1002

THE STATE OF THE ECONOMY

HEARINGS

BEFORE THE

JOINT ECONOMIC COMMITTEE
CONGRESS OF THE UNITED STATES

NINETY-SIXTH CONGRESS

SECOND SESSION

MAY 28 AND 29, 1980

Printed for the use of the Joint Economic Committee

U.S. GOVERNMENT PRINTING OFFICE

67-218 O WASHINGTON : 1980

JOINT ECONOMIC COMMITTEE

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

LLOYD BENTSEN, Texas, *Chairman*
RICHARD BOLLING, Missouri, *Vice Chairman*

SENATE

WILLIAM PROXMIRE, Wisconsin
ABRAHAM RIBICOFF, Connecticut
EDWARD M. KENNEDY, Massachusetts
GEORGE McGOVERN, South Dakota
PAUL S. SARBANES, Maryland
JACOB K. JAVITS, New York
WILLIAM V. ROTH, JR., Delaware
JAMES A. McCLURE, Idaho
ROGER W. JEPSEN, Iowa

HOUSE OF REPRESENTATIVES

HENRY S. REUSS, Wisconsin
WILLIAM S. MOORHEAD, Pennsylvania
LEE H. HAMILTON, Indiana
GILLIS W. LONG, Louisiana
PARREN J. MITCHELL, Maryland
CLARENCE J. BROWN, Ohio
MARGARET M. HECKLER, Massachusetts
JOHN H. ROUSSELOT, California
CHALMERS P. WYLIE, Ohio

JOHN M. ALBERTINE, *Executive Director*
LOUIS C. KRAUTHOFF II, *Assistant Director-Director, SSEC*
RICHARD F. KAUFMAN, *Assistant Director-General Counsel*
CHARLES H. BRADFORD, *Minority Counsel*

CONTENTS

WITNESSES AND STATEMENTS

Wednesday, May 28, 1980

Thursday, May 29, 1980

SUBMISSIONS FOR THE RECORD

Wednesday, May 28, 1980

Thursday, May 29, 1980

THE STATE OF THE ECONOMY

WEDNESDAY, MAY 28, 1980

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

The committee met, pursuant to notice, at 10 a.m., in room 318, Russell Senate Office Building, Hon. Lloyd Bentsen (chairman of the committee) presiding.

Present: Senators Bentsen and Javits.

Also present: John M. Albertine, executive director; Charles H. Bradford, minority counsel; Lloyd M. Atkinson, L. Douglas Lee, Mary E. Eccles, and Mayanne Karmin, professional staff members; Betty Maddox, administrative assistant; and Mark R. Policinski and Carol A. Corcoran, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

Mr. Secretary, it looks like I'm the only one left after the recess.

Secretary MILLER. I see the quality of the meeting is going to be very high today, Mr. Chairman.

Senator BENTSEN. It's going to be difficult to ask some tough questions after such a comment. You've got a little of the Irish in you.

Mr. Secretary, this is the first of two hearings devoted to the state of the economy. I think we are very fortunate to have you as the chief economic spokesman for the administration as the Secretary of the Treasury.

These are difficult times for the American people. That recession that you said is out there somewhere is now with us. What the American people are going to be looking forward to for months to come is a period of declining real GNP, rising unemployment, increasing plant idleness, and continued double-digit rates of inflation, and that's not a very cheery outlook.

Our main reason for having you here this morning, Mr. Secretary, is to discuss the issue of a tax cut. I happen to believe that a tax cut is necessary to insure that the administration reaches its long-run economic objectives to permanently lower inflation, to permanently lower unemployment, and to raise the living standards for the American people.

Toward these ends we need to start now the process that will cause a significant shift of our Nation's resources toward increased capital formation, to expand our Nation's productive capacity, to modernize America's industry and to foster the development of new growth, high productivity industries.

I know you wouldn't object to any of these hopes for the future. In fact, you've told us several times that you have no quarrel with the idea that the next tax cut should encourage savings and investment.

It seems to me then we are very close to agreement, if not totally in agreement, on what we should do. The only discord has to do with when we do what we agree needs to be done.

