quarter of 1974 through the fourth quarter of 1976—i.e. during this period M1 grew about 4 percent slower than expected.

SHIFTS IN MONEY DEMAND SINCE 1974

Year—End quarter	Annualized rate of growth of M-1B		
	Actual	Predicted	Error or shift
1974:			
3d quarter	3.1	8.4	−5.3
4th quarter	5.0	9.0	−4.0
1975:			
1st quarter	2.9	6.4	−3.5
2d quarter	6.0	9.3	−3.2
3d quarter	7.2	9.1	−1.9
4th quarter	3.2	9.7	−6.5
1976:			
1st quarter	5.7	10.0	−4.3
2d quarter	6.4	8.4	−2.1
3d quarter	4.0	7.8	−3.9
4th quarter	7.6	8.4	−.8
Average:			
1974 (III)-1976(IV)	5.1	9.0	−3.9
1977	7.9	8.3	−.4
1978	8.0	8.3	−.3
1979	7.5	8.0	−.5
1980:			
1st quarter	5.8	7.4	−1.6
2d quarter	−2.5	8.2	−10.7
3d quarter	14.6	8.9	5.7
4th quarter	10.8	8.0	2.8

A small downshift of about 4 percentage points occurred in the first quarter of 1979 (not shown on the table) and a much larger shift developed in the second quarter of 1980. Both of these shifts followed periods of extraordinarily high interest rates—3 month T-bill rates reached record highs in the fourth quarter of 1978 and again in the first quarter of 1980.

The record level of short-term interest rates reached in late 1980 thus provides an important backdrop to the problem of setting targets for M1B in 1981. A downshift in the relationship among M1B, interest rates and economic activity is almost certainly underway. Since the middle of November 1980, when short-term interest rates were pushed sharply upward, the transactions component of M1B—currency, demand deposits, and the demand deposit component of NOWs—has fallen sharply.[7] Over this same period nominal GNP has virtually

[6] The money demand function used is:

$$\log\frac{m}{p}=.54+.74\log\frac{m-1}{p}-.012\log RTB-.013\log RS+.13\log y$$

where $\frac{m}{p}$ is real money balances, RTB is the 3- month T bill rate, RS is the rate on passbook savings, and y is real GNP. The equation is fit from 1960 fourth quarter through 1974 second quarter. The "predicted" values from which the errors are derived are based on a dynamic simulation of this equation.

[7] The level of M1B has dropped by $1 billion over this period. If some $6 to $8 billion of NOW accounts are subtracted from M1B on the grounds that about one-fourth to one-third of the $25 billion growth of NOW s since mid-November has merely reflected a transfer of funds from non-transactions balances to NOW's, the remaining transactions portion of M1B actually contracted by $7 to $9 billion.

exploded, advancing at a 15.2 percent annual rate in the fourth quarter and probably at about a 12 percent rate thus far in the first quarter. Such an inconsistency between monetary growth and growth in nominal spending can only be explained by another downshift in money demand.

How much should the 1981 target be lowered from the 10 percent to 11 percent midpoint derived earlier (adjusting for the NOW account bias) to take account of the speedup in the rate of turnover of money? Unfortunately this question is difficult to answer. We can predict the onset of a demand shift with some certainty, because such shifts have invariably followed periods of record high interest rates. But the magnitude and duration of downshifts are impossible to predict with any confidence. Lacking any better estimates, perhaps it should be assumed that the shift in 1981 will about offset the upward bias in M1B growth arising from NOW accounts. This would imply that the mid-point of the 1981 M1B target range should be no more than 7½ percent.

V. SHIFTS IN THE RELATIONSHIP BETWEEN INTEREST RATES AND ECONOMIC ACTIVITY

The likely instability of the relationship between money and economic activity raises the obvious question: shouldn't the Fed consider targeting once again on interest rates? After all, it is well known that when instability originates mainly in the financial sector greater predictability in income growth can be achieved by targeting on interest rates rather than on money. The trouble with this line of thinking is that, even given the apparent instability in money demand, it appears that instability in the "real" sector—i.e. in the consumption and investment functions—may also have increased as a result of high inflation and interest rates. Thus, retreating to an interest rate target may not improve the ability of the Federal Reserve to achieve the final goals of policy.

Several factors have contributed to the increased instability in consumer and investment demand. One most important factor has been the gradual deregulation of financial markets since 1974, designed to alleviate the contractionary effects of high rates on certain sectors. Following the 1974 "credit crunch" when interest rates soared above usury and regulation Q ceilings, usury ceilings on consumer installment and mortgage borrowing were raised in many states to prevent high nominal interest rates on unregulated money market instruments and bonds from diverting funds from these "worthy" sectors.[8] But with higher usury ceilings, lending has continued at a rapid pace at interest rates well above the old ceilings because the profit incentive to lend is no longer eliminated by low ceilings. In essence, the raising of usury ceilings has raised the level of real interest rates required to reduce borrowing (and the associated final demand for goods and services). Whereas the presence of low usury ceilings had produced constraints on credit availability before interest rates got high enough to choke off credit demands, the removal of these ceilings has made it necessary for rates to rise to levels sufficient to restrain the demand for credit.

Other efforts to deregulate financial markets—most notably the introduction of 6-month money market certificates in June 1978—have similarly removed restraints on flows-of-funds during periods of high nominal interest rates and have thereby raised the level of rates required to retard the rate of borrowing and the related demand for durable goods.[9]

In addition to deregulation, the introduction of new financial instruments in recent years—in effect the indexing of financial instruments to inflation—has raised the level of borrowing and aggregate demand consistent with a given level of real interest rates. For example, when only fixed-rate loans were available, businesses were reluctant to borrow when rates approached what were perceived as "peak" levels because of the fear of "locking in" an unusually high

---

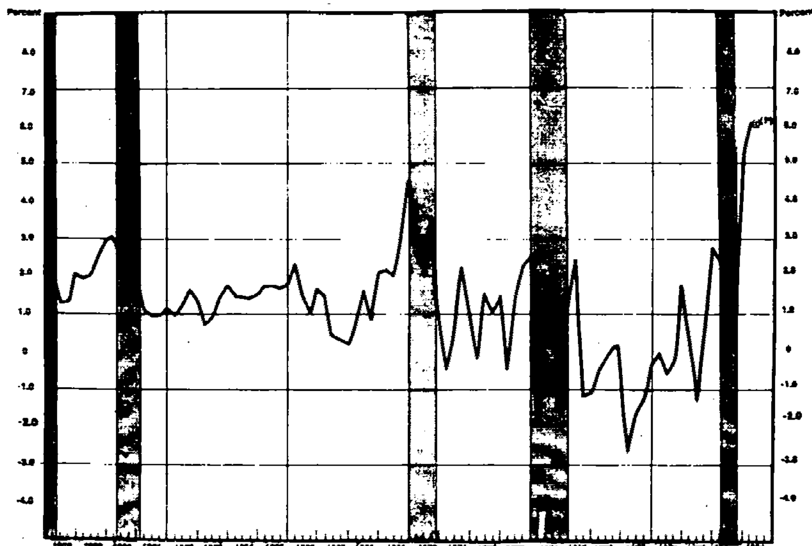
[8] The diversion of funds from one sector to another under some circumstances would merely result in lower interest rates and heavier borrowing in the unregulated sector. This would tend to offset lower borrowing in the regulated sector. But such is not the case when the Fed is following an interest rate target. When market rates rise above ceilings on, say, mortgages, real estate lending becomes unprofitable. The demand for funds by the banking system then declines. All things equal, this will take pressure off the Fed funds rate, thus encouraging the Federal Reserve to drain reserves from the banking system. In essence, the funds that ordinarily would have been directed toward the mortgage market are drained from the system when market rates exceed mortgage rates and the Fed is following an interest rate target.

[9] For an excellent analysis of the possible effects of financial market deregulation on interest rates, see Albert M. Wojnilower, "The Central Role of Credit Crunches in Recent Financial History, "Brookings Papers on Economic Activity, 2 : 1980.

cost of credit. Thus, when rates reached unusually high levels, the demand for credit, and ultimately, aggregate demand, was significantly restrained. The introduction of variable rate loans, however, has lowered the resistance to borrowing when interest rates appear unusually high. If the rates are high but expected to decline, a business might still borrow on the expectation that the currently high borrowing costs on a floating rate loan soon will be declining.

Other examples of new financial instruments designed to "beat" high inflation and interest rates are shared-equity and graduated-payment mortgages. The constraint on borrowing on a straight payment contract when mortgage rates reach say, 15 percent, is not the real after-tax cost of credit: after all, 15 percent is equal to about 10 percent after taxes for most taxpayers, and that is no more than the expected rate of inflation in home values. The binding constraint in mortgage markets when only straight fixed-payment mortgages are available is cash flow. Many families wishing to purchase a home which was affordable when mortgage rates were 10 percent or 11 percent have found that the monthly payments on a 15-percent mortgage are simply too high relative to their income for the lending institution to approve their mortgage application. Both shared-equity and graduated payment mortgages help to overcome this problem by providing a debt instrument on which payments are lower in the early years of the contract and rise through time as incomes move up with inflation. With such contracts, 15 percent mortgage rates become less restrictive and borrowing increases.[10]

Direct evidence on the extent of the shift in the consumption and investment functions is scanty. Some insights might be gained by comparing the level of real interest rates today with those prevailing before and during previous periods of economic contraction. This comparison is shown in the chart, where it is seen that the real commercial paper rate has hovered at record levels for the last two quarters. However, as yet. high real rates have not produced significant weakness in economic *activity* in 1981.



NOTE.—(a) The real rate shown is the six-month commercial paper rate less inflationary expectations (as measured by the University of Michigan Survey Research Center). (b) Shaded areas represent recessions.

[10] Formally one could think of the rise in interest rates required to produce a given level of borrowing (and investment) as inducing an upward shift in the Hicks-Allen "IS" curve. This, in turn, implies that, all things equal, a monetary aggregates target is preferable to an interest rate target.

Recent evidence on the housing industry also is consistent with the view that a given level of real interest rates is less restrictive today than it was earlier. For example, as shown in the table, single family home sales and building activity are currently 10 percent to 20 percent higher than last winter when mortgage interest rates and inflationary expectations were at about the same level as today.

[Seasonally adjusted, annual rates]

	Latest level	Level at similar mortgage commitment rate in early 1980
New home sales	545,000 (December)	503,000 (February/March).
Single-family homebuilding permits	732,000 (December)	632,000 (February/March).
Single-family housing starts	947,000 (December)	786,000 (February).

Although sketchy, this evidence suggests that, like the demand for money, the relationship between economic activity and interest rates has become unpredictable. Higher real interest rates now appear to be required to restrain economic activity than earlier. But who knows how much higher? Since interest rate targeting can help to achieve the final goals of policy only if there is a reliable relationship between rates and the goals, this heightened uncertainty implies that the Federal Reserve should not alter its formal targeting procedure to give greater weight to interest rates.

V. TARGETING IN AN UNSTABLE WORLD

The record interest rates that accompanied the inflation spiral of the 1970's produced significant changes in relative prices and costs, particularly of financing services relative to nonfinancial goods and services. While prices of most goods and services roughly doubled during the seventies, the opportunity cost of holding noninterest bearing money balances increased fivefold (the nominal quantity of money needed to effect a given volume of real transactions doubled and interest rates tripled from the early seventies until the end of the decade). Likewise, with mortgage rates doubling and home prices almost tripling, the cost of financing a new home purchase greatly outstripped the overall cost of living. The market, true to form, with some help from regulators and legislators, responded by devising new methods of coping with these changes in relative prices. Implementation of these new methods—improved cash management techniques, new financial instruments . . . etc.—has, unfortunately, heightened instability in the relationship between GNP and both money and interest rates.

This increased instability produces a major problem for the Federal Reserve in conducting monetary policy. Presumably one of the purposes of employing an intermediate target such as M1B is to provide early information on fluctuations in the final goals, information on fluctuations in the final goals, information on which the Fed can alter policy so as to steer these goals closer to their desired path. But with the severing of the tight linkage between spending on the one hand, and money and interest rates on the other, the informational content of fluctuations in money and interest rates has diminished.

The increased instability in the money demand and interest rate to GNP relationship has one clear implication: The Federal Reserve should not rely exclusively on fixed rules of monetary, or even reserve, growth. Nor should the Congress require such fixed rule targeting. As a correlary, the Fed should retain a flexible posture in interpreting monetary growth over short periods of time. Wide fluctuations in monetary growth should not immediately provoke policy actions to get the aggregates "back in line." Such actions in the face of potentially shifting money demand and interest rate functions could produce a significant increase in volatility in the real economy.

Until progress is made against inflation and stability returns to the relationship among money, interest rates, and economic activity, the Fed will have to continue doing what it has been doing—eeking out as much information from M1B as possible and, ultimately, paying close attention to staff projections of the growth path of nominal GNP. This is no excuse for giving up on inflation. With the aid of a responsible fiscal policy, the Federal Reserve can move the economy toward a lower rate of growth of spending and prices even without stable targets.

Representative REUSS. Thank you very much, Mr. Paulus. I have a number of questions to inquire of the panel.

Mr. Lehrman, noting the dangers of inflation, you have come out for a gold standard for the United States. Professor Brunner in his remarks has said—I'm referring to his prepared statement—"The gold standard is quite consistent with long-run inflation within the gold standard system."

How would you answer that? I'd like to get a little dialog between you and Professor Brunner, because you go in opposite directions on that.

Mr. LEHRMAN. Forgive me, Mr. Chairman. I did not hear that sentence clearly.

Representative REUSS. I'll read it again. Professor Brunner in his prepared statement tended to reject the gold standard for the reason that, and here I'll quote: "The gold standard is quite consistent with long-run inflation within the gold standard system." In other words, he says it is inflationary or is quite consistent with inflation.

Mr. LEHRMAN. I would be surprised if Professor Brunner would try to make that argument, either on analytical grounds or certainly based upon the history of the gold standard itself.

Briefly, whether you take the gold standard period in the United Kingdom or the gold standard in the United States, you will find that in general wholesale prices were steadier over that entire long period, approximately 150 years in the case of the United States and 200 years at least in the United Kingdom where the wholesale price level was the same at the end as it was at the beginning.

In the interval, there were fluctuations. We live in an imperfect world characterized by human beings subject to risk and uncertainty. There will always be business cycle fluctuations.

The history of the gold standard in the United States—but for the Great Depression caused by the protectionist policies of all the Western countries—never saw a period of rising prices in excess of 2 to 3 percent per year, which is quite modest by present comparisons; nor did we experience a falling price level, call it deflation, at rates exceeding 1 or 2 percent.

Indeed, I would give as a concrete example the late 19th century in this country between 1865 at the end of the Civil War and 1900. The price level tended to fall in this period very gradually and imperceptibly at a rate of around 1 to 2 percent, and this fall in the price level was associated with one of the most rampant periods of real economic growth in American history.

No one, by virtue of that example, can deny that falling prices necessarily are accompanied by a decline in economic output. And conversely, I would deny that, under any gold standard period that history has known, not subject to either war or drastic import and quota systems of the participating nation-states—I would deny that there was ever any rise in the price level exceeding 3 percent at an annual rate.

Representative REUSS. Thank you. Professor Brunner, what do you say to that?

Mr. BRUNNER. The last statement which Mr. Lehrman said about the United States I can't fully accept. From 1896 to 1914, there was

a period of the gold standard, and we had, if I remember correctly, a continuous inflation rate of about 3 percent, but 10 or 15 years of a 3-percent rise piles up quite a bit. Indeed, if we look over a century, these fluctuations even out again because in between there's a 50-percent drop in the price level of the 10, 15 years after the Civil War. But then we were not on the gold standard; we were on the congressional standard. Congress determined really completely the monetary base at the time. It was a really interesting institution existing there.

You also mentioned the Spanish inflation which was due to the gold inflow which was very long drawn out over many, many decades—a long drawn-out persistent inflation going on based on gold. These are the empirical facts.

Analytically, the point if we have an international fixed exchange rate system based on gold, the domestic price level is not determined. If the system uniformly pushes under the pressure of circumstances to expand its basic domestic credit component pretty much along the same line this need not be constrained as part of the gold standard, and the price levels will change accordingly.

So simply saying that if we have a gold standard, it would assure us that, we have an arrangement which would prevent that is not correct. Now we can reinstitutionalize a gold standard which gives rigid constraints of the domestic credit component, like the Bank of England in 1944 and such kinds of things, but this is a very indirect procedure for achieving the same thing as by essentially a direct approach in the form of a constant monetary growth rule, subject to explicit rules under which the central bank would be allowed to modify the benchmark level, for instance. That would be a much more direct procedure, in my view, as against the indirect approach which would try to anchor the system effectively.

Representative REUSS. On a related subject, Mr. Brunner, would it be a correct interpretation of your testimony to say that in your view, present Federal Reserve policy is not constructive—is not conducive to national economic goals, but that if it were to give up, one, its current attachment to the Federal funds interest rate as a leading determinant; two, its use of lag reserves instead of current reserves; and three, if it were to let the discount rate float or in some way not try to set a discount rate, that it probably would be a great deal more successful? Is that a fair statement?

Mr. BRUNNER. That is a fair statement, yes.

Representative REUSS. I named three things, three changes. Are there any others?

Mr. BRUNNER. Of course, sort of a positive statement has to be added. These are things which would make it more easy to get a controllable approach to monetary growth—namely, that they have to change a procedure or develop a procedure for directly approaching the monetary growth—say, for instance, reserve targeting or monetary base targeting.

There I can state very strongly and most definitely that whatever work we have done in this sinister group called the Shadow Open Market Committee, but also others which are a bit more closely associated with the Federal Open Market Committee, indicates that there is no basic technical problem to control monetary growth in the United States through that route.

I think it is a matter which can be executed, and the evidence seems to be rather clear, and I'm curious why the Federal Reserve simply doesn't go that way.

Representative REUSS. Thank you very much. Mr. Dornbusch and Mr. Paulus, am I correct in my appreciation of the testimony of both of you gentlemen that you feel that the Federal Reserve's just announced 1981 targets for the leading aggregates are erroneously low and too severe and specifically that in light of the fact that the growth of M-1B last year, 1980, was in excess of 8 percent, that it seems to you not a good idea to have lowered the target for M-1B to the 3.5 to 6 percent?

Have I stated your position correctly, Mr. Dornbusch?

Mr. DORNBUSCH. Indeed, yes.

Representative REUSS. Mr. Paulus.

Mr. PAULUS. Yes.

Representative REUSS. Let me ask, over a long period of time and as we get inflation under control, are you respectively in favor of the modest yet progressive deceleration of the monetary targets?

Mr. DORNBUSCH. I would think that deceleration of money growth should come last. I would point to the example of Germany, if I can take a second, where inflation over the 5-year period, 1969 to 1974, was about 7 percent; in the 5-year period, 1975 to 1980, it was almost 4 percent, so there was a substantial 3 percentage point decline in inflation. Money growth, however, was unchanged.

Of course, what happened is that as inflation declined, people wanted to hold more money. How was the decline in inflation achieved? Through a reduction in nominal income growth. Monetary growth. Monetary growth is very much the wrong thing to watch in a disinflation process.

Of course, when everything has happened but well beyond 5 years, money growth has to be way down. But in the transition, money on the average has to grow faster than prices because people want higher real balances. That is in sharp conflict with the monetary growth route and rapid deceleration of money ahead of anything else.

Representative REUSS. Mr. Paulus, can you remember the question?

Mr. PAULUS. I think the question was, am I in favor of lowering the monetary targets progressively?

Representative REUSS. Obviously you're not in favor of doing it this year, but as a general proposition, are you? What is your position?

Mr. PAULUS. I am more in favor of lowering the rate of growth of money than the targets. As I said in my introductory remarks, since 1976 the Fed has missed the target in all but four quarters. I think their credibility has been shattered by this experience, and that it's critical that they announce reasonable, realistic targets. The 3.5 to 6 percent effective range for M-1B is really too low for an economy with nominal GNP probably growing in the 10 to 11 percent area this year. We would need an increase in velocity on the order of 4 to 5 percent.