Now you know I have been pushing for a tax cut for several months. I think I'm beginning to detect at least some degree of response from the administration and that ray of hope encourages me to push a little harder so we can agree on all points, including timing. There's no better time than the present for the administration to support a tax cut for the supply side.

The economy has slowed sharply in the past few months. A moderate tax cut to raise the rate of capital formation would at least have the early effect of limiting the decline in the overall level of economic activity without adding to inflation and, more importantly, it would put us on a new growth characterized by a higher investment/GNP ratio, and I think that's an outcome that's essential to have this economy moving ahead.

Mr. Secretary, we welcome you this morning and I would be delighted to hear you tell us what the administration is doing and how it might now be ready to support the tax cut.

STATEMENT OF HON. G. WILLIAM MILLER, SECRETARY, DEPARTMENT OF THE TREASURY

Secretary MILLER. Thank you very much, Mr. Chairman. With your permission, I would suggest that my prepared statement be included in the record and perhaps I could make some summary comments from it that would be the basis for our discussion.

Senator BENTSEN. We would be delighted to do that, without objection.

Secretary MILLER. I certainly appreciate this opportunity. I think the points you have made are well made and I will repeat that I think our differences, if any, are one of timing.

One of the concerns, quite frankly, that we now have is that in the long-term goal of achieving permanent reduction in inflation and achieving conditions for balanced growth in the economy, we need to exercise greater control over Government spending to avoid the escalating growth that can drain off access of the private sector to capital and impede the development of investment.

Because of this, we think perhaps our highest priority now is to pursue the fiscal disciplines, the budgetary disciplines, that are to us a precondition of the subsequent tax relief which you are discussing and which we favor in principle.

Let me just give a little background to fill in some of the gaps. Earlier this year we all experienced this—we are aware of the tremendous pressures within financial markets. We also saw that inflation was beginning to spread beyond the areas of energy and home financing which have been somewhat related phenomenon in the inflationary period we have experienced.

As this began to happen, interest rates shot up to historic highs. Short-term interest rates rose in a very short time by about 4 percentage points. Some of the long-term financial markets were almost out of business. They were very severely strained.

Now I mention this background because even tax changes are not going to satisfy the needs for capital formation and capital investment unless we also have capital markets working so that businesses and families can enter those markets to finance their programs.

In response to this particularly unsettled condition earlier this year, the President did announce some new intensified anti-inflation measures on March 14. We recognized at the time that this was powerful medicine and all powerful medicine has some risks to it, but we believe it was required under the circumstances to break the pattern of inflationary psychology and financial discord.

One of the proposals of the President on March 14 was a revised fiscal year 1981 budget that would show substantial reduction in Government spending. This particular revised budget was developed after very extensive consultation with congressional leadership, so it represented not just an administration initiative but one that was jointly developed with congressional leaders.

The budgetary restraint that was proposed obviously involved very tough decisions by both the Congress and the administration, but they did seem to be appropriate and there was a consensus I think at both ends of Pennsylvania Avenue to accomplish this.

There were also some strong steps in the monetary area. The President exercised his authority under the Credit Control Act to empower the Federal Reserve to exercise some temporary restraints, targeted restraints, on excess demands for credit and to dampen the inflationary activities earlier this year.

This program has had remarkable success. We have seen a sharp turnaround in credit demands and I think a break in inflationary expectations. Short-term rates have dropped by 8 percentage points and long-term rates by more than 2 percentage points, and some of the market mortgage rates have come down 1½ to 2 percentage points.

The credit and financial markets are now operating in an orderly and efficient manner. It has already become possible for the temporary credit controls to be relaxed somewhat. The Federal Reserve last week more or less cut in half the degrees of restraint. So this program has had considerable impact.

Now since that period 2½ months ago most of the major economic statistics have indicated slowing economic activity, a recession, Mr. Chairman, that you mentioned, and particularly we could look at the data on unemployment and industrial production as confirming that we are experiencing a recession. It's impossible I think at this point to predict the whole course of how this recession will run and so I do believe it would be unwise to undertake basic changes in economic policy at the moment based on some rather recent statistics which we have not yet seen confirmed over a period of time.