A very simple velocity model that I have worked with indicates, given Goldman, Sachs' forecast of real GNP interest rates, that we may get three percent this year, but probably no more. The 3.5 to 6 percent target is probably unachievable.

The upward revision of the NOW accounts does buy the Fed some room. My own guess is NOW's will probably bias the M–1B upward by $10-to-$15 billion or 2.5 to 3.5 percent. If the bias is less than that, then the 6 to 8½ percent target is reasonable. If the bias is more than that, the Fed will have trouble hitting the top of the 6 to 8½ percent target range.

Representative REUSS. Then if I may venture a restatement of monetary law, according to Paulus, then it would be that in an inflationary period, you increase your money supply to include all of real growth, of course, and in addition, to include parts of that unfortunate add-on which is caused by inflation, both of an avoidable kind and of an OPEC unavoidable kind, and that you would recognize that inflationary factor some, but not too much?

Mr. PAULUS. That's right, Mr. Chairman. Unless you're willing to take a sharp and perhaps prolonged economic contraction, you have to recognize inflation in setting your targets. That's something the Fed has not done in the last 4 years.

The top of the range for M–1 in 1976 was 6.5 percent. Inflation in 1976 was 5 percent. Inflation in 1980 is twice as high as in 1976; it's around 10 percent. The top of the M–1A range last year was 6 percent—M–1A is really the analog of old M–1. The Fed has lowered the targets; inflation has doubled. They have missed their targets. Their credibility is wounded.

Representative REUSS. So in effect what you're saying to the Fed is that: While in general there's something to be said for their proclaimed goal of an increase in the monetary aggregates that has lessened over the years until we get everything, inflation, interest rates, and money supply, down to where we'd like to see them, that they shouldn't inhale. And they shouldn't inhale particularly when you've had 12-percent inflation in the last year and it's continuing, you shouldn't, at such a time, try to ratchet down the money supply. You should leave well enough alone and not make it any tighter than it has been.

Mr. PAULUS. You shouldn't move the targets down until you first hit them, Mr. Chairman. The first order of business should be defining reasonable targets this year. Hit them, begin to establish some credibility and then start to lower the targets. Monetary growth will come down, I think, more easily if the Fed's credibility is enhanced by a period of actually hitting the targets.

Representative REUSS. Now, a very important question to put to you in your capacity as vice president and economist of Goldman, Sachs, one of the most active participants in the Wall Street market: What do you mean when you say that proclaiming a target and then having to say at the year's end, oops, sorry, we missed her again, costs the Fed credibility? How does that come about and why does it matter? You may think less well of the Fed, but the world isn't going to come to an end unless it has some repercussions in the market.

Mr. PAULUS. Well, I think it does have repercussions, Mr. Chairman. We would like to lower inflationary expectations. But you can't do that by telling people that you're going to do something and then doing something different. I don't know how many times I've been asked by our clients: How can you say that the Fed is pursuing a

restricted policy and is intent on bringing inflation down—as I sometimes have said—when they can't hit their targets? In fact, I think monetary policy last year on balance was restrictive. As I stated earlier, growth in nominal GNP dropped from 11 percent to below 9 percent in 1980. That's an indication of a restrictive policy. Yet even last year as this was going on, many of our clients told me they didn't believe the Fed was serious about fighting inflation because they couldn't hit their targets.

Now, the way you lower inflationary expectations is for the Fed to first impose a restrictive policy. The public would begin to recognize the restraint and to take the Fed's intentions seriously. They would begin to believe future tight policy pronouncements, and will lower their inflationary expectations in response. The Fed has in a sense taken the first step. They did introduce, on balance, a tight policy last year. But the markets didn't view it as a tight policy because they looked at actual growth in M-1(b), a little over 7 percent, compared that to the top of target range of 6½ and said the Fed missed again. They said, I don't believe the Fed is serious.

Representative REUSS. How does this lack of belief in the Fed's seriousness—I leave to one side how justified it is, but the lack of belief is there—affect what we all want: less inflation and fuller employment? What is it that a seller of goods, or sellers, of their labor, or lenders of money do differently as a result of this misapprehension obtained by the Fed's failing to meet its targets?

Mr. PAULUS. Workers would seek higher wage increases than they otherwise would. If they believed the Fed was serious about fighting inflation, lenders would require lower interest rates to commit their money long term than if they expect inflation to continue at a rapid pace for an extended period of time. Again, it affects expectations which in turn affect the way prices, wages and interest rates are set.

Representative REUSS. Thank you very much. Mr. Richmond.

Representative RICHMOND. Thank you, Mr. Chairman.

I'd like to just discuss with all of you gentlemen of the panel your opinion of a couple of things that I think are important.

Representative REUSS. Would you excuse me. Are you going to ask questions specifically of Mr. Lehrman? If not, I would want to excuse him. He has a plane to catch.

Would you feel free to go, then, at any time. I am going to suggest that you go now.

Mr. LEHRMAN. Thank you very much, Mr. Chairman.

Representative REUSS. Traffic is bad. We're very grateful to you.

Representative RICHMOND. I'm sorry I didn't get to talk to you, Mr. Lehrman.

Messrs. Paulus, Dornbusch, and Brunner, first of all, what do you think of the administration's depreciation plan, 10, 5, and 3? Do you think that, in itself, it will spur capital investment and sufficiently modernize America's industrial depreciation plans? Mr. Brunner.

Mr. BRUNNER. I have difficulty understanding you. Could you please repeat, perhaps?

Representative RICHMOND. As you know, the administration has been espousing a policy of modernizing our corporate depreciation levels and I think everyone is pretty comfortable with this 10, 5, and 3, 10

years on buildings, 5 years on equipment, and 3 years on automotive equipment. That would materially change our present depreciation standards and certainly be a great spur to industry to modernize, I think. How do you people feel about it?

Mr. BRUNNER. I have to apologize, I have a pressure problem off and on here. I'm sorry. If I understand you correctly, you ask about the administration's program with respect to developing in our productivity and industries generally over the next years. Do I address myself to the right question?

Representative RICHMOND. I think if you just address yourself——

Mr. BRUNNER. The depreciation allowance, yes. Well, the depreciation allowance certainly is an item which would have quite an immediate effect within a relatively short order on the relative costs of investment goods. To this extent it is designed as a tax incentive to build up our investment expenditures. But in this respect I would like to add that we should not just concentrate on such isolated items like depreciation allowances and the alleviations there. I think we should look, as has been emphasized by a variety of people, including as I was happy to hear this morning, Chairman Volcker, at the broad range of our tax incentives affecting the supply of savings and particularly also affecting in the broader range the supply of investments in productive investments. I think we have to look at the whole range there and not just concentrate on the depreciation.

Representative RICHMOND. Mr. Dornbusch.

Mr. DORNBUSCH. I agree with Mr. Brunner that the more liberal depreciation allowance will, without doubt help modernize industry, but I think that a sustained high level of demand would do much more for investment incentive and that lower long-term real interest rates would also do more, so I wouldn't single out the depreciation allowance as a particularly important part of fiscal policy. I would more particularly express concern about the personal income-tax reduction.

Representative RICHMOND. Mr. Paulus.

Mr. PAULUS. As I understand it, the accelerated depreciation provision will cut business taxes by $60 billion by 1986.

Representative RICHMOND. It will, in effect, make up for all the inflationary influence we've had on that depreciation. As you know, the average corporation could never survive, if it just modernized its space.

Mr. PAULUS. I think it's interesting that the tax cut is being billed as basically a consumer tax cut. The biggest cuts in the early years are for consumers, the 10-percent cuts, but in a sense those tax cuts, and I don't have detailed numbers, but I believe they, by and large, just more than slightly offset bracket creep and scheduled increases in social security taxes. The 10-percent cut next year will lower consumer taxes by something like $27 billion. But bracket creep, pushing taxpayers into the higher tax brackets, raises taxes around $12 billion. I think it's probably safe to assume that the average social security tax increase over the next few years will be on the order of $5 billion in today's dollars. You've offset probably about 60 percent of that consumer tax cut in——

Representative RICHMOND. Bracket creep and social security?

Mr. PAULUS. Bracket creep and social security. I am not bothered by that, frankly. I would like to see an even bigger portion of the tax

cut slanted toward the business side. It seems to me a true supply-side approach would emphasize savings incentives and would emphasize capital formation directly and would not place the apparently largest part of the reduction in the hands of consumers. I say apparently because I think part of it is being offset by other increases.

Representative RICHMOND. That gets me to my next question. The Reagan formula for personal tax reduction gives two-thirds of the tax reduction to the people earning over $25,000 a year and only one-third to people earning below $25,000 a year, on the premise that people earning above $25,000 a year will be more likely to save that money than people below $25,000. Now, first of all, do you agree with that or do you think it perhaps ought to be skewed the other way with two-thirds of the tax cut going to people earning below $25,000 and the other third going to people earning above in order to stimulate the economy, because we all want the same thing. We want to stimulate the economy, right, and get people back to work again.

Mr. BRUNNER. Let me begin in this case. As I understand the Reagan program proposed a uniform percentage reduction over the whole range. Now, of course, this uniform percentage simply means a larger dollar amount the higher the income is. The higher the income is in the average the higher will also be the dollar amount of tax reductions. Not necessarily the percentage amount on the average, but certainly the larger will be the dollar amount and the average of the amount saved. In this context, of course, a larger savings will accumulate per person in the higher income level, it does not matter at which point you divide between higher level income and lower level income. Now, whether this is appropriate or not, my answer would be indeed I see no reason why this should not be appropriate.

Representative RICHMOND. Except first of all there is some doubt this will increase savings. Second, unless we increase demand from consumers, manufacturers are not going to want to borrow money to modernize. Now, the people who create the demand for consumers are those people earning below $25,000 not the ones earning above $25,000.

Mr. BRUNNER. The mass of the demand will come from below and I see no problem of creating an aggregate demand to absorb whatever additional investment credits are generated by additional savings. We have appropriate monetary and fiscal policy which can combine in order to do that with a uniform tax reduction. The general direction of the budget policies and the general direction of the monetary policies that the administration indicates, I would argue, go in the right direction in this respect.

Representative RICHMOND. Mr. Dornbusch.

Mr. DORNBUSCH. I have a number of problems with both your question and Professor Brunner's answer on part 2. To start with the last point, Professor Brunner says we have monetary and fiscal policy to cope with aggregate demand, but I think we don't have monetary policy any more to cope with aggregate demand because of the money growth targets, so we only have fiscal policy. That's the reason I think we have to reduce the budget deficit. If we did have monetary policy, we'd have to worry less about it. As it is because of the presetting of monetary growth we have to be very careful to have the right monetary fiscal policy.

Second, you asked two questions. One, how do we get people to work. Next, how do we get savings. We have two concerns, to have people employed and to expand potential output. To expand potential output it doesn't make a difference whether households save or whether the Government runs a budget surplus. We can do without personal income tax cuts and run a lot smaller budget deficit with the same economy-wide saving. It contributes to capital formation in just the same way. So, we can really focus on the equity issue and the tax cuts. I don't think the question is the relative cuts for people below and above $25,000. I'd first look at the transfer payments cuts, which truly are much more serious. But also in response to what Mr. Paulus raised as a question, I'd worry about what is the distribution of the tax cuts and the bracket creep and whether there is any differential impact to be expected. So on balance I'd be more careful on the cuts for personal income taxes because monetary policy is already preset through monetary growth targets.

Representative RICHMOND. Mr. Paulus, you're against most personal income tax cuts?

Mr. PAULUS. I'm sorry, sir, I didn't hear the question.

Representative RICHMOND. I get a feeling how you feel on this matter. I don't believe you're for further cuts to lower income people, right? How do you feel?

Mr. PAULUS. Well, if your objective is to stimulate savings I think you should do it directly, and exempt a larger share of interest and dividend income.

Representative RICHMOND. That would stimulate savings across the board.

Mr. PAULUS. Directly, yes.

Representative RICHMOND. What kind of exemption would you have employed?

Mr. PAULUS. I don't have any specific amount in mind.

Representative RICHMOND. Certainly increasing above the $200 per capita amount.

Mr. PAULUS. I've seen numbers like $1,000 or $2,000. I don't remember the revenue loss to the Treasury, though I believe it is very large.

Representative RICHMOND. A thousand or $2,000 per person would certainly increase savings quicker than anything I can think of.

Mr. PAULUS. It certainly would. On the other hand, we currently subsidize borrowing by permitting interest deductions for households when we treat them like businesses on the borrowing side, but not on the spending side or the investment side. That is, we defer taxes on capital gains on homes, which I think is fine. Given the inflationary environment we're operating in, we shouldn't be taxing inflation gains. But I think we should be more symmetrical and think about limiting or reducing the deductibility of interest income by households. That would also spur saving. At least on a net basis it would reduce borrowing.

Representative RICHMOND. Professor Dornbusch, you're probably quite familiar with some of the European tax structures.

Mr. DORNBUSCH. I'm afraid not at all.

Representative RICHMOND. Professor Brunner. I just wondered what we can learn from the German tax structure and some of the other more successful Western European countries right now. What are they doing that we ought to be doing in this country?

Mr. BRUNNER. I'm not very familiar with it, either. I have not studied tax structures in Germany or Switzerland, so I cannot give you a reliable answer on that one, I regret.

Representative RICHMOND. Thank you, Mr. Chairman.

Representative REUSS. Thank you very much, gentlemen. You've contributed to our deliberations very helpfully. We thank you. We will now recess until 9:30 tomorrow morning at which point the Democratic and Republican economic reports will be issued and later that morning we will hear testimony from the Secretary of Energy.

[Whereupon, at 3:15 p.m., the committee recessed, to reconvene at 9:30 a.m., Thursday, February 26, 1981.]

80-478 O - 81 - 14

THE 1981 ECONOMIC REPORT OF THE PRESIDENT

THURSDAY, FEBRUARY 26, 1981

CONGRESS OF THE UNITED STATES,
JOINT ECONOMIC COMMITTEE,
Washington, D.C.

The committee met, pursuant to recess, at 11 a.m., in room 6226, Dirksen Senate Office Building, Hon. Edward M. Kennedy (member of the committee) presiding.

Present: Representatives Richmond and Brown; and Senators Jepsen, Hawkins, and Kennedy.

Also present: Louis C. Krauthoff II, assistant director; James M. Cubie, Keith B. Keener, Deborah Matz, Mark R. Policinski, and Timothy P. Roth, professional staff members.

OPENING STATEMENT OF SENATOR KENNEDY, PRESIDING

Senator KENNEDY. The committee will come to order.

Mr. Secretary, I understand you're under some severe time restraints, and it's your desire to be out of the committee by noontime. We'll make every effort to accommodate that. We'll proceed quickly because I know there are a number of members who want to participate in this morning's hearing. Let us get underway at this time.

This hearing today is part of the Joint Economic Committee's annual hearings on the state of the American economy. Today we'll be concentrating our attention on the impact of energy policies on our economic health.

Energy policies have become a driving force in economic policy. The oil price increase of 1979–80 has lowered the gross national products of the Western World by 6 percent or about $500 billion in 1982. That is the equivalent of 3 years of economic growth.

The first major economic decision of the administration was the decision to accelerate the cost of oil at a cost of billions of dollars this year. This hearing will examine the economic impact of this decision. Spending for energy is a significant element of our Federal budget. The Reagan economic package makes several billion dollars in energy cuts. There are major cuts in the solar, conservation, and fossil fuel budgets.

Will these cuts in energy spending produce a cost-effective energy program? Will they increase our energy security? These are issues this committee will face today.

Secretary Edwards, I understand you have a statement.

STATEMENT OF HON. JAMES B. EDWARDS, SECRETARY OF ENERGY, ACCOMPANIED BY RAYMOND G. ROMATOWSKI, ACTING UNDER SECRETARY

Secretary EDWARDS. Senator Kennedy, I have a prepared statement. If you'd permit me to submit it—it's fairly extensive—and let me touch some of the highlights.

Senator KENNEDY. We'll include your prepared statement in its entirety in the record. We thank you for getting your statement up before the committee in such a timely fashion. This is not always the case, and as one who's made that point when they don't get them up here on time, I want to express our appreciation to you for getting your statement up here.

Secretary EDWARDS. Thank you, Senator.

Mr. Chairman, members of the committee, I really do appreciate the opportunity to discuss the current status and outlook of the U.S. energy situation, the energy policies of this administration, and finally our new energy policy as it relates to the fiscal year 1982 DOE budget.

The U.S. economy is still adjusting to the 120-percent increase in imported crude oil costs that occurred in the wake of the 1979 Iranian revolution. Between 1978 and 1980, the cost of international crude went up 130 percent. Consumer reaction to higher prices and the whole economic performance in 1980 has cut U.S. oil consumption by about 8 percent, and net U.S. oil imports by 20 percent in 1980 compared to 1979.

Preliminary data for 1981 indicates a continuation of these encouraging trends toward lower U.S. oil consumption and imports. A lower level of oil production in Iran and Iraq, resulting from the war, has been offset by the declining world oil consumption and incremental production from other OPEC members, so that adequate world crude oil supplies should be available throughout 1981.

While further increases in Iranian and Iraqi production are possible and would likely further soften oil markets, such optimism must be tempered with the real possibility that other OPEC countries may cut back production to maintain a tighter balance in the oil market.

During the 1980's we expected that world oil prices would likely rise faster than inflation, as the world oil market continues to adjust to limited oil supplies. We hope this will improve in the future.

U.S. net oil imports, given the overall outlook for U.S. energy consumption and production, and assuming only existing policies and programs, will likely remain near current levels of 5 to 7 million barrels per day over the coming decade.

The administration's energy policy has been formulated around the realities of the Nation's energy situation; taking the "next steps" in areas where we have made progress and making fundamental changes in others.

This energy policy framework is comprised of: (1) decontrol, which would lead to a realistic energy pricing policy; (2) the recognition that energy is an international issue requiring a clearsighted understanding of the problems and opportunities that this entails, including support for oil stockpiles to deal with disruptions in the world market; (3) elimination of extensive subsidies for domestic energy

production, which buys us little additional security and diverts capital, workers, and initiative from more productive uses elsewhere in the economy; (4) reformed regulatory policies for coal which reconcile energy, environmental, and other national objectives and allow the Nation's ample coal resources to be used more cost-effectively; (5) prompt resolution of the regulatory and institutional problems inhibiting the use of nuclear power; and (6) refocusing the government's role in energy research and development in many areas to emphasize long-term, high-risk activities.

Production and conservation of energy must be increased, consistent with the principles I've just listed. President Reagan's decision to end oil price controls is the first major step in this direction.

Other measures which should lead to increased domestic production of energy, such as much faster siting and permitting of energy production facilities, will be part of this administration's energy program.

More specifically, with the new government philosophy, the fiscal year 1982 budget will now emphasize long-term, high-risk research and development; not near-term demonstration and commercialization. It should save us about $2.5 billion in fiscal year 1982.

Decontrol of oil and reduced information gathering by DOE will save us $150 million in 1982.

Regarding the strategic petroleum reserve, the Department of Energy will speed up facilities development and increase the controlled fill rate.

Under nuclear, DOE will continue breeder development and encourage the production of nuclear energy.

Under Defense activities, the DOE will contribute to the administration's commitment to a strong national defense.

I am committed to a leaner, more efficient, and more effective organization in departmental administration. In the budget estimates related to that overall, we expect to be able to reduce the Department's budget request for fiscal year 1982 by almost $3 billion and budget authority at about $2.2 billion in outlays.

Specifically, reductions in budget authority include synthetic fuel at $1 billion, fossil fuel $4 million, solar energy $4 million, other energy supplies about $2 million, energy conservation about $600 million, energy information and Department overhead about $38 million, energy regulation, as I said, about $150 million, and general science about $40 million.

Mr. Chairman, that generally is my formal comment. I'd also like to make the point that this administration realizes that the real problem facing this country, Mr. Chairman, is the problem of our inflationary spiral that's eating the heart out of the pocket books of us all, the working men and women of America; and in order to control this, we have to control the deficit spending in government, the amount of money that government can take from working citizens and turn into a deficit and turn into programs that decrease the value of the American dollar at the same time they decrease production.

It has an effect on our Department because the rate of inflation certainly is related to the cost of international crude, just as international crude is related to the rate of inflation. If we can control the rate of

inflation, balance our budget, bring that under control, the strength of the American dollar will go up in international markets around the world, and the strength of the American dollar will, once again, add back to a stabilized price of international crude.

Senator Kennedy, with those opening remarks, I'd like to open the floor to any questions that you or any of the committee members would like to ask.

[The prepared statement of Secretary Edwards follows:]

PREPARED STATEMENT OF HON. JAMES B. EDWARDS

Mr. Chairman, members of the committee, I appreciate the opportunity to discuss with you today the current status and outlook of the U.S. energy situation, the energy polices of the Reagan Administration, and finally how the new energy policies relate to the fiscal year 1982 Department of Energy budget request.

U.S. ENERGY SITUATION

The U.S. economy is still adjusting to the 120 percent increase in imported crude oil costs to U.S. refiners that came in the wake of the Iranian revolution. Consumer reaction to higher petroleum prices coupled with a low economic performance in 1980 has dramatically reduced U.S. oil consumption and imports. U.S. oil consumption in 1980 fell by about 8 percent compared with 1979, while net oil imports declined by about 20 percent to equal 6.2 MMBD in 1980—the lowest level since 1975. Preliminary data for the first few months of 1981 indicate a continuation of these trends toward lower U.S. oil consumption and imports. While the level of imports is not by itself a complete measure of our energy well-being, it does indicate that the nation is adjusting to higher prices in an efficient manner.

Regarding world crude oil availability, we expect to see steady or only moderate increases in world oil prices this coming year. Despite lowered levels of production in Iran and Iraq resulting from the war, declining oil consumption, high inventories and incremental production from other OPEC members should ensure that adequate supplies will be available throughout 1981. While further increases in Iranian and Iraqi production above current levels are a possibility and would likely further soften oil markets, such optimism must be tempered with the realization that other OPEC members may cut back production to maintain a tighter balance in the oil market. The availability of oil supplies, and the possibility of further oil price increases, will depend on the degree to which the continuing conflict between Iran and Iraq disrupts a return to more normal levels of production and the reactions of other producers to these developments. If disruptions occur, then our expectation regarding moderate price increases, of course, would not hold and we would expect to see higher prices.

Despite our recent gains in using and producing energy more efficiently, our current projections (dated November 1980 and not including new policy initiatives) indicate that:

Over the longer term, world oil prices will likely rise faster than inflation, as the world oil market continues to adjust to limited oil supplies;

U.S. energy consumption is now expected to grow at a rate of about 1 to 1.5 percent per year from 1980 to 1990, compared to about 1.5 percent per year for the previous decade (and over 3 percent per year from 1950 to 1970). This relatively low level of energy growth reflects the effects of decontrol and higher prices in reducing energy demand;

Domestic oil production (excluding coal liquids) could range from 7 to 10 MMBD in 1990, depending upon actual recoverable resources, finding rates, and costs of new technologies;

Domestic gas consumption in 1990 could decline from current levels of 9.5 MMBDOE or 20 Tcf/year to 18 Tcf/year (8.7 MMBDOE), or increase slightly to 21 Tcf/year (10.1 MMBDOE), assuming no changes in gas policy. An increase in gas imports may be necessary by 1990 to meet these expected levels of consumption, as domestic natural gas production is expected to decline slightly by 1990;

U.S. coal consumption is expected to grow at from 3 to 5 percent per year to 1990, depending on the resolution of environmental and technical problems associated with industrial and electric utility coal use;

On-line nuclear capacity should range from 115 to 130 Gwe by year-end 1990, compared to a 1980 capacity of about 55 Gwe;

Energy from solar, hydro and other renewables is expected to increase the oil equivalent of about 3 MMBD by 1990 compared with current production of about 2.4 MMBD.

Given the overall outlook for U.S. energy consumption and production, U.S. net oil imports will likely remain near current levels over the coming decade (about 5 to 7 MMBD in 1990). But we will not improve the situation by an indiscriminate policy which attempts to reduce imports at costs which substantially exceeded the cost of importing oil. Again I would emphasize that these projections assume current policies and programs.

ADMINISTRATION ENERGY POLICY

The Administration's energy policy has been formulated around the realities of the Nation's energy situation—taking "next steps" in areas where we have made progress and making fundamental changes in others. This energy policy framework is comprised of:

A realistic energy pricing policy which decontrols oil and gas prices and allows prices to reach world market levels. This policy recognizes the resourcefulness of the American people, delegates to them decisions on how energy can be produced and saved most effectively, and rewards them accordingly, unfettered by second-guessing from government planners.

Recognition that energy is an international issue, requiring clear-sighted understanding of the problems and opportunities that this entails, including support for oil stockpiles to deal with turbulence in world markets.

Elimination of extensive subsidies for domestic energy production, which buys us little additional security and diverts capital, workers and initiative from more productive uses elsewhere in the economy.

Reformed regulatory policies for coal, which reconcile energy, environmental and other national objectives and allow the Nation's ample coal resources to be used cost-effectively.

Prompt resolution of the regulatory and institutional problems inhibiting the use of nuclear power. Nuclear power is and will continue to be an integral part of the energy mix in the country. Utilities should not be subject to uncertainties in Federal regulations that essentially eliminate nuclear power from consideration as an energy source.

Refocusing the government's role in energy research and development in many areas to emphasize long-term, high risk activities.

Production and conservation of energy must be increased, consistent with the principles I have just listed. President Reagan's decision to end oil price controls is the first major step in this direction. The President's commitment to regulatory improvement should lead to increased domestic production of energy.

Concerning decontrol, the Administration believes that price controls on oil have restricted domestic production, artifically boosted energy consumption, aggravated our balance of payment problems, and frustrated the introduction of new technologies. When producers and consumers must confront the true cost of energy in their everyday decisions about processes and products, the drive for improved energy efficiency will accelerate. American industry will also have an incentive to invest in new ways of producing energy that will no longer be at a competitive disadvantage to artificially low priced oil.

It will be the free enterprise system, not government, which will supply the enormous capital investments required to discover and develop the nation's conventional resources and support the commercial introduction of new and alternative energy technologies into the economy. The market place can do this more efficiently and effectively than government, especially when energy prices truly reflect energy costs. This is why decontrol is such an important part of the overall energy policy of the Administration.

The Administration's views regarding the proper role for the Federal government in energy has led to a new strategy for applying Federal funds to energy research and deveolpment programs. Briefly stated, this new strategy will require the government establish sound policy—so that the private sector has the incentive to produce and use energy efficiently. The government's role is then to focus its support on longer-term, high-risk (but potentially high payoff) research and development which industry cannot reasonably be expected

to undertake. The potentially high payoffs from this research are often so distant and risky that private investors cannot anticipate an adequate return on their investment. Industry will be expected to support demonstration of promising near-term technologies and to be responsible for their ultimate commercial development.

What the country must have, and what the Administration is committed to, is a more cost-effective and balanced approach to energy coupled with a firm resolve to increase energy production of all types.

Regarding oil import interruptions, the following guidelines are relevant although a more specific Administration position is still under review.

First, market mechanisms generally work better than government agencies. Now that the President has removed price controls and allocation regulations from the oil market, the forces of supply and demand will distribute oil supplies rather than bureaucratic controls or political influence. In the past, a system of controls and regulations has aggravated even small interruptions, causing gasoline lines and reducing available supplies. Clearly in view of our experience with controls we should rely on market mechanisms in dealing with disruptions.

Second, the damage to the health of the U.S. economy stemming from a supply disruption can be mitigated, to some extent, with appropriate monetary and fiscal policies. If the existing excise tax on oil production brings in large revenues during a supply disruption, an appropriate fiscal policy might be to quickly return those revenues to the economy through an emergency tax cut.

Third, since major supply disruptions can be expected to cause higher oil prices and unemployment, we must be sensitive to cases of extreme personal hardship. We must ensure that the social safety net protects those people lease able to cope with disruptions. This Administration will work with Secretary Schweiker and with the state Governors on this aspect of emergency planning.

Finally, while the market response to supply interruptions will be more flexible and adaptive to actual circumstances than a government response, the nation—not merely the Federal government—must prepare for disruptions. Consequently, oil users need to provide for disruptions and higher oil prices, and the government must move ahead with the strategic petroleum reserve. These principles should provide the foundation of our preparation for oil supply interruptions.

THE FISCAL YEAR 1982 BUDGET

The impact of the Administration's energy policies and its philosophy regarding Federal support for energy research and development will be readily apparent from the following description of certain major elements of the fiscal year 1982 budget request.

SYNTHETIC FUELS PROGRAM

The President is committed to ensuring the efficient development of a commercial synthetic fuels industry that can produce competitively-priced domestic fuels using our abundant resources of coal, oil shale, tar sands and renewable materials.

By shifting the focus of government synfuels programs to the newly-created Synthetic Fuels Corporation, the President's approach permits elimination of duplicative synfuels programs at the Department of Energy that will cost the taxpayer billions of dollars over the next five years.

Encouraging synthetic fuels production through the Synthetic Fuels Corporation instead of through the Department of Energy, therefore, reduces the likelihood that synthetic fuels promotion will become a major budget or economic burden in the future. The Department of Energy will end its program of major technical demonstrations, transfer the interim alternative fuels funding program to the Synthetic Fuels Corporation at the appropriate time, and focus on supporting longer range related research and development. The proposed transfer of projects that involve international cooperation will be carried out in a manner that provides for continuity of DOE funding pending consultations with cooperating partners that are required under our agreements with them.

As a result of this change, current arrangements for direct government funding of coal liquefaction and gasification demonstration projects will be terminated. The President intends to have the Corporation consider these and other projects either as fullsized synthetic fuels projects or as less than commercial joint-ventures.

FOSSIL ENERGY RESEARCH AND DEVELOPMENT

In conjunction with the restructuring of the synthetic fuels program, the Administration plans to revamp fossil energy research and development and terminate fossil energy commercialization activities in the Department of Energy. This will allow a substantial reduction in outlays while continuing effective support for longer-term research with higher potential returns to the Nation.

By relying on private market forces and the assistance of the newly-created Synthetic Fuels Corporation, the near-term technology demonstration and commercialization activities can proceed without direct Federal funding. Federal research support will thus focus on high-risk, longer-term, higher payoff activities that the private sector traditionally has been less willing or able to undertake.

Substantial budget savings will result from the adoption of this policy, as funding for design and operation of major fossil energy pilot and demonstration plants is reduced or eliminated and reductions are made in the near-term and company-specific research and development work in coal. Deregulation of oil and gas will also provide sufficient incentives for the private sector to undertake many of the activities currently funded in the petroleum and gas research and development programs. Because of the proposed changes in the regulatory and tax areas, it is expected that technology development will not be slowed down because many of the activities now supported by the government will be continued by the private sector.

To achieve this change in policy, some contracts will be terminated and major reductions in budget authority proposed for 1982. The Administration will also propose rescissions for 1981.

SOLAR ENERGY

By placing greater emphasis on the private sector in developing and marketing solar products, and by eliminating price controls that have put the solar industry at a competitive disadvantage, Department of Energy solar spending can be reduced by more than 60 percent in 1982 with cumulative savings of approximately $2 billion by the end of 1986. This can be accomplished without affecting the Federal government's support for longer-term research on emerging solar technologies. These budget changes will have little effect on solar energy use, which will continue at a healthy rate of increase over time as solar tax incentives and rising conventional energy prices stimulate the demand for solar products.

Total Federal support for solar energy will remain extremely high under the President's proposal due to continuation of the solar tax credits, which are expected to reduce taxes for residential and business investors in solar energy systems by $2.6 billion between 1981 and 1986. Tax credits for alcohol fuels and biomass will provide an additional tax expenditure of $4.3 billion over the same time period.

The Administration will continue direct government support for solar programs focused on advanced research concepts and exploratory development, but assumes that the private sector will be responsible for developing marketable systems once technical feasibility is established.

The Administration will also propose deferring construction of a permanent facility for the Solar Energy Research Institute until the mission of the organization is better defined and an appropriate staffing level agreed upon.

OTHER ENERGY SUPPLY PROGRAMS

The Administration will propose a 34 percent reduction in energy supply programs in geothermal, energy storage, electric energy systems, energy impact assistance, environmental studies, uranium resource assessments and hydropower as part of the general effort to employ market force instead of bureaucratically-administered programs to achieve national energy goals. These reductions will:

Terminate geothermal loan guarantees that serve merely to reallocate capital from more productive investments;

Eliminate funding for additional government-supported commercialization of geothermal technologies that can and should be supported by the private sector;

Eliminate energy impact assistance grants to the States that duplicate other Federal programs and unnecessarily assume responsibility for activities that are more appropriately undertaken by State and local governments;

Eliminate development and demonstration programs in electric energy systems and energy storage that can and should be supported by the private sector;

Terminate environmental studies that duplicate efforts of the Environmental Protection Agency and other Federal agencies;

Phase out uranium resource assessment activities because this program is no longer necessary to nuclear nonproliferation objectives; and

Terminate subsidies for all additional small hydropower demonstrations since sufficient incentives are already provided through a 21 percent investment tax credit and through credit programs in the Department of Agriculture.

By focusing Department of Energy programs on longer-term high-risk research, outlays can be reduced by a total of $861 million over the next five years. Various projects that do not meet these criteria will be phased out in an orderly manner. There will be little impact on domestic energy supplies. To achieve this policy change, the Administration will propose rescissions of $148 million in fiscal year 1981 funds and reduce its request for fiscal year 1982 appropriations by $186 million.

ENERGY CONSERVATION PROGRAMS

Motivated by rising energy costs and substantial Federal tax credits, individuals, businesses and other institutions are undertaking major conservation efforts. Decontrol of oil prices and continuation of tax credits can be expected to accelerate these trends.

Some Federal conservation programs are, therefore, no longer necessary, while others may impede private initiative by imposing too great a regulatory burden on the public. Selected, long-term research and development activities are needed, however, as is assistance to schools and hospitals and low-income people who do not benefit from tax credits.

By eliminating unnecessary conservation programs and by better targeting remaining efforts, Department of Energy program outlays can be reduced by nearly 10 percent from the current base in 1981, by nearly 40 percent in 1982, and by a total of nearly $2.4 billion by the end of 1986.

Program reductions are proposed for the three types of conservation programs conducted by the Department: technology development, regulation and information, and financial assistance to State and local governments. Technology development projects that can be commercially viable without Federal assistance will be terminated. These projects include work on energy from urban waste, consumer products, advanced automotive engine design, electric and hybrid vehicles, and industrial processes. Other high potential projects that are unlikely to be supported by the private sector alone because they are high risk and long term, or apply to many industries, will be retained.

Regulatory programs mandating building and appliance efficiency standards and utility conservation services would impose massive regulatory burdens on the private sector and would be a nightmare to administer and enforce. Therefore, these programs also would be eliminated. Consumers already are demanding and manufacturers are producing more energy efficient products and buildings without Federal standards. The Federal government's internal conservation efforts and certain information programs would be retained.

Financial assistance to state and local government conservation programs will be reduced and restructured. Grants for state energy offices and public outreach programs will be eliminated. Grants for conservation investments in public and non-profit schools and hospitals will continue at a reduced rate of approximately $100 million. These grants have proved their value in financing cost-effective conservation improvements in public facilities not eligible for tax incentives.

Finally, the Energy Department's low income weatherization assistance grant program will be incorporated into the Department of Housing and Urban Development's community development block grant program.

ALCOHOL FUELS AND BIOMASS FINANCIAL INCENTIVES

The Administration will propose termination of feasibility studies, cooperative agreements and loan guarantees for alcohol fuels and biomass energy development as part of the general effort to adopt market principles to achieve national energy goals. Tax credits will continue, which, in the case of alcohol fuels, will result in a subsidy of over $18 per barrel. The credits result in tax expenditures of $4.3 billion over the 1981–1986 period. The removal of price

controls from domestic crude oil will make alcohol fuels more competitive and eliminate the need for additional subsidies through loan guarantees, feasibility studies, and cooperative agreements.

As a result of this change, projects selected by the Department for feasibility studies, cooperative agreements, and loan guarantee awards will not be funded. These projects will have to compete for financing in private markets along with other energy projects. To achieve this policy change, the Administration will propose a rescission of $745 million of funds appropriated in 1980.

ENERGY REGULATION

The President's commitment to ending unnecessary government regulatory programs will permit a sizable reduction in spending and the removal of large numbers of Federal employees from government payrolls. Oil decontrol has enabled the President to eliminate a substantial part of the Department's regulatory activities. Department of Energy programs such as the price and allocation regulatory functions of the Economic Regulatory Administration, interventions in State public utility proceedings, mandatory fuel-use restrictions, and the cumbersome coupon rationing system will be completely eliminated or replaced by streamlined programs relying on market forces.

The proposed reductions total $150 million, or a reduction of 57 percent from 1982 budget authority levels.

ENERGY INFORMATION AND DEPARTMENTAL OVERHEAD ACTIVITIES

As part of the effort to reduce excessive Federal Government overhead costs and burdensome information gathering activities, the Administration plans a significant reorientation and reduction in the data and analytic services of the Energy Information Administration (EIA) in the Department of Energy. Various department-wide support and administrative functions will also be cut back consistent with diminished activity elsewhere in the Department.

Energy Department overhead activities such as accounting and personnel are proposed to be cut back largely to complement reductions proposed for other areas of the Department. Other proposed decreases occur in department-wide functions such as policy analysis, international energy activities, public information and other programs consistent with the need to reduce the cost of government.

To achieve these results, the President will propose appropriate budget amendments as well as any legislation needed to reduce data requirements written into law.

The proposal is expected to reduce EIA and departmental administration budget authority by $38 million or 10 percent in 1982.

NUCLEAR ENERGY

Final decisions on the Department's fiscal year 1982 budget for nuclear programs are just now being made.

DIRECT ENERGY PRODUCTION

The production activity is comprised of three components: the Power Marketing Administrations (PMA's), Uranium Enrichment Activities, and the Naval Petroleum Reserves (NPR). Estimated gross revenues for fiscal year 1982 are $5.7 billion. The Power Marketing Administrations sell electricity generated by Federal hydropower projects. The Department remains dedicated to the objective of operating the PMA's in a manner which will provide adequate and reliable electric energy and the fiscal year 1982 budget request will accomplish this.

The Department enriches uranium in the U.S. to meet domestic, foreign and U.S. government requirements for uranium enrichment services. Sales are projected at 13.9 million Separative Work Units (SWU) in fiscal year 1982, resulting in revenues of $1.7 billion. The fiscal year 1982 budget will support the continued production of enriched uranium from the existing gaseous diffusion plants and provide for the continued construction of the centrifuge plant.

The legislatively mandated purpose of the Naval Petroleum Reserves is to produce the reserves at the maximum efficient rate of production. The budget request will provide the funding necessary to carry out this mission. It is estimated that the Federal share of production for fiscal year 1982 will be approximately

158,000 barrels of oil per day and yield approximately $2.5 billion in gross revenues.

STRATEGIC PETROLEUM RESERVE

The Administration is committed to an effective strategic petroleum reserve program. The Reagan budget will provide for development of 750 million barrels of government-owned storage by 1989, in a secure and reliable system capable of a crude oil withdrawal of up to 4.5 million barrels per day.

The new Administration is taking an aggressive attitude toward filling the SPR as quickly as practicable. To accomplish this the Administration will submit a fiscal year 1981 supplemental request to offset the loss of entitlements under deregulation. Further, we are actively reviewing approaches which will accelerate the availability of storage capacity for the balance of the reserve.

GENERAL SCIENCE

As part of its overall policy of reducing funding levels to assist in resolving the Nation's fiscal and economic crisis, the Administration proposed a reduction of $40 million from the January budget in the Department of Energy's general science programs in life sciences and nuclear medicine, high-energy physics, and nuclear physics. This reduction to $567 million will still provide an increase over fiscal year 1981 to cover anticipated inflation, in recognition of the importance of basic research in these and other fields of the natural sciences as an investment in the Nation's future.