We do have a recession, but the extent of it is not yet identified. Policy changes instituted now—we must bear in mind that any policy changes that we should initiate now would have an effect in the next economic recovery, not in this recession, because of the lag. So I think we must design those policies as you are suggesting toward that recovery and toward our long-term objectives and not be too focused on the impossibility of dealing with the next couple of months.

It's very important that we keep monetary and fiscal policies on a steady course, geared to the long-term requirements of economic and financial stability. We have no cause to divert our monetary policy from the objectives of keeping the growth of money and credit within the established targets or to divert our fiscal policy from a dedicated, persistent effort to restrain the growth of public spending.

Within this framework, I would refer to just a few of the economic statistics to put them into context. The unemployment rate in March was at 6.2 percent. In April, it jumped up to 7 percent, a very large increase and one that is worrisome. Some of the greatest impact on unemployment has been in the fields of automobile production and in construction, particularly home construction. We think the largest declines in these particular areas may be behind us, but the fragmentary data for May indicates that labor markets continue to be weak, and this is a concern.

The second statistic worth noting is that retail sales have declined for 3 successive months and it appears that not only have they declined in nominal dollars but there's a sharp drop in the actual physical volume of sales. This may reflect some impact of the public response to the President's initative on March 14. To the degree that it's been a temporary effect from the credit control measures, the relaxation of those measures should begin to move us back more toward normal.

The third statistic I would call attention to is industrial production, which has also declined for 3 consecutive months; the nearly 2 percent drop in April was the largest since 1975. So this too shows that we have a sharp downturn.

Fourth, I would call attention to housing starts which were slightly above 1 million annual rate of starts in April. Building permits have also eased so that this is a soft part of the economy. Here again, the decline in interest rates and the increased availability of credit for thrift institutions should begin to provide some relief for housing before too many more months.

It is clear from these data that the economy has registered a sharp decline in real output during the second quarter. The question is: What will happen during the second half of the year?

The evidence still is for a fairly moderate recession. The leading economic models are forecasting that the recession will be about the average of the postwar period and substantially less than the downturn in 1974–75, but I think all of us recognize that there's a great degree of uncertainty in economic projecting nowadays.

Why do we believe that this particular downturn will be more of the moderate type and not of the scale of 1974–75? I think there are both financial and real factors that point to some more moderate conditions.

First, let's look at the financial area. I have already pointed out that interest rates have come down rather sharply. Also, I should call attention to the fact that savings flows to thrift institutions have picked up and the financial preconditions for an upturn in housing are beginning to be established. A general increase of credit availability and lower interest rates will help, and this should begin to relieve the heavy burden that for some time has rested in the small- and medium-sized businesses and farmers and others who make a very great difference in our economy. So we should see some relief for these sectors of the economy.

In the nonfinancial areas, we are fortunate that inventories are in relatively good balance. We do not have a heavy overhang of inventories that weaken economic upturn by requiring liquidation and holding down of industrial production. So as final demand begins to pick up as we expect it will, there's an immediate need for a response in the production side.

Also, plant and equipment spending has continued to proceed at a fairly good pace. We have not seen a reaction there and we expect that with the business plans ahead, that this will be a positive factor. It seems quite probable, therefore, that the economy has already experienced its sharpest fall during this second quarter, during the quarter we are now in; and during the balance of the year, we should begin to see some improvement.

I don't suggest that we won't see further downturn, but the rate of change should be much more moderate.

Mr. Chairman, in the context of all of these comments, inflation still is our No. 1 priority. Here there are some encouraging signs. Again, the decline in interest rates do signal an abrupt drop in inflationary expectations. Materials prices have gone down. The consumer price results in April were encouraging with the lowest monthly increase in more than 1 year. Of course, that's only 1 month and we must see that confirmed before we can take comfort.

In May, however, the National Association of Purchasing Management reported the lowest rate of price increases in 3 years. So there is growing evidence that we are beginning to see a moderation of inflation.

Lower rates of inflation at the consumer level should become more apparent as the year progresses, but our problem is to avoid ratcheting up the rate of inflation into our whole economic system. Fiscal and monetary decisions we make now will be affecting the inflation outlook for some time to come. So, in this regard, we stand at a crossroads so far as inflation is concerned. It's coming down. What we do now will determine whether it continues to move down or whether we begin to feed a new period of inflation.