DEFENSE ACTIVITIES

Final decisions on the details of the Department's budget for Defense Activities are still under consideration. We are considering providing increases in funding for weapons research and development, testing, nuclear materials production, and upgrading of the Department of Energy's defense complex. These increases are needed to deal adequately with long standing problems within the Department of Energy defense complex, and to enable the Department of Energy to meet future Defense Department requirements for nuclear weapons.

Mr. Chairman, this Administration is fully aware of the depth and seriousness of the energy challenges facing our nation. The intensive budget review now coming to a close is intended to put the Department of Energy on a course which will deal with these problems resolutely and in a manner which recognizes that meeting these challenges requires the full cooperation and involvement of industry, commerce, individual citizens, and the Congress of the United States.

Senator KENNEDY. Thank you, Secretary Edwards. Senator Jepsen would like to make an opening statement. After that time, I'll ask questions.

OPENING STATEMENT OF SENATOR JEPSEN, VICE CHAIRMAN

Senator JEPSEN. Good morning. I apologize for being late. I was chairing another subcommittee hearing down in the Armed Services Committee. It's been a busy morning.

There is no issue more critical than the need to accelerate our economic growth. The demands on the Nation's resources are growing and important consideration needs to be given to high inflation, high unemployment, lingering poverty, rapidly eroding infrastructure, declining international competitiveness, and the need to increase our military preparedness. Each of these problems has one thing in common. It is that faster economic growth offers the only real hope for their solution.

Historically, economic growth in the United States has come from three sources—increases in the amount of capital employed, increases in the amount of labor employed, and increases in productivity. While it is true in recent years that employment has risen rapidly, net plant

and equipment investment has been stagnant, while productivity, as we all know, has turned negative. It is not surprising then that the growth rate of real GNP has fallen from its post-World War II rate of 3.5 percent per year to 2.9 percent since 1974.

The roles of bad monetary, fiscal, and regulatory policies in reducing the growth rates of net investment and of productivity are well documented. Yet if monetary, fiscal, and regulatory policy has been bad, energy policy has been perverse.

The domestic control of energy prices encouraged domestic energy consumption at the same time as it discouraged energy production. In the process, it served to increase our dependence upon foreign energy sources while adding upward pressure on OPEC oil prices. The combination of increasing energy dependence and rapidly rising energy prices contributed directly to the decline of net investment and productivity growth. In short, bad energy policy has been a constraint on growth.

I'm pleased that the administration is committed to the idea that the way to resolve the energy problem is to give market forces the freest possible rein. I believe from what I have read and been told, that you share this feeling.

Secretary EDWARDS. Senator, I do.

Senator JEPSEN. I endorse the President's Executive order fully decontrolling domestic oil prices, and I look forward to a dismantling of the complex oil allocation rules and their supporting bureaucracy. Most important, I look forward to a future in which this Nation's dependence upon foreign energy sources is reduced and in which energy begins to play a positive rather than a negative role in the economic growth process.

Thank you, Senator Kennedy.

Senator KENNEDY. Congressman Brown.

OPENING STATEMENT OF REPRESENTATIVE BROWN

Representative BROWN. Thank you, Mr. Kennedy.

Time is everything in politics. I do appreciate the opportunity to welcome Secretary Edwards. This is the first opportunity I've had to hear you before a congressional committee because of my schedule and the problems that we've had meeting those commitments.

Mr. Edwards, I look forward to your service in the energy area because we need stability in energy markets. I think we can get stability through the steps that have already been aggressively taken by this administration; steps that are consistent not only with the current market situation but with the policies that were finally come to by the previous administration.

As you know, the Democratic Congress in 1975 permitted the President, by right, in legislation to modify the pricing of oil so that we could elicit the supplies we so desperately need in this country to get us off dependence on foreign oil from abroad. That step was not taken until 1979 and came as a result of the shocks from the Iranian collapse when President Carter set a target date of September 30, of this year, for the gradual deregulation of the price of oil.

However, President Reagan and you have moved that date up and I think for very good reasons. The facts of the circumstances indi-

cated that we would have now, if we decontrolled, less price impact on consumers, more price impact on producers in a positive sense, and in a general sense a return to a much more stable market.

America can produce effectively and be induced to conserve. The prospects of easy increases and manipulations by our friends abroad are reduced. So I think that your step has been a wise one, and I look forward to your testimony.

Secretary EDWARDS. Thank you, Congressman Brown.

Senator KENNEDY. Senator Hawkins.

OPENING STATEMENT OF SENATOR HAWKINS

Senator HAWKINS. I have known Mr. Edwards for many years, and I'm looking forward to working with him. As I was listening to the statements here, it reminded me, I'm probably the only person here today that sued the Department of Energy; that is, the previous Secretary of DOE. I hope that never happens again. I think it's an awkward and an awful state of affairs when a public official or a citizen has to sue government in order to get the cooperation of that agency. I think we're all frustrated throughout this land at the work product of an agency that probably began as a great idea, but developed into an awkward, bulky, immovable mass of people and ideas which really had so little productivity, and so little positive effect on what we originally thought would be a help.

I might say that they settled out of court with me in order to get rid of me. I got the information I wanted, but I am very tenacious, and am looking forward to working with you in a better framework.

Secretary EDWARDS. Senator, I hope you never have to sue me. I hope we can sit down and talk out any differences before we come to that.

Senator KENNEDY. Congressman Richmond.

Representative RICHMOND. No, thank you.

Senator KENNEDY. We will follow the 10-minute rule under the precedent established by Senator Proxmire. We will also follow the order in which the members joined the hearing.

One of the points that you made is that the test of an energy policy and economic policy—I think in your own words as I have written them down here—is the amount of money it takes from working families. This, of course, is stated in other words by the President when he said that Americans should use the test, in judging an economic program, whether families were better or worse off than they had been in the past.

We have had a full presentation of the Reagan economic program, and it is time to ask the basic question, will the American family be better off in 1981 with this plan or without it?

I'd like to direct your attention to this chart which describes the effect of the administration's economic plan on the family with a $20,000 income, using the published rates that have been provided to us by the administration. It shows that a tax cut proposed by the Reagan administration will provide for that family whose income is $20,000 a tax cut of $114. And the cost of the decontrol this year, just this year alone, will be some $638 according to the Government figures.

I am wondering, in terms of your own evaluation and using your own test about the amount of money taken from working families, whether you think an American family is better off when it is $524 more in debt?

Secretary EDWARDS. Senator, I think if you take any specific area like this and concentrate on it, you could prove anything. One thing I've learned in the short time that I've been here is, you can find all sorts of statistics here in Washington proving almost anything you want to, but I don't think we can concentrate on one little narrow aspect of this total package.

I think we have to look at the whole issue. I might add that the cost of gas and oil has gone up 120 percent from 1978 to 1980, which leads me to believe that something isn't helping the working men and women of America in recent years, and I certainly think it's time for a new opportunity to try something new.

I think the best way we can help the working men and women of America is to get on top of this terrible inflation rate, and since we are talking about the economy, I think the decision we have to make, Senator, is whether we would prefer to have that construction worker out there building that house or that apartment building or that steelworker tending to rolling of the steel or that automobile worker assembling those automobiles in the automobile assembly plants around this country, or whether we'd prefer to have a person here on the Washington scene working, taking away the economic strength of the Government.

If we don't get on top of that, if we don't stop this terrible increase in Government spending—and I'd like to remind the committee that, in spite of all these proposed cuts and increases that the Reagan administration is making, we are still going to be spending about $40 billion, plus or minus a few billon more, in 1982 than we're presently spending in 1981, so I'd like to point out to the committee that these cuts are really not cuts in what we're spending in 1981, they're cuts in the proposed increases in 1982—but if we can get on top of this deficit spending, we can bring our inflation rate under control, and inflation has a direct relationship to the interest rates.

If we can get our interest rates down, then the American people can afford to buy that new automobile, build that new house. The young people can afford to borrow some money to do these things. That way, we can get that construction worker back there with his hammer in his hand, that steelworker working, and that automobile assembly man on the job once again.

So I don't believe we can concentrate on one issue like this. But I would like to make the point——

Senator KENNEDY. Well, it's our responsibility to concentrate on it today. The fact of the accelerated decontrol adds another point to the Reagan inflation.

Representative BROWN. Senator Kennedy, would you yield for a question?

Senator KENNEDY. I'd like to be able to complete my questioning, and then I'd be glad to yield.

That adds one point to the Reagan inflation, even following your own scenario. If interest rates follow the rate of inflation, we're in for an awesome period.

But just taking these statistics, I think it is important—you say you can prove about anything by statistics. We can show this kind of a burden on the families in my own State or in the Northeast by any visit with any group of consumers or any people that are making $20,000, I don't think we should delude ourselves that these are just statistics that are somehow developed or fabricated in any way. They are reflected in real terms, in human terms, with very great anguish and suffering.

I'm sure that that is communicated to you by letters from people all over—whether it's in the Northeast, the Midwest, or other parts of the countries. I listened to your testimony about the importance of the development of an energy policy that is going to back off from imported oil. I would like you to take a look at the major areas of energy spending at DOE in the area of the solar conservation budget and the nuclear budget. Let's see how each of these are actually saving oil.

Again, the statistics and figures are based on DOE figures. With the energy and conservation budget, oil saved in 1985 by various Federal spending—the Department of Energy estimates that under conservation and solar budgets will back off 103 million barrels—the equivalent of 20 days of imports. While nuclear spending will only back off 4 million barrels.

Yet on the one hand, we've seen a reduction of solar conservation cuts of some 74 percent and virtually no cut in the nuclear budget. I think your own statement and testimony earlier this week indicated that you were going to ask for additional kinds of expenditures. This chart over here indicates what the figures are for the spending in conservation and solar, $1.5 billion, with a 74-percent cut in conservation and solar—nuclear, $1.6 billion with no cut. And in the middle chart we see what is actually saved or backed off from the importation of imported oil.

I'm just wondering what possible sense this makes from an energy point of view in terms of achieving the backing off of the imports from the Middle East countries or from the OPEC producing countries.

Secretary EDWARDS. Senator, I think once again these are interesting charts. I wished that you had extended me the courtesy of seeing this, like I extended you the courtesy of having my testimony, before I came.

Senator KENNEDY. Mr. Secretary, these are all statistics and figures that are Department of Energy figures and statistics. They are rather basic. You talked about the nuclear budget yourself earlier this week. These are figures describing the reductions in conservation and solar provided to us.

Secretary EDWARDS. Senator, you're implying that all of these savings and conservation are due to the expenditures of the Federal Government. I doubt very seriously that many of them were doing that. I think the savings in conservation were due to the marketplace.

The only thing that drove me to a smaller automobile and diesel automobile was the price when I drove up there to that gas pump and I saw the price. It certainly was not any Federal program or any

Federal information that I got that cost billions of dollars or millions of dollars and more Government costs and created more deficits. It was not that that drove me. It wasn't these Federal programs that forced me to put that additional insulation into my home. It was the price of heating oil and the price of energy that drove me to that.

So I respectfully submit that it was not the Federal programs that brought about these savings. It was the marketplace. And that's what we have to get back to.

Senator KENNEDY. Mr. Secretary, you'd better read your own reports. These are incremental, additional savings as a result of these expenditures that we're talking about. That's what I'm talking about, and that is documented in your own reports. We're not just talking about general increases; we're talking about savings as the result of these expenditures.

Secretary EDWARDS. They may be documented in those reports, but I would have to submit to you that these people who wrote these reports may just be justifying their reason for being on the Federal payroll. We'll look at these reports, and we'll be glad to give you back our estimates, and we'll give them back after we've studied the reports. I think we'll respond to you in writing, if that would be satisfactory.

Senator KENNEDY. They have been out for some period of time, and if you've got new information to reflect on those, please provide it. They have been examined; there have been hearings by various energy committees. They've been a matter of public information and documentation.

If you have new information to undermine the basic fundamental integrity of those reports in your Department, then we'll be interested in it. But the fact remains that they have existed for some period of time, and they have not been refuted.

[The information referred to follows:]

One document Senator Kennedy was referring to was an unpublished, internal study dated January 1981. This study had been commissioned by the previous Assistant Secretary for Conservation and Solar Energy in January 1980. Although it was reviewed by other offices of DOE, it was not and has not been concurred in nor approved by these offices within the Department because disagreement existed regarding the base case used to estimate future potential conservation savings, and this could not be readily resolved. Therefore, this report is an inhouse working document and does not represent Departmental policy.

This report did contain an estimate that the incremental oil savings due to DOE conservation programs in 1985 would be 0.6 quadrillion BTU (which is equivalent to 103 million barrels of oil). A major flaw, however, is that this report did not make a comparative analysis of the savings that result from: (1) DOE conservation programs, (2) voluntary conservation efforts, (3) pricing impacts.

Further, the estimate does not reflect the expected effects of the Program for Economic Recovery recently announced by the President, including regulatory reforms, continuation of existing residential and business solar energy tax credits, and the Accelerated Cost Recovery System to provide businesses an investment tax incentive. It should also be noted that some conservation savings are the result of actions and expenditures already made by these programs and are therefore unaffected by proposed reductions in future expenditures. All of these factors represent substantial deficiencies in the estimate that would tend to cause it to be on the high side.

The estimate for the oil backed off ". . . in the area of nuclear spending . . .", (sic) Senator Kennedy, was four million barrels. That estimate was not developed within the Department of Energy. It is understood that this estimate was developed by a professional staff member of the Joint Economic Committee as the approximate oil equivalent energy in the electric power that might be generated by the Clinch River Breeder Reactor test facility only.

Senator KENNEDY. What I'd like to just ask is, in the new recommendations that are being made now about the President asking more cuts—as this leadline indicates—"Reagan Tells Cut More," $3 to $6 billion, will the nuclear budget be sacrosanct from any kinds of cuts?

Secretary EDWARDS. Senator Kennedy, none of our budget is sacrosanct from any kind of cuts, and I hope you will appreciate that when they come over to the Congress.

Senator KENNEDY. Well, we haven't had any cut there so far. You've indicated that you thought there was an increase.

Secretary EDWARDS. We have 4 years of catching up on the nuclear side to try to put nuclear in its proper place in the armamentarium of solving energy problems. You have problems in your part of the country with energy costs. Nuclear has been stopped in its tracks by the previous administration. For example, when we said that we were not going to reprocess spent fuel rods for nuclear energy, that set the nuclear energy industry back in this country many, many years. It will take us 10 years to catch up.

Senator KENNEDY. Your own Budget Director, Mr. Stockman, has stated that in terms of the support that has been given to the nuclear energy field, it's totally incompatible—that is a quote, and I'll include these letters in the record—"totally incompatible with the free market approach to energy policy."

[The letters referred to follow:]

U.S. SENATE,
Washington, D.C., February 23, 1981.

Hon. DAVID STOCKMAN,
Director, Office of Management and Budget, Executive Office Building, Washington, D.C.

DEAR MR. STOCKMAN: I was quite disturbed in examining the recent budget cut proposals to find that absolutely no cuts were proposed in the nuclear energy budget. Other energy programs, solar conservation, and coal, have been deeply cut.

On many different occasions, both you and President Reagan have emphasized the primacy of the free market. This is the reason you have given for many of the budget cuts that will exact the highest price in human terms. And it is the rationale you cited when the Reagan Administration accelerated oil price decontrol, a policy which will cost the nation $200 billion and the consumers of Massachusetts $25 billion during this decade.

What I fail to understand is why an Administration that claims so deep a commitment to the free market in other areas continues to countenance vast federal subsidies for the nuclear utilities. Especially disturbing is the subsidy for the Clinch River Breeder Reactor project which you so forcefully opposed in a September 17, 1977, letter to your Republican colleagues, a copy of which is appended. At that time, you called the $3 billion Clinch River project "totally incompatible with our free market approach to energy policy."

In the same letter, you wrote that "the precedent set by continuing the Clinch River project will be . . . massive federal subsidies to underwrite future national energy costs." You concluded: "it (funding Clinch River) is a test of whether as Republicans, we will consistently adhere to . . . free market views on energy policy. . . ."

Your Administration faces that same test now. It is a test of the fundamental fairness and the fundamental consistency of your program. An Administration that demands an end to CETA job training for unemployed workers in depressed industries and inner cities should not be advocating a breeder reactor project which involves, in your own words, "a large, uneconomic subsidy"—a breeder project that is, in fact, nothing more than a CETA program for nuclear engineers.

If you regard a painful policy of decontrol as right for the ordinary families of New England heating their homes, then surely it is right that the multi-billion dollar nuclear industry should not receive the comfort of excessive government

spending. I hope that when the final federal budget recommendation is released, the nuclear industry will not be given special subsidies, special protection, and special privilege.

Sincerely,

EDWARD M. KENNEDY.

Attachment.

CONGRESS OF THE UNITED STATES,
HOUSE OF REPRESENTATIVES,
Washington, D.C., September 17, 1977.

CONSERVATIVE ECONOMICS AND FREE MARKET PHILOSOPHY SAY "NO" TO THE CLINCH RIVER BREEDER PROJECT

As a member of the Energy and Power Subcommittee, I worked to defeat the Administration's National Energy Plan on the grounds that it was anti-free market in nearly every respect.

Along with most of our Republican colleagues, I advocated decontrol of oil and natural gas prices because I believe the market will furnish additional supplies in response to higher prices. I oppose bureaucratically administered conservation programs because I believe the free market is the best means of achieving conservation. As prices rise, businesses, households, and other energy users substitute lower cost factors—insulation, improved engineering efficiency, and other capital improvements—for energy, thereby lowering demand and costs. I also opposed the Administration's red-tape-ridden coal conversion program. The market system will lead to increased coal use by utilities and industry as the Btu cost of gas and oil rises without the costly "help" of a Washington bureaucracy.

Until a few months ago, I assumed that the Clinch River Breeder project was a good idea. It promised vast amounts of energy free from foreign control. But after a careful, in-depth review of the economics of the project, I have come to the conclusion that it is totally incompatible with our free-market approach to energy policy.

The case for the Clinch River project and early breeder commercialization has been constructed almost without reference to the principles that we applied in the earlier energy debate. It ignores the dynamic resource adjustment process that will take place in the energy market during the next three decades. As a result, it overstates future demand for electric power and understates the expanded supply of uranium that will be generated by higher prices. This lack of market reference in the case for the breeder obscures the clear cost advantage of sticking with conventional nuclear power over the next thirty years. The breeder cannot compete with existing nuclear technologies within the time frame contemplated by its advocates without continuing massive subsidies.

The precedent set by continuing the Clinch River project will be one of increasingly deeper government involvement in the development, marketing, and commercialization of alternate energy sources and massive federal subsidies to underwrite future national energy costs. Today it is the nuclear breeder lobby looking for a large, uneconomic subsidy. Tomorrow it will be the solar power gang, then the windmill freaks, and so on in a never ending stream of outstretched palms.

As I said in my previous Dear Colleague, I believe that government support for basic scientific research, laboratory experimentation, and pilot scale demonstrations is a laudable and appropriate policy. But government should not become involved in the provision of subsidies for the commercialization of new energy technologies that cannot pass the market test of competitiveness with alternatives on a price basis. The breeder reactor will not pass this test until well into the next century, if ever.

If your view is similar to my initial reaction, you assumed that the vote on Clinch River was a struggle between the pro-production forces and the anti-growth Doomsday squad that has done so much damage to our energy situation already. It is not. Ironically, it is a test of whether, as Republicans, we will consistently adhere to the free-market views on energy policy that we so forcefully advocated during the debate on the energy bill earlier this session.

I hope that you will carefully consider the attached memorandum and vote in favor of the Brown amendment to cut back the funding for Clinch River.

With all best wishes, I am

Yours very truly,

DAVE STOCKMAN,
Member of Congress.

Enclosure.

The Market Case Against the Clinch River Breeder Project

1. Uranium supply, demand for electricity, and power costs: two nuclear technologies in competition

The issue of whether to continue heavy federal subsidies to the Clinch River project is fundamentally a question of energy costs, not one of quantity or supply adequacy. Clearly, we must make large additions to our electrical generating capacity between now and early in the next century. Due to dwindling fossil fuel supplies, an increasing share of this additional capacity must be nuclear. The market case against early breeder commercialization, as distinguished from the anti-growth and anti-nuclear arguments, does not deny either of these propositions.

But it does focus on a very specific and important question regarding the appropriate choice of nuclear technologies and the timing of their introduction into the commercial market. The question is, within the time frame under consideration—roughly the period from 1990 to 2010/15—which nuclear technology offers the prospect of adequate electric power production at the lowest cost: the conventional light-water cooled reactor or the proposed breeder-plutonium fuel cycle?

Either of these nuclear power variants can fill our electric needs. The question presented by the Brown amendment is which will be the best bargain for the economy, electric customers, and the Federal treasury.

This question cannot be answered apart from the dynamics of the marketplace and its complex interaction of electric power demand, uranium ore supply, and the comparative capital and fuel cycle costs of the two technologies.

No one has seriously argued that the breeder is competitive or ought to be added to our electric energy supply system so long as there is an adequate supply of low-cost uranium. Current figures indicate that the capital cost of the breeder will be from $100 to $200 greater per kilowatt of capacity than for conventional light-water reactors. Similarly, at current uranium prices, the once-through fuel cycle of the conventional reactor is also cheaper to the high cost of separating, reprocessing, and refabricating spent reactor fuel, as required by the breeder.

However, at such time as our supply of low-cost uranium is depleted and the price rises to levels perhaps three or four times above historic uranium prices, the comparative economics change. The breeder fuel cycle becomes cheaper because it does not require fresh uranium ore. Eventually, these fuel cycle savings more than off-set the higher capital costs of the more complex breeder design and technology. Under these conditions the breeder variant would displace the light water reactor as the lowest cost source of nuclear electric power.

In a normal product market, the interaction of supply and demand would determine this threshold point, and thereby determine whether 1990, 2020, or any point in between, is the appropriate date for the introduction of the commercial breeder. However, the market for advanced nuclear electric technologies (and indeed advanced energy technologies of all types) is heavily influenced by extensive Federal involvement in research, development, and demonstration.

In the present case, this involvement is appropriate due to the unusual national security implications of civilian nuclear power and due to the clear national economic benefits which result from public financing of research and development activities that would have prohibitively long pay-back periods in the private sector, especially in the risk-averting utility industry.

But development of energy technology options should not be confused with their marketing and commercial introduction. An essential principle of the market approach to energy policy is that when the stage of commercialization or near commercialization is reached, the market choice mechanism must take over and development subsidies must largely end. Therefore, the only justification for any continued funding of the Clinch River project is the hard economic judgment that under foreseeable conditions, the market would select the breeder during the 1990's as the lowest-cost form of nuclear electric power production.

Advocates of the Clinch River project have recently shifted their justification in an attempt to avoid this crucial test, and are soft-pedalling the former argument that Clinch River is the first stage in an integrated commercialization program. But even a cursory review of the nature and scope of the timetable proposed by the Science Committee demonstrates that the Clinch River project cannot be served from the overall timetable for early commercialization.

The new argument is that the Clinch River project offers a kind of energy "insurance policy," or a scaled-up R & D option on which a commercialization choice can be made in the late 1980's—after the project is in operation. But this argument ignores economic and political realities. The Clinch River project will cost at least $2.7 billion. In conjunction with the other elements of the breeder development program, it will generate a vast industrial support and supply infrastructure among private companies engaged in all phases of reactor design, component manufacture, and plutonium fuel cycle support. The development of this infrastructure is in fact one of the central goals of the project.

The notion that after the government and private firms have invested billions of dollars in developing a commercial breeder industry infrastructure, it will somehow be easier to make a decision on commercialization is absurd. All of the expenditures on the project and its infrastructure will have become sunk investments. It would make no sense to write off all of this investment and put the breeder reactor on the shelf for two or three decades until economic conditions become more favorable, should that be the conclusion of the Clinch River test. What will happen is that the breeder will develop still greater institutional momentum. As difficult as the decision to defer breeder commercialization is today in the face of clear and convincing evidence, it will become still more difficult at the so-called "commercialization decision date" in the 1980's.

What about the "insurance policy" argument? It may seem attractive to support the Clinch River project despite its very unfavorable economics against the risk of unpredicted deterioration in the world uranium market. But uranium is not the only fuel source facing the prospect of depletion of low-cost reserves. Supply uncertainties are at least as strong for conventional sources of natural gas and crude oil. If we adopt the "insurance policy" rationale, the Federal government should make a commitment to very heavy subsidies for commercial scale synthetic crude, oil shale, geopressurized gas, and coal gasification plants as well—just to provide an "insurance policy" for other vital energy sources. This kind of logic obviously leads very rapidly to a non-market based energy supply system, something that I fervently hope is not our goal.

In light of these considerations, it is clear that the time to make the choice between accelerated or deferred commercialization of the breeder is now. The following sections demonstrate quite clearly that market conditions will not be conducive to breeder introduction until well into the next century.

II. There is no such thing as free energy

The preceding makes clear that the breeder is an advanced technological variant of current reactor and fuel cycle design, not the energy equivalent of a perpetual motion machine. Contrary to the popular image, it does not "breed" more energy than it consumes; rather, the breeder facilitates a more complete extraction or recovery of the energy potential of uranium ore than is possible with current technology. This enhanced recovery, however, comes at a substantial premium in reactor capital investment and fuel reprocessing facilities.

For this reason, the widely advertised fact that the enrichment tailings left over from the conventional nuclear process contain the energy equivalent of a trillion barrels of oil is of little significance divorced from the context of economic costs. For one thing, this huge, dramatic number represents electric-generation input equivalents, not end-use energy available to the economy. Given the inherent thermal conversion inefficiency of electric power generation, the end-use value is something in the order of only 300 billion barrels of oil equivalent.

More importantly, incomplete energy recovery from fuel resources is by no means unique to the uranium 235 fueled light water reactor; the extraction and conversion process for nearly every fuel in use in the economy today exhibits the same pattern.

On the average, almost two-thirds of the crude oil in a given reservoir is left in the ground because the costs of a higher rate of recovery are prohibitive. In fact, since the beginning of the petroleum age in the United States, nearly 300 billion barrels of oil have been left in the ground due to the economy limits of recovery.

Similarly, until most U.S. coal seams have been deepmined, yet the typical "room and pillar" method of extraction has left considerably more than half of the available coal behind. The amount of energy in this unrecovered coal is in the equivalent of another 300 billion barrels of oil.

A proposal to launch a massive Federal subsidy program to re-open abandoned mines and wells, or to encourage much higher rates of recovery from currently producing properties, would not be given serious consideration at the present time. Yet the much bally-hooed stored uranium tailings are no different in principle. The desirability of enhanced BTU recovery from any fuel is essentially a matter for the market to decide; physical potential is a thoroughly inadequate justification for a large subsidy program.

III. Future electric power demand and market adjustment

The linchpin in the case for subsidized breeder commercialization has been enormous projected increases in electric power demand during the next three decades. As recently as 1974, for example, the ERDA midcase estimate showed a need for 2,200 gigawatts of generating capacity by the year 2000—a figure which represents generating capacity more than four times greater than available today.

Under this demand scenario, a minimum of 1,000 gigawatts of nuclear capacity would have been absolutely essential (this compares with 40 gigawatts of nuclear capacity on-line at present). Nevertheless, even at this high level of nuclear supply, coal-steam capacity would have had to increase four-fold to make up the difference. Obviously, under these electric demand conditions, known and even speculative supplies of low-cost uranium would have been inadequate, making early breeder commercialization imperative.

In truth, however, these demand projections represent an inexcusable ignorance of market dynamics. Rather than being sophisticated economic projections, these numbers were merely mechanical extrapolations of the electric power consumption growth rate that had prevailed for the previous decade or so, about seven percent per year.

Yet this high electric consumption growth rate—nearly double the average growth in GNP—was made possible by a single key economic factor that even in the early 1970's should not have been viewed as indefinitely sustainable: a steadily declining real price of electric power.

Between 1945 and 1970, for example, the constant dollar cost of residential electricity dropped from 11 cents per kilowatt hour to only 2.5 cents per kilowatt hour; similarly, industrial rates were reduced by more than one-half during the same period. The result of this unique combination of steeply declining unit prices and rapidly growing total consumption was that the share of GNP devoted to purchased electricity remained almost constant at 2 percent during the entire post-war period.

It is clear today that declining real prices for any energy source including electriicty, are a thing of the past. Indeed, average electricity rates in constant dollar terms have already increased by 34 percent since 1972.

Due to huge additional costs for environmental controls, rising costs of utility financing and capital, and sharply increasing utility fuel costs, a substantial continuing rise in real electric rates over the next 20 or 30 years is highly probable. Indeed, one recent study by ERDA's Institute for Energy Analysis indicated that real electricity prices will increase by more than 60 percent by the year 2,000.

Yet assuming a seven percent growth rate in electrical consumption (as per earlier ERDA demand studies) in combination with the undeniable prospect of something in the order of a 50–60 percent increase in electric rates (as per recent ERDA price studies) produces an entirely absurd proposition: namely, that the fraction of GNP devoted to the purchase of electric power would jump from its historic 2 percent level to more than 15 percent! Even at a more modest 5 percent annual consumption growth rate, the mathematical outcome is nearly a 10 percent share of GNP going to electrical purchases.

There is little reason to believe that the economy would permit such a drastic shift in resource allocation to occur. The residential market, which has been a source of differentially high growth in recent decades, provides a good case in point.

This sector is now nearly saturated with basic appliances, as symbolized by the Census Bureau's decision to discontinue its questions on basic appliance ownership because levels have reached 99 percent. In addition, the stabilization of the population growth rate indicates a much lower rate of new household formation than in previous decades. There is also a strong prospect of large increases in household thermal efficiency in both space conditioning and appli-

ance applications, spurred by mandatory efficiency standards, the likelihood of strong solar penetration, and of course simply by rising power rates. For these reasons it is probable that aggregate household consumption of central station power will grow very modestly, if at all, during the next few decades.

The process of factor substitution will greatly constrain the rate of industrial and commercial power growth as well. To take one specific instance, it is almost certain that the two and one-half decade long decline of industrial co-generation, during which co-generated power declined from almost 20 percent of industrial use to 10 percent, will be sharply reversed, thereby constraining demand for purchased central station power.

As a result, an average electrical consumption growth rate in the three percent range seems highly probable in the decades ahead. Even this would mean an increase in the central station electricity share of GNP to nearly 5 percent by the year 2000, assuming a 60 percent increase in real prices.

Since the long-term growth rate for real GNP is roughly in the 3 percent range, this would imply a 1:1 growth ratio between electrical consumption and GNP, a sharp contrast with the 2:1 ratio implicit in the pro-breeder scenarios.

There is already strong evidence accumulating that this sharply reduced growth rate in central electric power is likely. During the last two years of strong economic recovery and high real GNP growth, electrical consumption has increased only at a 1:1 ratio with GNP. This contrasts markedly with the pattern during previous decades in which even strong cyclical recovery years exhibited electrical consumption growth rates far in excess of GNP.

IV. Meeting electrical demand under a realistic market scenario.

The foregoing considerations make clear that rather than in excess of 2,000 gigawatts of electric capacity by the turn of the century, the more probable estimate is in the range of 1,000 gigawatts (based on a three percent average growth rate instead of seven). On the basis of current trends, it is likely that even 350 gigawatts of nuclear electric capacity is an optimistic estimate of the nuclear share of this total capacity requirement.

Two strong considerations support this estimate. First, there is little reason to believe that there would be serious restraints on achieving roughly 650 gigawatts of non-nuclear capacity. Presently, for example, hydro-electric accounts for 65 gigawatts. The Interior Department projects that this will reach nearly 100 gigawatts by 1985. In addition, it is almost certain that a minimum of 5 percent of capacity will have to be fired with liquid or gaseous fuels (perhaps synthetics) because it is simply economically prohibitive to use large coal or nuclear fired plants for peak-shaving purposes.

This leaves a requirement for baseload coal capacity in the range of 500 gigawatts. Presently, there are 250 gigawatts of coal capacity in place. According to current surveys, another 100 gigawatts of coal capacity is either under construction or planned through 1985. Thus, over the remaining fifteen years of the century only another 150 gigawatts of capacity would be required, an average of 10 coal-fired plants per year.

These coal fired capacity estimates imply annual coal production of slightly over 1.2 billion tons per year, even after allowing for substantial increases in direct industrial use. Since the Carter Administration has targeted this production level for 1985—15 years earlier—there is little reason to think that there would be serious supply constraints.

The second reason to believe that nuclear capacity would not exceed 350 gigawatts under a realistic demand scenario is simply the lagging rate of light water nuclear plant additions in the past three years. The 350 gigawatt figure for the year 2000 implies that 14 new 1,000 megawatt units will become operational during each of the next 22 years.

Yet in 1975, there were only two new orders for nuclear plants; in 1976 there were only three; and this year there have been none. Moreover, during the same period there have been 18 units cancelled representing nearly 20,000 megawatts of nuclear capacity. Compared to the 5,500 megawatts of new orders, this means that just since 1975 there has been a net decline of nearly 14,000 megawatts of nuclear capacity ordered for the 1980's.

Certainly it is to be hoped that Congress will act soon to streamline the present disastrously complicated and prolonged licensing process, and that the intense social and political opposition to nuclear power generation will be overcome.

Nevertheless, the experience of the past few years makes clear that the required annual addition rate of 14 nuclear plants will be difficult to achieve, and that 350 gigawatts of nuclear capacity by the year 2000 is indeed a conservative reference target for analyzing uranium supply and prices.

V. Uranium Supply and Prices: Bureaucratic vs. Market Perspective

The second critical question regarding early breeder commercialization concerns future prices and supplies of uranium ore. Specifically, is there likely to be a sufficient supply of low-cost uranium ore to support the lifetime requirements of 350 gigawatts of nuclear capacity, thus permitting a deferral of breeder commercialization program until after the turn of the century?

The answer to this question depends first of all upon future enrichment practices. Uranium oxide contains roughly .7 percent U–235, but the extent of enrichment extraction of this fissionable material can range from 57 percent (.3 tails assay), to between 87 and 100 percent (.1–0 tails assay). For this reason, projections of uranium oxide requirements are very sensitive to assumptions about enrichment methods and the tails assay.

Specifically, the lifetime requirements of the 350 gigawatts of nuclear capacity projected previously would be 2.5 million tons, assuming .3 tails; 2.2 million tons, assuming .2 tails; and 1.8 million tons, assuming .1 tails. The high tails assay thus produces uranium ore requirements nearly 40 percent greater than under the low assay.

Traditionally, U.S. enrichment facilities have operated at a .2 tails assay. But in 1973 this was temporarily increased to .3 in response to what appeared to be a growing shortage of enrichment capacity relative to projected rapid growth in the nuclear power market. The effect of this change was to increase the apparent uranium oxide requirements for current and planned light water reactors by 26 percent.

However, it is likely that the future trend will be toward increasing rather than declining extraction of fissionable material from our uranium supplies. The anticipated shortage of enrichment services capacity has become extremely unlikely because of the serious slowdown in reactor deployments and because of the active enrichment capacity expansion program now underway.

Another factor determining the level of extraction efficiency is the cost of enrichment services relative to the cost of uranium. As the price of raw uranium rises relative to the price of enrichment, the percentage of U–235 that can be economically extracted from raw ores increases. Thus even assuming that there are no breakthroughs in enrichment technology, the proportion of useable fuel that can be extracted from raw uranium will rise over the next decades.

The biggest potential increase in extraction efficiency will come from new technologies, however. These new processes promise to radically reduce the amount of U–235 left in the tailings. The most promising new technology from a theoretical standpoint is laser isotope separation. This process may be capable of extracting nearly 100 percent of the U–235 from uranium ore, thus vastly expanding the amount of fuel that could be produced from our uranium supplies. The tailings piles that breeder advocates point to as a huge potential source of energy could be used to produce fuel for light-water reactors if laser isotope separation becomes commercially viable.

Another promising variant in enrichment technology is the gas centrifuge. Current U.S. enrichment plants use immense quantities of electricity. When all three plants are operating at full capacity, they use nearly as much electricity as the entire state of Minnesota.

But because these plants had access to the very cheap electric power produced by the TVA, the cost of enrichment remained within reasonable limits. Now that even TVA power has become significantly more costly, less electricity-intensive enrichment technologies such as the centrifuge may be able to lower the cost of enrichment services. This will permit a higher rate of extraction.

Both of these new enrichment technologies are under intense development. The Administration requested more than $50 million in FY 1978 for advanced isotope separation techniques. A gas centrifuge plant is planned for construction within the next decade as an expansion of the Portsmouth, Ohio enrichment facility.

In light of these almost certain improvements in enrichment efficiency, it would be prudent to assume a maximum uranium oxide requirement of 2.0 to 2.2 million tons to meet the lifetime fuel needs of the 350 gigawatts of capacity projected above. It is necessary to make some very unreasonable and non-market

oriented assumptions to show that uranium supplies in these magnitudes will not be available in the decades ahead.

Before proceeding to a discussion of current reserve estimates, two frequently encountered red herrings need to be disposed of. The first is that the current "proved" reserves of uranium only total 680,000 tons, or roughly one-third of the supply requirement indicated above.

However, the term "reserves" refers only to uranium resources that have been specifically located and delineated by drilling and other engineering techniques. Placing resources into this category thus requires mining companies to make substantial investments. These investments will obviously not be profitable unless these reserves can be produced in the relatively near future. Thus, the widely quoted reserve number actually represents a "production inventory" and has little to do with the potential resource base, the relevant concept for decision-making purposes.

The most apt analogy is the case of natural gas, for which proven reserves now stand at about 200 trillion cubic feet. Were this taken as the potential resource base and were production to continue at current rates we would reach absolute depletion in 1987. Even the most conservative analysis of the natural gas industry have not suggested this extreme possibility.

For one thing, natural gas, uranium and almost every other extractable resource has a clear "extension" pattern in which economically delineated reserve levels imply a somewhat fixed "new find" rate in adjacent deposits or reservoirs within prevailing price ranges. Current ERDA estimates put these uranium extension reserves, the most conservative category of resource base expansion, at 1.1 million tons. This, in combination with what has previously been termed the production inventory, amounts to nearly 1.8 million tons of known reserves, a figure nearly equal to the lifetime supply requirements given above.

Unfortunately, advocates of early breeder commercialization have used this figure (1.8 million tons) as the "prudent planning base" for calculation of breeder economics. But this is clearly a bureaucratic expedient rather than an economics based estimate, because it implies nearly a zero elasticity of supply beyond presently identified reserves. As will be shown more fully below, this assumption has even less credibility than that employed by proponents of continued regulation of natural gas.

The other item in the red herring category is the frequently recited fact that current spot market prices are in the $40 per pound range. But the spot market for uranium ore is extremely thin as most uranium is purchased under long-term contracts. As a result, the spot market price is highly volatile and can be highly affected by short-run demand conditions. In fact, the present high spot market price is a temporary aberration reflecting the surge in short-term demand induced by recent changes in ERDA enrichment practices, ERDA contracting procedures, and the massive abrogation of supply contracts by Westinghouse in late 1975.

A more reflective indicator of long-term price trends is the price for 1980's delivery contained in contracts written during the past year. These are almost entirely under $20 dollars per pound in real terms.

To return to the critical question of long-run supply it is clear as a matter of resource economics that the "prudent planning base" estimate of roughly 2 million tons used by breeder advocates is in fact, not only imprudent but actually nonsensical. By definition, proved and probable (extensions) reserves essentially represent past exploration activities. Therefore, to assume that this figure embodies the producible uranium supply for the indefinite future implies that either there will be absolutely no additional exploration for new uranium deposits in the coming decades or that the marginal cost of new reserves will escalate upward on nearly a vertical path.