It is our view that we must not be diverted at this point from our objective of combating inflation forcefully. We must not be tempted into a policy of excessive economic stimulation. With any premature relaxation of the basic policies of restraint that whipsaw the economy and the financial markets, interest rates and the rate of inflation could easily be driven back up again with serious consequences for automobile production, housing construction, and the entire economy.

Instead, it seems to us the proper course is to follow one of continued discipline, to insure progress in reducing the rate of inflation.

The key is to maintain close control over Federal spending. That now is well within the reach of the Congress. The budget resolution that

67-218 O - 80 - 2

will be coming up now does reflect the kind of restraint in Government spending that we have not seen for some time. You and your colleagues in the Congress certainly are to be commended for the progress in this regard and deserve full public support.

If the economy runs the path that we projected in March and Federal spending is controlled, then the proposed budget should show a surplus. Even if the recession is somewhat worse than we forecast, the budget proposed by the administration could still be in balance. But, in any event, inflation is still deeply imbedded in the economy and it's essential to maintain discipline by controlling Federal spending.

Steps that were taken on March 14 must be seen as a crucial element of longer term efforts to bring the growth of Federal spending under control. It's essential that we return a larger share of the national output to the private sector. By controlling Government spending, we will be able to transfer more resources to the private sector where it can be more efficiently and effectively utilized.

It seems to us too soon to initiate tax cuts. Again, Mr. Chairman, not disputing your view that they will be needed, but it's a question of timing. We think it's first important to demonstrate our ability through the legislative process to bring expenditures under control. Tax cuts needed in the future must be preceded by reducing the rate of spending and tax cuts then would need to be justified as you suggest on the basis of their contributing to the longer term goals of productive efficiency in the economy and lower inflation rates.

I know this is your view, so it's nothing at variance. What I think we both would agree on is we do not want tax cuts that are solely directed toward stimulating the economy, but we would want tax cuts that accomplish the other purposes of investment and lower inflation rates.

In recent years, this committee, Mr. Chairman, has played an extremely important role in directing attention to the need for a different approach to the economic problems of the 1980's. More emphasis does need to be placed on productive efficiency, on the supply side approach to current problems. Greater incentives do need to be offered for saving and investment and less for immediate consumption. Our tax system does have an important effect on the economy and will have an important role to play in this regard.

Tax cuts do affect aggregate demand as well as the composition and the growth of aggregate supply, and if we are to fight inflation as well as to increase productivity, both sides of this equation must be taken into consideration.

So, in conclusion, Mr. Chairman, the need at the present time is to demonstrate our resolve to deal with inflation. What is required is consistency and persistence, coupled with the readiness to adopt sound economic policies to changing economic circumstances. That readiness was demonstrated in mid-March with the initiatives taken and with the subsequent actions that we have pursued. The task remaining is to follow through with steady policies that will guide the economy to a less inflationary long-term path, and certainly part of this will be to look forward to the kinds of tax cuts that you're recommending if we can first see the progress of holding down spending.

Thank you very much.

[The prepared statement of Secretary Miller follows:]

Prepared Statement of Hon. G. William Miller

Mr. Chairman and members of the committee, thank you for providing me the opportunity to appear here today to discuss the current state of the economy. There have been some important developments in economic policy and performance in recent months. These Hearings provide a useful and timely forum for reviewing the significance of these matters.

THE INTENSIFIED ANTI-INFLATION PROGRAM

Earlier this year, while the economy was still rising, domestic financial markets came under intense pressure. In January and February, inflation began to spread beyond the energy and home financing areas. The annualized rate of inflation as measured by the CPI rose from about 13 percent during all of last year to 18 percent in January and February. Inflationary expectations intensified greatly. Serious disturbances in domestic financial markets developed in February and early March. Short-term interest rates rose by about 400 basis points, and some long-term financial markets were severely constrained.