The relatively brief history of the uranium mining industry offers no support whatever for either of these assumptions. Two trends tell the story. First, after the government-supported launching of the uranium mining industry in the early fifties, there was a persistent and steady decline in real prices—from $28 per pound in 1954 to less than $9 per pound in 1973. Yet despite this sharp drop in prices, exploration activity and production moved sharply upward. From 1950 to 1960 annual production increased nearly twenty-fold, and low-cost ($15 per pound and under) proved reserve levels rose from a negligible 3,000 tons to nearly 200,000 tons in 1960. By 1975 this category of the lowest cost reserves had again more than doubled to 430,000 tons. Resource base estimates (as distinguished from proved and probable reserves) were expanded in a similar manner.

Thus, in order to accept the prudent planning base estimates as the limit of future producible uranium supplies, it is necessary to assume that an industry that has been characterized by declining marginal costs, rapidly expanding reserve additions and drilling productivity rates that increased by nearly 6 percent annually for two decades will precipitously reverse course and careen down a path of sky-rocketing marginal costs and vanishing exploratory drilling productivity. The fact, however, is that even during the last three years of demand-induced market instability, drilling productivity in the low-cost reserve categories (under $30 per pound) has actually increased substantially, indicating continuity with past trends.

ERDA currently places the potential resource base, with includes both current reserves and future discoveries, at 3.7 million tons—a level nearly twice that necessary to sustain the 350 gigawatt scenario developed above. But these are of necessity extremely conservative figures because they embody geologic data gathered by an industry whose exploratory activities have been constrained by historic $10 per pound prices to the very lowest-cost uranium formations.

It is clear, however, that the breeder will not be competitive at a uranium price below $75 to $100 per pound. Under these conditions there is little doubt that as long-term prices rise above the extremely low historic levels additional geologic data will be gathered permitting, a substantial expansion of the potential resource base, and therefore, future uranium reserves and production.

The final environmental impact statement on the breeder, for example, estimated that with the addition of new geologic data derived from increased search for higher-cost deposits, the potential resource base at prices of $50 per pound is nearly 9 million tons—over four times the level necessary to sustain the 350 gigawatt scenario.

VI. The magnitude of the cost penalty for breeders: Uncertain but growing

The third reason why the breeder will not be commercially viable if introduced on the accelerated schedule proposed by the Science Committee is that the current projected cost differences between breeders and the conventional reactors, both for the capital cost of the plant and for the fuel cycle facilities, are almost certain to widen in the years ahead.

When the Clinch River plant was originally proposed in the late 1960's, the projected cost of the plant was only $500 million, or about $1,400 per kilowatt of generating capacity. By the time the project received its original authorization in 1973, the cost had gone to $690 million, or $2,000 per kilowatt. Today, ERDA estimates a completion cost of $2.3 billion, or more than $7,000 per kilowatt. Some experts have speculated that the cost may well go to $3 billion by the time construction is completed, since construction has not yet begun and experience with the Fast Flux Test Facility has been that most of the increases occur during construction.

At $7000 per kilowatt, Clinch River will cost more than ten times as much as current light water plants per unit of capacity. Of course, the cost of Clinch River includes many first-time expenses, and other costs associated with the prototype status of the plant that make a direct comparison unjust. But this factor of ten represents the improvement that will have to be made in the economics of building breeders in order to make them competitive with light-water reactors. The increases in the cost of building Clinch River have been reflected in the increases in the estimated cost of later commercial breeders, however.

In a 1974 study supporting the rapid commercialization timetable, ERDA calculated that breeders would cost $100 per kilowatt more than conventional reactors at their 1995 commercial introduction date, and that this difference would be eliminated in thirteen years. The most recent ERDA projections show a cost difference of $145 per kilowatt initially, declining to $50 after thirteen years. This reduction in the cost of breeders is absolutely essential to the commercial success of the development effort on the present timetable, yet the history of the light-water reactor and the great unknowns in breeder and reprocessing technology make the likelihood of achieving cost reductions of the requisite magnitude almost nil.

As commercial technologies mature, process costs almost invariably decline. One notable exception to this rule has been the light-water cooled nuclear power reactor. By the end of 1967 after nearly ten years of commercial operation, the cost per kilowatt of IWR's had reached about $180 (1975 dollars). By 1973, the average cost had increased to $475 per kilowatt of capacity. Thus, even after

setting aside the 34 percent increase in general price levels during this six year period, the real cost of light-water capacity rose nearly 200 percent.

The reason for the high rate of cost increases for nuclear plants was primarily regulatory and contractor design changes to meet safety and environmental problems, though of course some of it is attributable to the differentially high inflation rate of the construction industry in general. We simply did not know all there was to know about these facilities, however, and consequently the regulatory mechanisms for internalizing costs in the plants resulted in the continual addition of new, unpredicted cost factors.

This process seems to be nearing an end for the light-water cooled reactor. The latest ERDA projections for the cost of building reactors for delivery in the early 1980's is $667 per kilowatt in 1976 dollars. This represents a rate of real increase of only about 2 to 3 percent annually, well below the levels of the previous decade. The implications of this stabilizing trend in the cost of conventional reactors for the competitive position of the breeder are enormous. The breeder has yet to go through any of the licensing and development processes that produced the great escalations in the cost of building lightwater reactors. Yet the inherently greater technological complexity of the breeder, the large number of materials and design engineering problems that remain unsolved and for which the basic research is not complete, all indicate a high probability that the cost difference between breeders and conventional reactors will widen, not narrow. Even on the basis of current knowledge, some experts have predicted a gap of over $200 per kilowatt well into the beginning of the next century if we proceed on the present timetable. At this level, uranium prices would have to be four times higher than current projections to make the breeder cost-competitive.

In addition to the risk of cost escalations from plant construction costs, the breeder also faces a great risk of escalations from increases in the cost of reprocessing. This is a risk that is completely absent from the once-through uranium fueled light-water reactor, and consequently a particularly sensitive part of the competitive equation.

Experience in reprocessing light-water fuel has been dismal. The private plant at Barnwell, South Carolina, originally projected to cost $250 million, will cost over $700 million—if it is ever completed. Its private sponsors have backed out of the project as uneconomical, and our now attempting to secure a huge federal subsidy to operate the plant as a "demonstration" project.

The likelihood that breeder fuel preprocessing will encounter even more serious problems than current reprocessing efforts is great, yet the cost figures used in the economic analyses relied upon by the backers of Clinch River have been extrapolations from experience with spent light-water reactor fuel. The accuracy of these extrapolations is open to serious question because of two major technical differences between reprocessing spent LWR fuel and reprocessing breeder fuel.

The plutonium content of spent breeder fuel will be approximately 40 times greater than that contained in spent LWR fuel. Thus a breeder fuel reprocessing facility will have to contend with the safety problems associated with keeping this substantially larger proportion of plutonium from reforming into a critically-sized accumulation. In addition to the plutonium related problems, the breeder reprocessing plants will have to contend with fuel that has been irradiated at a higher temperature than present LWR fuel. This, combined with embrittlement caused by the higher neutron irradiation levels to which the breeder fuel has been exposed, will make the fuel more difficult to process. The West Germans have reported considerable difficulty in the handling of fuel from high temperature gas cooled reactors on an experimental basis, which may well be an indication of the problems that will develop with breeder fuel.

The bottom line, then is quite clear. Due to the inherent risk of nuclear technology, and to strong public attitudes (increasingly embodied in regulatory policy) insistent upon nearly absolute risk reduction, there is no basis for assuming "learning curve" cost reductions for new nuclear technologies.

The last decade of experience with the light-water reactor, which is an inherently less risky and less complex technology, has demonstrated this unequivocally. Therefore, the most reasonable assumption is that the currently projected capital cost and fuel cycle disadvantage of the breeder relative to conventional reactors will widen, rather than narrow. In that event, only drastic, highly improbable long-term changes in the uranium market would make the breeder a competitive option.

VII. Conclusion

Under the following conditions the breeder will not be competitive until well into the next century:

(1) Electric demand grows at only half the 1960's rate and the maximum share of year 2000 capacity required to be filled by nuclear-electric generation is on the order of 300–400 gigawatts;

(2) There is a reasonably assured supply of at least 2.5 million tons of low-cost uranium ore (under $50 per pound);

(3) Reactor cost differentials between the breeder and conventional plants are $100 or more, with similar differences in fuel cycle costs.

This analysis of the relevant economic markets makes clear that all of these conditions can be readily met. For that reason, early commercialization of the breeder will result in large economic losses to society in addition to a lengthy list of non-monetary risks in the safety, environmental and international relations-proliferation areas. Therefore, no further subsidization of the Clinch River project, an integral step in the early commercialization program, can be justified.

DAVE STOCKMAN,
Member of Congress,
September 17, 1977.

Secretary EDWARDS. Senator Kennedy, there has never been any free market play its work, for example—in my own State, it's frequently severely controlled industry. If there was an attempt to let the free market play its work, for example—in my own State, it's frequently been referred to in our testimony—the Barnwell plant—that's a private sector industry that put $285 million into the reprocessing business, and what they were trying to do in that business was to try to recapture about 50 to 60 percent of the energy that was left in these used fuel rods. And in the process of recycling these rods, you get the good out and you bury the bad.

But when the previous administration said that it was not going to allow reprocessing, this set our industry back terribly. So we have to continue pushing nuclear energy if we're going to find the solutions to the problems that are going to keep your people up in Massachusetts and other people around this country warm in the winter time and have the energy available to bring about increased productivity to turn the wheels of the factories and the plants of this country and create jobs for those 33 million young people that are going to be coming into the job market by the year 2000.

Nuclear energy certainly has a significant part to play, Senator, and I feel it my duty to see if we can't get it back on the track and make this country the nuclear technological leader of the world. We've lost it to foreign countries today. There are seven or eight of these foreign countries that are in the process of bringing about reprocessing plants. We've lost control of where the plutonium may be, and we've lost the economic benefit to this country by not allowing our nuclear industry to develop as it should have developed.

So we have a catch-up ball game to play. That's why we certainly are trying to push development of nuclear energy. But none of our budgets are sacrosanct, Senator. I would remind you of that.

Senator KENNEDY. Senator Jepsen.

Senator JEPSEN. Thank you, Senator. I've been asked to yield to the most distinguished Congressman Bud Brown, who has long been recognized as the legislative leader in the energy field, and I would now be glad to yield.

Representative BROWN. Thank you, Senator Jepsen.

I just want to say to you, Mr. Edwards, that Senator Kennedy, in his usual very efficient manner, has demonstrated, I think, one of the real problems you have as the Secretary of Energy, presiding over that Department that you have.

I've been on the Energy and Power Subcommittee of the Interstate and Foreign Commerce Committee since 1975 as its ranking Republican, and I'm always suspicious of DOE figures, which are cited as the source of the $638.

I'm not very good in math. I won't guarantee this; I may have made a mistake. But if I recall correctly, the Department of Energy statisticians said that the cost of decontrol is going to be somewhere between 4 and 8 cents a gallon. So I just took 6 cents and divided it into $638 and came up with the average family with a $20,000 income spending its money on 10,600 gallons of gasoline each year.

Assuming that you got 15 miles to the gallon, that would mean that the average family with a $20,000 incomes drives 159,000 miles a year. [Laughter.]

I drive a car that gets 24 around town and 32 on the highway—but I want to be conservative on this matter—and 10,600 gallons would take me 300,000 miles in my Citation.

If you assume that we pay $1.50 a gallon, that 10,600 gallons means that the average family with a $20,000 income spends $15,900 on gas and oil.

I assume some of it could have been home heating oil. I would think that we would all have some difficulty with those statistics, if the increase for the average family of a $20,000 income is $638 because of decontrol. That family really is badly budgeted in terms of energy and heating. [Laughter.]

Because it leaves only $4,100 for food, clothing, mortgages, education of the children, retirement pay, and social security benefits, not to mention the taxes that you pay on $20,000 of income, which is somewhere between 24 and 28 percent. So I'm baffled by the statistics that your Department seems to be putting out and startled at Senator Kennedy's effective use of those statistics to——

Senator KENNEDY. Since he's mentioned my name, would the gentleman yield?

Representative BROWN. I'll be glad to yield at the end of my comments, Senator. Mr. Jepsen will have to yield also.

I'm also concerned that we don't have figures up here showing the conservation impact of the price increase in oil and gas, in home heating, in driving mileage, gasoline consumption, in energy use by industry, in every area of energy consumption.

The decontrol first put into effect by President Carter, first authorized by my Democratic friends in Congress in 1975 and now brought to final successful termination by you and the current administration, has created in the last few months a sharp turnaround in the production of energy in this country. We're no longer dropping at the rate of 25 percent of our production every 6 years as we did through 1973–79. We've leveled off in terms of oil production in the United States and have actually increased that oil production as we have record numbers of drilling rigs out, record numbers of wells completed, and record new finds in oil above the 1956 record, which I think is the old standing national record.

But it's the conservation figures that I'm surprised are not on this chart up here. I assume that those statistics are available. But I want you to know, I' m going to check those too, because I don't trust those people in your Department.

Secretary EDWARDS. Mr. Congressman, I'm going to look very closely at the statistics that I work with in the future after seeing your analysis.

Senator JEPSEN. The standard procedure in the Senate, when we do mention a colleague by name, is that he has a chance to visit about it. [Laughter.]

Senator KENNEDY. I was glad to hear the Congressman say what I didn't say and then disagree with it.

The figures describing the cost of decontrol are from the Joint Committee on Taxation, which is recognized, I must say, by most Republicans as well as Democrats as being accurate and virtually nonpartisan in terms of the fashioning and shaping of their figures. Their figures for 1981 are $52.1 billion of gross revenues, divided by 81.6 million households, equals $638.

I'll include in the record the Joint Committee on Taxation material which substantiate those figures.

[The information referred to follows:]

TOTAL OIL DECONTROL COST—JOINT COMMITTEE ON TAXATION TABLE

1981—$52.1 billion—gross revenues over 81.6 million households (Census Bureau) equals $638.

Estimated increase in gross revenues[1] to oil producers resulting from decontrol of crude oil prices

	Billions
1979	$1.2
1980	15.3
1981	52.1
1982	57.5
1983	61.1
1984	64.7
1985	68.0
1986	71.5
1987	75.3
1988	79.0
1989	82.8
1990	86.7
Total	715.2

[1] Reflects revenues before tax on production which otherwise would have been subject to price controls after May 1979.

Source: Joint Committee on Taxation, February 24, 1980.

Senator KENNEDY. I think Senator Hawkins is next.

Senator HAWKINS. Mr. Edwards, I agree with your emphasis that producers and consumers must confront the true cost of energy rather than the indirect costs of regulatory policies and artificial Government subsidies. These indirect costs only contribute to the U.S. inflation problem.

Within the transition from phasing the indirect costs of energy to the President's program of facing the true cost of energy, many Americans are likely to face a difficulty.

What kind of measures can an individual take to help ease the effect of energy price increases, and what kind of programs are you implementing to help the most needy?

Secretary EDWARDS. Senator, we have, of course, a low-income energy assistance program in place. There are other programs that are in place. We have done a little analysis of what the effect of the decontrol would be on the poor people of this country at the 1978 poverty level or below 125 percent of the poverty level.

We tried to figure out what the average consumption would be, and it would be 700 or 800 gallons of gasoline. To the poverty level person or that person who was 125 percent above poverty level, gasoline costs would go up about $20 to $40 per year.

Most oil this year—when it comes to heating—most oil this season has already been purchased, particularly in anticipation of the phased deregulation that the Carter administration had in place, so there will be very little effect on that. This decontrol would have taken place in September anyway before the next year's heating season.

We've tried to do a little rundown on what poverty households use in the way of gasoline, and it's hard to get the statistics, even out of our Department. But based on our statistics, about 20 percent of these poverty groups have the use of about 1,000 gallons or more of a fuel a year; 30 percent have less than 300 gallons a year, and 30 percent don't use any gasoline at all.

We do have a variety of programs to help those people who are in need, and certainly we want to be concerned about them. But the energy tax expenditures, just looking here—residential conservation and solar credits in 1981—we have about $540 million. In 1982, we propose $615 million. Business conservation, alternative energy credits, about $585 million. Excise tax exemption for gasohol, about $189 million. Credit and excise tax exemption for buses, about $55 million.

Basically, these are some of the programs that we have. We have other programs, and I've said, we certainly want to help them, but I do think that the Department of Health and Human Services is better set up—the weatherization programs, for example, we hope to shift those over to HUD, because they have organization in place that can better deliver those services to people in need.

We have about a billion dollars in block grants for HUD for this program to be shifted into. These are just some of the things that we can think of right offhand that would help these people who are having difficult times, shifting over to the high cost of energy that has resulted from poor policy over the past several years, not just from the immediate decontrol that we're brought on since we've been in town.

Senator HAWKINS. Reading your prepared statement, I am pleased that your Department is taking a pragmatic look at various aspects of the regulatory process. This is firmly in line with my own ideas about truth in packaging for regulations. The man on the street must know the cost of the regulations before he can make a wise decision, and be for or against it.

What positive effects do you expect from your reduction of regulatory burdens and the 34-percent budget reduction in energy supply programs? Do you see any really negative effects?

Secretary EDWARDS. The 34-percent reduction in energy supply programs? Let me talk to my budget man, here. [Pause.] Just with the amount of deregulation that we have brought forth, we have saved between 500,000 and 700,000 man-hours of burden on the part of the industry, and on the part of the Government itself. On the other aspects——

Senator HAWKINS. Let me help you a little. In the decontrol that we're just been reading about, how many people were involved over there, in that massive agency decontrol?

Secretary EDWARDS. That agency, I recall, has about 800 people involved in it. With decontrol—in the compliance section, we certainly are going to keep in place—we have a lot of auditors who have been auditing some of the oil companies that have not been in compliance. We plan to keep them in place. After the audit section is done, then, of course, we will shift those over to the legal section. There should be a reduction in force in this department, and ultimately, we'd like to do away with most of it, shifting some of the final responsibilities to other departments of the Government.

For example, any of these cases of compliance that have not been brought forward, we will shift to the Justice Department. In regulatory, we have about 2,400 personnel; in compliance, 800 personnel.

Senator HAWKINS. Tell me again, how many in regulatory?

Secretary EDWARDS. 2,400 in regulatory, and 800 in the compliance section. That would be a total of about 3,000 people.

We hope to reduce a goodly number of these after we do away with the regulations, and get through with the compliance, the legal aspects, and all the aspects of compliance.

Senator HAWKINS. I'm in favor of removing any government controls over the development of new technology. For instance, with respect to energy, I believe the administration's policy will encourage private industry to produce needed supplies, and spur conservation efforts.

What kinds of new enterprises do you see emerging to fill America's conservation and supply needs?

Secretary EDWARDS. I think that when we deregulate, it is going to unleash this great, giant of a nation of ours. And if we can also unlock some of these resources that we have in our public lands—today the Federal Government owns roughly 34 or 35 percent of the total land mass of America, and about 65 percent of the energy resources are locked up in those land masses, and we're allowed only to explore about 6 percent of them.

So it seems strange to me that when we're here in an energy crisis, an energy crunch, we are sitting on these resources and not letting anyone get to them. I hope that we can increase the production in America, both in the private and in some of these public lands and the Outer Continental Shelf, and decrease the amount of time that's needed between the time that we decide to go out and put a hole in the bottom of the ocean and, in fact, start the operation.

This is a proven technology. It's been going on for some years, but for some reason it takes us about 2 years of redtape from the time a company decides to go out there and punch a hole in the ground, to the time they actually start punching the hole in the ground. It seems

strange that we talk about what we're going to do about our energy crisis and we've got all these resources locked up.

And we've just got to move ahead and unleash this great giant, and say, "Let's go out there and solve the problem. Let's produce. Let's, once again, establish that this Nation will be in charge of its own destiny, we aren't dependent on foreign countries that control our destiny through the energy tools."