In response to the growing threat from inflation, the President announced new actions for intensified fiscal and credit policies, reinforcing the programs of restraint already in place. The steps taken and proposed included major moves in the fiscal and monetary areas. The Administration recognized at the time that this was powerful medicine, but felt, and still feels, that it was required under the circumstances.

In the fiscal area, the fiscal year 1981 budget was revised after extensive consultation with Congressional leadership. The revisions eliminated some $17 billion in programmatic expenditures, bringing the proposed budget into balance. In addition, various measures to improve tax collections and conserve energy were proposed or initiated, resulting in a net surplus for the budget. This shift toward further budgetary restraint required difficult decisions by the Congress and the Administration. However, the actions were recognized as essential for national financial stability and for the long-term health of the economy.

Strong steps were also taken in the monetary area. Under the terms of the Credit Control Act of 1969, the President authorized the Federal Reserve to exercise new, temporary power to slow the growth of consumer and business borrowing. Implementation of the new measures, in conjunction with the continued exercise of monetary restraint, was remarkably successful in reversing the upward trend of credit demands and inflationary expectations. Short-term interest rates have declined by 800 basis points and more since March 14, long-term rates by more than 200 basis points, and secondary market mortgage commitment rates by about 150 to 200 basis points.

Credit and financial markets are now operating in an orderly and efficient manner. Accordingly, it has already become possible to relax somewhat the credit control measures instituted on March 14.

THE PATTERN OF RECENT ECONOMIC EVENTS

Since mid-March, most of the major economic statistics have indicated appreciably slower activity. It is widely recognized that the economy has entered a period of recession. The move toward recession has been quite steep, as evidenced by recent data on unemployment and industrial production. However, it is impossible to predict the whole course of the recession on the basis of one or two months of statistics. There is always an understandable tendency to assume that the future will merely reflect today's trends. That is rarely a safe assumption.

Similarly, it would be unwise to undertake basic changes of economic policy on the basis of contemporary statistics. Policy always affects the economy with a considerable lag. Most policy changes instituted now would have their major impact on the next recovery, not on the recession. This is largely the case regardless of the precise contours and duration of the downturn. It is, accordingly, very important that we keep monetary and fiscal policies on a steady course, geared to the long-term requirements of economic and financial stability. We have no cause to divert monetary policy from the objective of keeping the growth of money and credit within the established targets, or to divert fiscal policy from a dedicated, persistent effort to restrain the growth of public spending.

These considerations provide an essential frame of reference in reviewing the recent run of weak economic statistics.

The unemployment rate rose to 6.2 percent in March and further to 7 percent in April. In April, employment fell by about 500,000, the number on layoff mounted sharply, and the percentage of industries reporting increased payroll employment hit a five-year low. Some of the greatest employment impact has been in autos and construction, where the sharpest declines in output may now lie behind us. However, fragmentary data suggest that labor markets softened further in May.

Retail sales in current prices have declined for three successive months, following a sizable increase in January. Correction to a volume basis is difficult when prices are rising so rapidly, but there has been a sharp drop in sales volume. It is well to recall that monthly retail sales data are frequently subject to large revisions. For example, upward revisions last summer removed the apparent weakness that seemed to have been developing and upon which the projections of recession at that time had come to rest. However, the current decline is more than statistical. To the extent that it reflects a temporary effect from the mid-March program, the recent Federal Reserve relaxation in the consumer credit area should prove beneficial.

Industrial production has declined for three successive months and the drop of nearly 2 percent in April was the largest since early 1975. Although there are few signs of serious inventory imbalance, new orders for durable goods have weakened in recent months and further downward adjustments in production may quite possibly be in prospect.

Housing starts averaged slightly above a 1 million unit seasonally adjusted annual rate in March and April, down more than 40 percent from a year earlier. Building permits eased further in April, and housing starts may sink a little further before reviving. However, the decline in interest rates and increased availability of credit should begin to provide a boost for housing before too long.

THE NEAR-TERM OUTLOOK

On the basis of these and other data, it is clear that the economy will register a sharp decline in real output during this second quarter. The more important question in terms of the behavior of output and employment is the pattern during the second half of the year and into next. The weight of economic opinion still expects a moderate recession. For example, four leading econometric models forecast a peak to trough decline in real GNP slightly greater than the average postwar recession, and substantially less severe than the 1974–75 decline.