This is one of the things I hope we can carry out in this administration; and while I am here at the Department of Energy, I will work toward that end.

Senator HAWKINS. My time is up.

Senator KENNEDY. Congressman Richmond.

Representative RICHMOND. Thank you, Senator. Mr. Secretary, I assume you were involved in the construction of the President's budget.

Secretary EDWARDS. Congressman Richmond, we were certainly involved in trying to find ways to cut our Department so we could balance the budget and bring some of the deficit spending under control; yes.

Representative RICHMOND. I'm sure Mr. Stockman and company consulted you on all energy-related matters; right?

Secretary EDWARDS. We've been in close contact throughout this whole process.

Representative RICHMOND. Certainly, as I review the budget, one outstanding item which I just can't understand—in these days, particularly a man in your position, who understands the great need for energy in this country—is that the cost of energy has gone up 1,000 percent in just the last few years. You recall you were originally paying $3.86 a barrel. Now it's up to $40. It's 1,000 percent.

There's one way to immediately conserve energy, and I just can't understand why the President's budget reduces that. One absolutely perfect way to conserve; namely, mass transportation. We know for a fact that the more mass transportation we build in this country, similar to what they've been doing in Europe for the last 20 years, the more energy we'll save.

Why, in God's name, would that one item be cut, instead of expanded, if we indeed want to conserve energy? The exact opposite is happening in Europe, you know. Every major city in Europe either has a very, very effective mass transportation system, or is in the process of building one.

Why would we be cutting back on our allocations? We know for a fact that no mass transportation in the United States can survive unless it's subsidized. But if we raise our prices too high, people just won't use the system. So we get a point of no return.

Wouldn't it seem—wouldn't that be one item that should be increased, rather than decreased?

Secretary EDWARDS. Congressman Richmond, as you know, you can prove from history, in the city of Washington, for example, the capital investments for these mass transportation systems are extremely high, and certainly in Europe they have a lot of mass transportation systems, because the Europeans have never had the love affair with the automobile that America has. Their countries are not as large. They don't have to be this independent source of moving themselves from one place to another.

So, mass transportation fits in better in Europe than in this country, particularly out in some of the less populated areas. Certainly, if this comes under the Transportation Department, we participated in the discussion. As we can afford these things, certainly we'd want to move into these areas.

Representative RICHMOND. In other words, we can afford the Clinch River breeder project at $3 billion—which David Stockman was dead against when he was a Member of Congress—and we can't afford to help our mass transportation efforts in the United States, which produce immediate savings in energy.

Does that make sense to you, Mr. Secretary?

Secretary EDWARDS. Congressman Richmond, there certainly are priorities, and the long-range effects of these programs and the cost-benefit ratio of these programs have to be considered. We think, and I think, that it's time for us to move forward to the second generation of reactors, so that we can reclaim the leadership of nuclear technology around the world, and this will have a tremendous effect on our ability in the area of foreign policy.

Representative RICHMOND. Let's say, also, Mr. Secretary, that it's time we moved forward on mass transportation for every large city in the United States, because that is a sure, immediate, proven way of saving energy and moving people, and getting people to start revitalizing their own downtown areas of their own cities, the way they have in Europe.

Right next to mass transportation is the fact that the budget concontains nothing about weatherization funds for low-income housing. That's the second best way to conserve. It creates jobs. By insulating your housing, and weatherizing your housing, we know we can save 40 percent of the heat in the house. Yet there's nothing in the President's budget that provides for weatherization of housing for low-income people.

Wouldn't that be another one that you yourself should be virtually demanding along with your $3 billion nuclear plant?

Secretary EDWARDS. Congressman Richmond, we feel that the marketplace will motivate the weatherization, though, much more rapidly, as I said previously, than anything that Washington can do on the expenditures that we have. It's one driving force, and that is the cost of energy, that is going to make you and me go out and insulate our homes.

Representative RICHMOND. You and me, yes, but what about people with very low incomes?

Secretary EDWARDS. There are tax credits for this type of thing, for low income——

Representative RICHMOND. Low-income people can't take advantage of tax credits, Mr. Secretary, you know that.

Secretary EDWARDS. Assistance for these people who are having difficulty.

Representative RICHMOND. That's something that there isn't, also, in this quote "social safety net" that the President says is still in place. I know no inflationary increases to help low income people weatherize their houses.

It seems to me, these are just basic practical items that anybody who is interested in conserving energy in the United States, who is not attuned to the oil companies and wanting to increase the use of oil and gasoline, should be howling for—particularly from our Energy Department.

You represent energy in the United States. We all know we should be using less and less energy, right? Weatherization of houses, mass transportation—I can't think of two simpler, more efficient methods of reducing consumption. Why aren't we going full steam ahead on those two items?

Secretary EDWARDS. Mr. Congressman, we feel the marketplace will direct the weatherization. We have had these programs for the poor and the needy, several programs for it.

Representative RICHMOND. We have the programs for the poor and the needy, but there's no inflationary factor built in. So the poor and the needy can't afford it, because there's nothing in your quote "social safety net" to provide for the inflationary increases.

Secretary EDWARDS. This is in another department. But——

Representative RICHMOND. But it has to do with energy. That's your department.

Secretary EDWARDS. You're right there, but there are some increases in these payments, based on the Consumer Price Index, that increases payments to the poor, as inflation goes up. We do have certain programs like that. It's in another department. And I am not extremely well versed in that particular area. But we can get that information for you. But there are programs, I understand, along that line.

[The information referred to follows:]

There are many Federal income assistance programs that address the needy population—social security beneficiaries and welfare recipients. These include Supplemental Security Income (SSI) and basic social security retirement, survivors, and disability programs. One could add Veterans pensions as well. All of these Federal programs include annual cost of living increases. For 1981, these incremental increases would well total 20 billion dollars.

In addition, the State-operated Aid to Families with Dependent Children programs (AFDC) periodically increases their benefits based on the increased cost of living. While the increases are uneven, many have substantially improved their benefits over the past several years.

Representative RICHMOND. Mr. Secretary, I have looked into it, and there is no program to increase the allocation to poor people for their fuel, yet we know that fuel is going to go up, up, up. We know that gasoline will cost $2 within a year. Home heating oil will go right along with that.

I agree with you that gasoline isn't perhaps as necessary to very poor people as home heating oil. But that's going to go right along with the price of gasoline, and there's nothing in the budget to help poor people with the escalation of the cost of these items.

Secretary Edwards. Congressman Richmond, I think that if you really want to do something about having an energy source, this whole thing works under supply and demand. The cost of energy——

Representative RICHMOND. Mr. Secretary, when you're poor, supply and demand doesn't help much. When you have no money, you have no money to do anything. And this budget doesn't give people money to survive under present conditions.

Secretary EDWARDS. Congressman, we certainly are sensitive to the needs of the poor. There are programs in place that the Department of Health and Human Services, as part of your budget that you have written and built into these programs—certainly, I think, if you feel there's a bigger need, then you should certainly go out and vigorously try to get more of these services built into the budget.

Of course, coming from where you come from, I'd do the same thing.

Representative RICHMOND. I would hope you would also lend your not-significant influence into increasing the budget for mass transportation and weatherization, because certainly you, supposedly, want to conserve energy.

Secretary EDWARDS. We do have in place about $100 million in the program for the weatherization of hospitals and schools, because they don't have anything to write it off from, for example.

Representative RICHMOND. Poor people don't have anything to write it off from, either. Do they?

Secretary EDWARDS. A lot of poor people don't; some of them do. Congressman Richmond, this administration is dedicated to helping those who are truly in need. There's no question about that.

Representative RICHMOND. Mr. Secretary, you know, marginally poor people living at the $7,500 level for a family of four, pay little or no taxes. They're the ones who have to have some type of incentive; namely, some cash, in order to weatherize their houses, and in order to save you some fuel.

Secretary EDWARDS. Congressman Richmond, another thing that we could help with the poor and the near-poor is to get control of this inflation that's eating the heart out of the American economy.

Representative RICHMOND. Now you're changing the subject.

Secretary EDWARDS. No; it's all interlocked, Congressman. It all locks together. You can't take one part of the picture without looking at the overall thing. The greatest thing this administration can do to help the poor and the near-poor is to bring down the cost of inflation. If we do that, they won't need as much help and financial assistance from Government; I don't believe that's what the poor people of this country want.

Representative RICHMOND. Unless we have a lot more sense, while we're bringing down the cost of inflation, let's help the poor to weatherize their houses, and let's help the cities to deliver mass transportation. Thank you.

Senator KENNEDY. I don't know whether Congressman Brown wanted to be recognized in his own right. We want to move right along, because the Secretary wanted to try to get out of here at noontime.

Representative BROWN. Thank you, Senator, and I will yield the balance of my time to Mr. Jepsen, because he was courteous enough to yield his time to me.

I just want to make one observation, ask one question, and then turn the time over to Mr. Jepsen. It seems to me that the poor or needy person who owns his own home can get a loan on that home to weatherize his house, and pay back the loan from the fuel savings that he might make. And the poor or needy person who is renting could get his utility charge subsidized by programs that exist in almost

every State in the Union, with Federal help. The poor rental landlord who owns the home of the poor and needy person, it seems to me, also could borrow money to weatherize their home, but he wants to save on fuel bills.

So I think there are plenty of opportunities for the poor and needy with reference to the household taking care of them. We require that all the utility companies around the country must provide this kind of audit service.

Mr. Secretary, I'd like to ask if you've begun to study the question of the deregulation of the price of natural gas, so that we can also get the same kind of price response in natural gas as we get to the Btu equivalency price. With the first steps taken in deregulation, I understand we found in this country massive amounts of natural gas—which could replace the oil that we're now getting from the OPEC nations—and thereby reduce our dependency upon nations abroad for our energy sources.

It occurred to me that we might get the same results in terms of additional production and conservation that we've had in oil if we deregulated natural gas. I wonder if you're looking at that problem, and if you can give us some indication of what date or what kind of time frame you're thinking about regarding the recommendation from the administration in this field.

Secretary EDWARDS. Congressman Brown, as you know, this is an extremely complicated and sophisticated system of regulation. We have requested that we get an indepth, comprehensive study of the issue, and we have it in the field working now. It will probably take 2 to 3 or 4 months to get it back.

When we get it back, we will certainly relay that information to the President and to the Congress to help make our decision in the future about this type of problem.

Representative BROWN. I'd like to yield the balance of my time back to Senator Jepsen, I appreciate his courtesy.

Senator JEPSEN [presiding]. Congressman Richmond has asked for one more question. He shall have that prerogative. I hope it can be fairly brief.

Representative RICHMOND. It will be. Thank you very much, Senator.

Mr. Secretary, can you tell me, who is the major contractor of the SRC-2 plant for synthetic fuel in Morgantown, Pa.? I think It's called the solvent-refined coal plant?

Secretary EDWARDS. Congressman, I guess you might say the major contractor is the Federal Government, but the actual company that's going to manage it is a subsidiary of Gulf Oil.

Representative RICHMOND. Who are the major owners of the Barnwell reprocessing plant, which I believe the Federal Government is trying to help out?

Secretary EDWARDS. Well, the Barnwell reprocessing plant is owned by Allied General. There are several companies. I'd like to get the details, because there are some companies that dropped out of that. And it used to be Allied-Gulf-General, and I believe Gulf dropped out of it. And it remained Allied General. But I can get the details of that for you, Congressman Richmond.

[The information referred to follows:]

OWNERSHIP OF THE BARNWELL NUCLEAR FUEL PLANT

In 1968 Allied Chemical Corporation applied for a construction permit for a 1500 metric ton per year reprocessing plant to be constructed near Barnwell, South Carolina. Late in 1969, Gulf Oil Corporation, through its subsidiary Gulf Energy and Environmental Systems, Inc., expressed an interest in entering the spent fuel reprocessing field through the purchase of part of the Allied Chemical project. Subsequent negotiations led, in February 1970, to the formation of Allied-Gulf Nuclear Services, a 50–50 partnership. In 1974, with the formation of General Atomic Company as a partnership of Gulf Oil and Scallop Nuclear (a subsidiary of the Royal Dutch/Shell group, General Atomic assumed the Gulf half of the original partnership. As a result, the name was changed to Allied-General Nuclear Services.

Representative RICHMOND. I believe you'll agree with me that Gulf Oil Co. owns General Atomic, which actually is the outfit that is trying to bail out the Barnwell reprocessing plant.

Secretary EDWARDS. Congressman Richmond, I am not trying to bail out anybody on anything. I'm trying to get this country on the move.

Representative RICHMOND. You're trying to get the country on the move, but the Gulf Oil Co. is behind the SRC–2 synthetic fuel plant in Morgantown, and is behind the Barnwell reprocessing, right?

Now, Gulf Oil earned profits of over a billion dollars last year. I mean, do you think Gulf Oil ought to be the major recipient of this large an amount of your total budget, when there are so many other areas that are so desperately in need? Here's a highly solvent company, which makes all the money it wants on the outside, one of the great companies of the world. Why do we, the American taxpayers, have to support Gulf Oil Co.—which can literally get whatever money it needs for anything it pleases?

Secretary EDWARDS. Congressman Richmond, I might remind you that the SRC–2 program came in under a Democratic administration. I have said on several occasions that we certainly think that Gulf Oil and these other companies who participate in these projects should have a greater equity in the project.

Gulf Oil is paying about $20 million, as we see it, to get a $1.5 billion plant going, that can be expanded into a full commercialized plant. This is the type thing I've said in my testimony on several occasions. I think these companies ought to participate greater in it.

So far as I'm concerned, I have to agree with you, and I'm glad you brought the point out, that we do need greater participation, because, Congressman, if I'm dealing with your money, I'm not going to be nearly so careful with it as if I'm dealing with my money.

These companies ought to participate to a greater extent because they're going to give us better guidance and get better leadership, better management, and the projects are probably going to be more successful if they have a greater equity in it.

Representative RICHMOND. In conclusion, Mr. Secretary, I know you have to leave, and I really want to thank Senator Jepsen for recognizing me.

I think when we complain loudly and nationally and internationally about giving $4 million away to needy people for their fuel, on one side, and then we pile billions of dollars into the coffers of Gulf Oil

Co.—which really can get all the financing it wants on the outside—I just really don't think that's setting the priorities in line for the American people.

Secretary EDWARDS. I'm glad you're giving me this opportunity to set the record straight. I have never complained about any of these charity agencies getting money; I have complained about a system that is in place that permits one man on his whim and fancy to decide where $4 million of public money goes. That's the complaint I have.

I have no complaint about the great charity organizations that are out there serving the poor on a daily basis. I have great respect for them. I am glad you gave me that opportunity to put the record straight.

Representative RICHMOND. Thank you, Mr. Secretary. Thank you, Senator.

Senator JEPSEN. Thank you, Mr. Secretary. You have reinforced what I said many times in the last several months in response to the question, "What's new about the scene in Washington?" I said, "Well, among other things, one of the threads woven through the whole fabric in the past few days is the people that are there, who are coming in and are assuming the responsibility of government and are not being intimidated."

You have borne that out today. I suggest that I have observed at earlier meetings this morning—and I have heard some more here—that the presentations on behalf of our Democratic colleagues are dominated by the same discredited liberalism which was soundly defeated at the polls on November 4, which no longer has any intellectual respectability at all. And one no longer needs to be intimidated by listening to all the buzzwords and phrases. Thank you.

Secretary EDWARDS. Thank you.

[Whereupon, at 12:05 p.m., the committee adjourned, subject to the call of the Chair.]

[The following additional written questions and answers were subsequently supplied for the record:

RESPONSE OF HON. JAMES B. EDWARDS TO ADDITIONAL WRITTEN QUESTIONS POSED BY SENATOR KENNEDY

Question 1. On the McNeil-Lehrer Show on February 24, you stated that "I think that one of the philosophies here in Washington is, if you have a problem you throw money at it. And, that is supposed to solve the problem." In the same program, you indicated that you believe that nuclear power funding should be increased. Why do you believe the problems of the nuclear power industry can be solved by more Federal spending?

Answer. Nuclear power is completely unlike other sectors of the energy industry. A large part of our nuclear funding is associated with mandated production and operational functions that are reserved to the government. Over 70 percent of our fiscal year 1982 budget request is directed toward uranium enrichment, commercial and defense waste management, remedial action programs, naval reactors, and other activities that are solely government responsibilities.

The majority of the remaining funds for discretionary nuclear development emphasizes R&D on the breeder reactor. This effort is a long-term, high-risk venture that is consistent with the Administration's criteria for Federal support.

Federal spending on nuclear programs is necessary to enhance U.S. national security. Our nuclear policy and programs must permit us to:

Realize both the current promise and future potential of nuclear power for our national energy needs and for the needs of other countries; and

Support the key role of the U.S. in international nuclear affairs thereby furthering U.S. nonproliferation goals and other nuclear policy objectives.

Question 2. In the same McNeil-Lehrer Show, you stated that "the day that he (Jimmy Carter) stopped that (the development of reprocessing), there were seven or eight countries that went into the reprocessing business." According to a report from the Arms Control and Disarmament Agency entitled "Moving Toward Life in a Nuclear Armed Crowd," as of April 1976, there were 12 nations with plutonium reprocessing capability. These included Argentina, Belgium, France, Germany, India, Italy, Spain, Taiwan, United Kingdom, USSR, China and the United States. According to information in the Nuclear Proliferation Fact Book (December 1980), as of 1978, the following countries had nuclear reprocessing capability: France, West Germany, India, Japan, United Kingdom, Argentina, Norway, Spain, USA, USSR, and China. Could you identify what countries went into the processing business that were not already in the reprocessing business at or near that date?

Answer. The basic point that I sought to make was that the previous Administration's policy of renouncing reprocessing for U.S. domestic use has not had any deterrent effect on the programs of those nations that believe reprocessing is essential to their nuclear power programs. Indeed, it has been our perception that a U.S. nonproliferation policy largely based on denial, rather than cooperation, can have the counterproductive effect of stimulating, rather than discouraging, commitments to foreign reprocessing and enrichment plants. Simply put, we believe that if cooperating nations have serious doubts as to whether they can rely on the U.S. as a stable nuclear partner, they will reduce their nuclear ties with the U.S. and go their own way. Also, if they do not agree with U.S. fuel cycle choices and view us as hostile to their own energy needs, we sense that they will move to greater nuclear independence or turn to other nuclear suppliers.

Your question referred to discrepancies in the lists of countries having reprocessing capabilities in 1976 and 1978. These discrepancies are the result of citing several different sources with different definitions of significant reprocessing activity. Plutonium reprocessing capability can range from small laboratory scale efforts, to pilot plants directed toward large scale commercial spent fuel reprocessing, to established commercial plants of the type found in France and the UK.

As of 1976 the USSR, China, the U.S., France, Belgium, the U.K. and India had reprocessing capabilities. The Italian pilot reprocessing facilities at Saluggia came into operation in the 1960s. The FRG's ambitions to move from pilot to commercial scale facilities were well known. Argentina, Brazil, Spain, and Taiwan either had or aspired to acquire some reprocessing capability—generally of modest size.

In the interim, since 1976, a Taiwanese program has not materialized. However, the following significant developments have occurred, notwithstanding the policies which were adopted by the previous Administration:

The British announced in May 1978 their decision to proceed with the 1200 tonne/year Thorp commercial scale reprocessing plant at Windscale. This facility will, inter alia, provide reprocessing services which other industrialized nuclear power countries, including Japan, regard as essential.

The French have continued commercial scale reprocessing at Cap la Hague and are moving to expand these facilities.

The Japanese brought their 210 tonne per year pilot reprocessing plant at Tokai-Mura into initial operation in 1977 and are actively studying the proposition of following this with a commercial scale 1200 tonne plant.

The FRG has operated its pilot 40 tonne per year WAK plant at Karlsruhe. While the German reprocessing plants at Gorleben have been deferred, plans for a 350/tonne/year plant at Hesse were announced.

In 1977 the Belgian Government began studying a plan to take over and reopen the Eurochemic plant at Mol, which a group of OECD countries operated from 1966 to 1974. It is possible that this plant will be modified and will resume operation in 1985.

Brazil and the FRG have continued to implement their comprehensive nuclear accord which provides for FRG assistance to Brazil in acquiring pilot reprocessing and enrichment facilities.

Argentina is building a pilot scale reprocessing plant at Ezeiza, which began after the Carter Administration announced its policy in May 1977.

India has moved forward with its reprocessing capabilities at Tarapur. In 1978 India announced plans for another reprocessing plant at Kalpakkam, for which design details are being completed.

Also, Spain intends to acquire a pilot reprocessing capability.

Several of the foregoing nations believe that reprocessing is the optimal way to close the fuel cycle. Nations heavily engaged in breeder development (Japan, France) feel reprocessing is essential to their needs. Some nations evidently also wish to preserve a technical capability in the field for potential later commercial use.

One of the challenges that the Reagan Administration will face will be to work with others to assure that the best nonproliferation measures, including safeguards, are applied to such activities. We also have a strong continuing interest in assuring that sensitive nuclear facilities are not employed in unstable regions, particularly by nations whose military nuclear ambitions may be open to question. Accordingly, we believe that the new Administration will have to embrace a two-pronged approach:

Positive cooperation with nations with good nonproliferation credentials.

Continued strong efforts to discourage the uncontrolled spread of sensitive facilities, particularly to unstable regions. As you know, we remain concerned about the development of sensitive facilities in countries like Pakistan.

Question 3. During that same McNeil-Lehrer Show, you stated in reference to energy development that "the private sector has always proven that they can do it more efficiently, more effectively, and at a lower price to the taxpayers of this country." Yet, before the Senate Appropriations Energy and Water Subcommittee you stated that "I feel that the government should probably do all the reprocessing for awhile . . . I would like to see some way to acquire this Barnwell plant, get it working to help resolve the energy problems of this country; to help close the fuel cycle as we move ahead at the same time, and develop a breeder reactor so that we can use the plutonium." Since the private sector has refused to go into the reprocessing business, and you believe the private sector can produce energy most efficiently, why should the Federal Government?

Answer. The private sector did choose to enter the reprocessing business. The plant constructed at Barnwell was strictly a private venture. Allied General Nuclear Services had signed contracts with utilities to reprocess spent fuel. The financial markets provided the funds to build the plant.

However, government action thwarted the operation of this plant and frustrated the private sector attempts to establish a commercial nuclear reprocessing industry. As a result, it is not realistic to expect industrial interest in a commercial reprocessing effort at the present time because of past instability of government policy.

In the interim, we need to reassess the likely timing private sector reinvolvement. We also need to examine our options regarding the proper role and timing on the future use of the Barnwell facility. We believe that once we have re-established a stable and favorable climate concerning government policy, the private sector can again assume the primary marketplace responsibility.

Question 4. According to page 10 of "A Program For Economic Recovery," two of the "guidelines" that were applied in reducing the budget, were (1) "stretch out and retarget public sector capital investment programs; and (2) apply sound economic criteria to subsidy programs." The Clinch River Breeder Reactor is a major capital investment program. The second relevant guideline was the principle of "sound economic criteria." Both the present Budget Director and a major study by the American Enterprise Institute concluded that the construction of a demonstration breeder reactor was not economically justified. Since under both of these guidelines the Clinch River Breeder Reactor merits reduction in funding and is not justified by any of the other principles mentioned in the specific guidelines, on what basis is the increased funding of the Clinch River Breeder Reactor justified?

Answer. For the past 3 years Congress has repeatedly stated its support for the Clinch River Breeder Reactor (CRBR) project through supplementals to the Carter budget. The continuing commitment to Clinch River on the part of the Congress is clear.

The CRBR was not intended at any point to be a commercial-scale facility. The development of CRBR requires government support because:

The regulated electric utilities can only contribute to but cannot fully fund the large development costs;

The nuclear supply industry has been affected by past government decisions to the extent that its viability is now threatened, thus reducing their ability to support the development of this technology which will connect the U.S. to a very large and abundant domestic energy supply;

80-478 O - 81 - 16

Industry cannot be expected to invest significantly in CRBR when government decisions have been so abruptly changed and voided past private sector investments; and

World nuclear proliferation concerns require government involvement in the technology choices and development.

Question 5. On page 5 of your testimony before the Committee, you said that one of the key points of the energy policy framework is the "elimination of extensive subsidies for domestic energy production which buys us little additional security and diverts capital, workers, and initiative for more productive uses elsewhere in the economy." You stated before the Senate Energy Committee during your confirmation hearing that expenditures for nuclear research, development, and demonstration were subsidies for domestic energy production. Why have you not proposed any cuts in the nuclear budget?

Answer. In my confirmation hearings, I made a clear distinction between subsides for pilot and demonstration projects and subsidies for commercialization of energy technologies. I stated that I support subsidies for research and development but that I object to subsidies for commercialization.

In my testimony before the Committee, my view on the "elimination of extensive subsidies" was intended as a target for the commercialization aspects of our energy policy framework. As we all appreciate, many subsidies exist today for commercialization of synthetic fuels, solar energy, conservation, alcohol fuels and other new technologies. It would be very impractical to remove all these subsidies at one time. Thus, I was expressing my belief that we must soon proceed to remove commercialization subsidies and allow the market place to make the technology commercialization decisions.

The DOE Nuclear budget proposal is entirely consistent with my stated support for subsidizing research and development.

Question 6. According to page 12 of your statement, you are proposing reducing solar energy spending by 60 percent and according to page 15, conservation spending by 40 percent. If all of the cuts in the solar and conservation budget contained in "A Program for Economic Recovery" were put into effect, a level of $1.172 billion would be reached. According to the Carter Administration Budget, the present total solar and conservation budget is $1.587 billion, which would indicate a 74 percent cut. Do you agree that the actual cut is a 74 percent cut? If not, what level of 1982 funding do the proposed cuts represent in percentage terms?

Answer. In my testimony of February 26, 1981 before the Joint Economic Committee, I stated that solar spending (outlays) would be "reduced by more than 60 percent in 1982." I also stated that DOE conservation program outlays can be reduced "by nearly 40 percent in 1982." In this testimony, I was referring to our proposed reductions in Budget Outlays over the current base. The current base for Solar Budget Outlays is $589 million. The proposed reduction in outlays for solar in "A Program for Economic Recovery" was $365 million—a 61.9 percent reduction. The current base for Conservation Budget Outlays is $799 million which we are proposing to reduce by $310 million or 38.8 percent.

The fiscal year 1982 Solar Energy Budget Authority requested on January 15 was $583 million. The fiscal year 1982 Budget Authority proposed in "A Program for Economic Recovery" for solar energy is $220 million, a reduction of 62.3 percent over the January 15 request. The fiscal year 1982 Budget Authority request for conservation in the January 15 submission (exclusive of Energy Impact Assistance) was $872 million. In "A Program for Economic Recovery" the Budget Authority proposed for conservation programs in fiscal year 1982 is $195 million. This is a 77.7 percent decrease in proposed fiscal year 1982 Budget Authority for conservation, and a proposed total solar and conservation Budget Authority reduction of 71.5 percent.

Since the issuance of "A Program for Economic Recovery" and my testimony of February 26, 1981, we have made further changes in the proposed conservation and renewable resources budget. To bring the record up-to-date, and in the interest of consolidating the entire proposed changes in the DOE conservation and renewable resources budget, the attached table summarizes the January 15 submission and the March revisions included in "U.S. Department of Energy fiscal year 1982 Budget in Brief."

Two additional points should be noted when considering the level of Federal support for conservation and renewable energy implied by the DOE budget:

The Weatherization program, which was proposed at $200 million for fiscal

year 1982 in the January budget submission, will be transferred to HUD and included in the block grants. Thus, it no longer appears in the DOE budget.

The Administration is providing significant incentives for conservation, renewables, and alcohol fuels through existing tax credits. Between now and 1986, these tax credits will provide an estimated $10.6 billion in subsidies.

FISCAL YEAR 1982 DOE CONSERVATION AND RENEWABLE RESOURCES BUDGET REQUESTS

	Fiscal year 1982 BA (millions)		
	January 1981 submission	March 1981 revised	Precent reduction
Solar and other renewables:			
Solar (energy supply R. & D.)	$543.4	$183.3	
Solar (energy production, demonstration and distribution)	7.5		
Alcohol fuels	32.6	10.0	
Subtotal, solar	583.5	193.3	66.9
Hydropower	3.2		
Geothermal	91.5	48.4	
Geothermal resources development fund	5.6	.2	
Subtotal, other renewables	100.3	48.6	51.6
Total, solar and other renewables	683.8	241.9	64.6
Conservation:			
Conservation R. & D	335.5	88.0	
State and local	538.6	107.0	
Energy impact assistance	47.6		
Subtotal, conservation	921.7	195.0	78.8
Energy storage	59.5	39.0	
Total, conservation	981.2	234.0	76.2
Total, conservation and renewables	1,665.0	475.9	71.4

Question 7. During the McNeil-Lehrer show you stated, "I think we have to set some priorities . . . and really move forward to find where we can produce energy to back up our dependence upon international crude. That is what this Administration is dedicated to." The United States presently has about 400 years supply of coal. The purpose of the nuclear energy budget is to create an electricity fuel. Why should the Federal Government be spending a billion and a half dollars each year to create a substitute for coal?

Answer. This country will need extensive quantities of both nuclear- and coal-generated electricity if we are to achieve our goal of energy security. The development and deployment of nuclear power is a complement to, not a substitute for, coal power plants.

The multiple uses of coal for electricity production, industrial boilers, coking, and synthetic fuels production will place heavy burdens on our ability to mine, transport, and burn coal in an environmentally sound manner. Our projections indicate that we will need to double our annual coal production in the next 20 years even with an aggressive use of nuclear power.

Our analysis indicates that we may need to deploy 600,000 to 800,000 megawatts of new baseload electric power plants by the turn of the century. This expansion can only be partially achieved with coal. We must also use nuclear power to help reduce our dependence on international crude oil. Indeed, we should be using all of the technologies and fuels available to us without exception.

Question 8. During that same program, you stated that the Carter Administration had stopped reprocessing in the United States. In his statement of October 28, 1976, President Ford stated, ". . . With respect to nuclear fuel reprocessing, I am directing the agencies of the Executive Branch to implement my decision to delay commercialization of reprocessing in the activities in the United States until uncertainties are resolved. Specifically, I am directing the Administrator of the Energy Research and Development Administration to change ERDA policies and programs which heretofore have been based on the assumption that reprocessing would proceed . . ." Does not this statement indicate that at least, for a period, President Ford supported stopping reprocessing

and that in the long term, he indicated that ERDA should develop policy options which assume that reprocessing would not be available?

Answer. President Ford did indicate that he wanted a review of the uncertainties involved with the reprocessing of nuclear fuel. He also indicated that he wanted a variety of options, including the option of no reprocessing, prepared for his consideration. However, his decision to delay commercialization, pending further review, was in no sense remotely similar to President Carter's decision to postpone indefinitely (in effect, stopping permanently) the reprocessing option.

The examination of options that President Ford desired has taken place in the Nuclear Alternatice Systems Assessment Program and the International Fuel Cycle Evaluation. President Reagan and I have independently reviewed these options and both of us have concluded that this country should proceed with reprocessing.

APPENDIX

American Council of Life Insurance

1850 K Street, N.W.
Washington, D.C. 20006
(202) 862-4150

February 27, 1981

Kenneth M. Wright
Vice President and Chief Economist

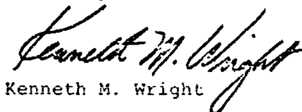
The Honorable Henry S. Reuss
Chairman
Joint Economic Committee
Congress of the United States
Washington, D. C. 20510

Dear Mr. Chairman:

On behalf of the American Council of Life Insurance I am pleased to submit for consideration by the Joint Economic Committee our "Statement on Economic Policy Issues of 1981" in which we present our views on the issues raised in the Economic Report of the President and the recent policy messages by President Reagan.

It has been our privilege to submit our views to your Committee for the past several years and we greatly appreciate your willingness to consider our views as part of your hearings.

Sincerely,



Kenneth M. Wright

STATEMENT ON ECONOMIC POLICY ISSUES OF 1981

Submitted to the Joint Economic Committee of the Congress
by the
American Council of Life Insurance

February 27, 1981

This statement is submitted on behalf of the American Council of Life Insurance, a national trade association with a membership of 508 life insurance companies which account for 95 percent of the legal reserve life insurance in force and 97 percent of the total assets of all U. S. life insurance companies. At the end of 1980, total assets of the life insurance business aggregated more than $475 billion, invested mainly in corporate and government securities and mortgage loans to businesses and individuals. These funds represent the savings that have been entrusted to our business by millions of individual policyholders and employee benefit plans. We are pleased to have this opportunity to present the views of our business to the Joint Economic Committee in the course of its deliberations over national economic policies to promote sustainable economic growth while reducing the current high rate of inflation.

Inflation and the Economy

Inflation in the United States continued to worsen in 1980, with a rise in the Consumer Price Index of 13.5 percent--the biggest increase in any single year since World War II. On average, consumer prices today are double what they were only eight years ago. Alarmingly, little if any improvement is in

prospect for the coming year. The outgoing Carter Administration estimated a 1981 rise in the CPI of 12.5 percent, while the incoming Reagan Administration has assumed a CPI increase of just over 11 percent this year. Clearly, the inflation problem which confronts the Nation demands our top domestic priority, even if it means deferring other desirable goals.

It is widely agreed among government economists and private forecasters that the course of economic activity during most of 1981 will be sluggish, with an increase of real GNP of only about one percent. Among the reasons for this outlook are (1) the current high level of interest rates, (2) the continued squeeze on real incomes that results from prices rising faster than wages, and (3) the continuing increase in tax burdens on both business and consumers. The first two negative factors are a direct consequence of our current high inflation, indicating the urgent need to confront this problem if we are to achieve a more rapid economic expansion. The third factor restraining growth, the rising burden of taxes, stems from the combined influence of higher Social Security taxes, the windfall profits tax, and the "bracket creep" by which inflation pushes wages and salaries into higher tax brackets. Taken together, these automatic increases will probably boost the tax burden by more than $50 billion this year, without any new actions by the Congress. This kind of "fiscal drag" can exert a considerable downward influence on the economy, particularly if it continues over several years or if it is not offset by countvailing tax reductions for business and individuals.

Federal Budget Proposals

The Reagan Administration has presented a program of major tax reductions, together with sizable expenditure cuts, with the aim of gaining control of inflation and helping to create new jobs. Just over $41 billion in spending reductions has been proposed, holding total federal budget outlays to $695 billion in the fiscal year ahead. Tax reductions for business and individuals would total almost $54 billion in fiscal 1982, with an estimated $650 billion in revenues and a budget deficit of $45 billion.

The life insurance business applauds the bold steps which the new Administration has outlined in the program announced on February 18. We believe that decisive action is needed to combat the intolerably high level of our current inflation, to reduce the rising burden of taxation, to cut down the growth in federal spending, and to eliminate counterproductive regulatory measures. The policy positions urged by our business through the American Council of Life Insurance have stressed these same objectives for many years. We urge the Congress to move quickly toward legislation that will carry out the intent of these budgetary actions within the next few months.

On the tax front, the automatic tax increases described above threaten to increase the burden of taxes on the U. S. economy by $50 billion or more. In our view, the Reagan proposals for a $54 billion reduction in individual and business

taxes for fiscal 1982 are both well-timed and of the appropriate magnitude, as an offset to the increased tax burden that is under way.

Tax changes can have a profound effect on the decisions of business to spend, to save, and to invest. In the interests of both fostering economic growth and productivity and curbing pressure on prices generally, we believe that tax changes in 1981 should be designed to provide at least as great a stimulus to saving and investment as to consumption. A significant liberalization of depreciation allowances, along the lines proposed by the Administration, would provide much-needed encouragement to business investment. While the exact form of this legislation may require Congressional review over the next several weeks, we believe that prompt passage of liberalized depreciation rules, retroactive to January 1, is desirable to allow American business to move forward with greater certainty as a means of improving their capital base and raising the national level of productivity.

As to tax reductions for individuals, we endorse a 10 percent reduction in the schedule of tax rates, effective July 1, as proposed by the Administration. However, we believe that further tax rate reductions for subsequent years should not be legislated in advance, since we are concerned over the possible revenue impact in future fiscal years. In view of the uncertainties over economic conditions and revenue requirements 15 to 18 months from now, we would urge the Congress to make the judgment about the advisability of further tax rate cuts for

individuals at a later date. Tax changes should be considered in light of the objectives to be achieved at that time. As a general principle, we believe that, in this inflationary climate, tax reductions should be carefully designed to encourage saving, investment and productivity growth and to discourage excessive consumption that puts pressure on price levels.

We recognize that the $54 billion of tax reductions proposed by the Administration for fiscal year 1982, which we endorse as to magnitude and timing, would greatly enlarge the size of the federal deficit unless other fiscal actions are taken. For this reason, we strongly support the program of significant reductions in federal expenditures. Such cuts in spending are needed to hold down the amounts of Treasury borrowing that would otherwise be required, thereby reducing the upward pressure on market interest rates. Such cuts in spending also would ease the pressure on aggregate demand in the economy and hold back pressure on prices. Finally, such cuts would represent a positive step toward the reduction of federal involvement in our economic life, reversing the upward trend of recent years. In 1981, federal outlays will represent 23 percent of GNP. The Reagan proposals would reduce this percentage below 20 percent by 1984. We urge the Congress to accept the principle that cuts in spending are of overriding priority for the national interest.

Some attention should be paid to the impact of federal budget cuts on state and local government spending. If a program

is absolutely essential, reduction of federal support will only force greater support at the local or state levels. At the other extreme, elimination of federal spending may bring a reduction of state or local spending, too, where the programs being supported were of doubtful or marginal benefit.

While we applaud the Reagan initiatives to hold back the growth in federal expenditures, we believe that much more can and should be done, particularly in the area of entitlement programs which comprise nearly half of all federal programs. For too long, the citizenry has been told that most of the budget is "uncontrollable" because of built-in entitling provisions in the law, beyond the reach of the Congress. We believe that nothing should be beyond the reach of the people and their elected representatives. Programs must be examined more critically with respect to the magnitude of financing required and the relation of benefits to costs. Furthermore, legislative actions now should be calculated to restrain the future growth of entitlements so that the problem of so-called uncontrollables does not become ever more difficult to deal with. Not only should benefit levels be scrutinized, but revision of indexing provisions should be considered. It makes little sense to provide benefit recipients with full protection against inflation when the taxpayer himself is left to bear the full brunt of inflation on his own family.

Further personal tax reductions in 1982 and beyond must be carefully evaluated in terms of progress in holding

back the upward course of federal spending. Only in this way can excessive budget deficits be avoided, leaving a larger share of the Nation's saving for business capital formation. We cannot ignore the impact that big deficits and heavy federal borrowing can have on the availability of funds to meet our housing needs, enlarge our productive capacity and create new jobs in the private sector.

The Role of Monetary Policy

Federal Reserve policy has a critical role to play in reaching our objectives of sustainable economic growth and a reduction in the rate of inflation. In setting targets for the monetary aggregates, care must be taken to make them consistent with an increase in current-dollar GNP that allows for reduction in the inflation rate by at least one percentage point each year, along with a return to sustainable long-term growth in real GNP over the next five years. We cannot state too strongly our belief that monetary policy and budgetary policy must complement each other if our anti-inflation strategy is to be successful.

In conclusion, it is our belief that the broad national interest demands that we come to grips with our inflation problem, even if it requires drastic actions on the fiscal front. Efforts to cut back sensitive areas of federal spending will doubtless encounter strong and sometimes emotional resistance. But we urge the Congress to keep in view the higher goal, that of reducing the intolerable rate of inflation that has brought

so much distress to those least able to defend themselves--the unskilled, the disadvantaged, and those living on fixed incomes. If we can rid the Nation of inflation we will not only restore economic equity among different groups but also create a climate for better growth and a shared prosperity.