A recent survey of 42 leading economists at major banks, corporations, and academic research organizations found the average drop expected by that group to be 2.6 percent, just about the postwar average. The Administration forecast will be revised and updated in line with recent developments, and will be released in July at the time of the Mid-Session Budget Review.

What are the reasons for believing that only a moderate recession is in prospect, rather than a deep decline on the 1974–75 scale? Both financial and real factors point toward a more moderate contraction.

First, in the financial area, it is important to recall that interest rates have come down very sharply from their earlier peaks. Savings flows to thrift institutions have picked up recently and the financial preconditions for an upturn in housing are already being established. A general increase in credit availability and lower interest rates will also provide support for those sectors of the economy that depend heavily upon consumer credit and business borrowing. In the process, the heavy burden that has come to rest upon small- and medium-sized business and agricultural borrowers should gradually be removed.

Second, in the nonfinancial area, there are still no signs of serious inventory imbalance, and inventory-sales ratios remain at relatively low levels by past standards. Difficulties in correcting for inflation can leave some doubt on that score in terms of inventory volume, particularly in some areas of manufacturing. Still, there is nothing visible to this point which suggests that inventory accumulation is generally excessive. Indeed, cautious inventory policy is one reason why output has fallen so sharply in the current quarter in response to sales declines. In some past recessions, production has continued in the fact of a pileup of inventories which only makes the eventual adjustment worse.

Plant and equipment spending plans have continued to show encouraging strength, although it is only realistic to suppose that some modest softening may soon begin to appear. In general, however, businesses are taking a longer view and building the modernization improvements and additions to capacity that will be needed out further in the decade, well beyond the current adjustment.

It seems quite probable, therefore, that the economy is already experiencing its sharpest fall during the current quarter. During the balance of the year, some positive factors should begin to emerge in areas of the greatest current weakness. Auto, housing, and construction activity will not continue to decline at recent rates. Instead, these important sectors of activity are expected to bottom out and begin to post some gains in a lower interest rate environment. It is our best current judgment that the recent drop in the economy will not cumulate much further. Of course, no one can state that with complete certainty. But, on the basis of the information in hand and apparent trends, a modest further decline after the current quarter appears to be the most probable outcome. Needless to say, the current situation is being monitored carefully.

THE INFLATION PROBLEM

Inflation is, and must remain, our number one priority. Already, in the wake of the March 14 measures, there are encouraging signs. The dramatic decline in interest rates in the past two months signals an abrupt drop in inflationary expectations, as well as a softening economy. Sensitive materials prices have fallen sharply in March and April, which also signals a favorable turn in the inflationary process. Because of lags in the process, full results cannot be expected to show through immediately at the later stages of the productive process. However, the consumer price results in April were encouraging, with the lowest monthly increase in more than a year. Admittedly, the favorable producer price index result in April was heavily influenced by falling prices of food and farm products which will not continue on that scale. But there are pervasive signs that the inflation outlook is in the early stages of significant improvement. In May, the members of the National Association of Purchasing Management reported the lowest rate of price increase in 3 years. This may be the leading edge of things to come in the important area of industrial prices.

There is a dependable and predictable cyclical sequence in costs and prices. It can be seen in every postwar recession and we are beginning to see it now. First, the rate of economic expansion tapers. Second, sensitive industrial material prices begin to fall. Third, after some lag in time, lower rates of inflation are experienced at the final stages of the production process. The first two stages—a softer economy and declines in sensitive prices—are now clearly visible, and the third stage—lower rates of inflation at the consumer level—will become increasingly evident as the year progresses.

The problem is that although every postwar recession has lowered the existing rate of inflation, every expansion in the past two decades has then lifted the inflation rate to a new higher level. This successive ratcheting up of the rate of inflation must be reversed in the interest of long-run economic stability. The fiscal and monetary decisions we make now will be affecting the inflation outlook for some time to come. It is widely felt—here and abroad—that we stand at a crossroads so far as inflation is concerned.

Thus we must not be diverted from our objective of combatting inflation, and be tempted into a policy of excessive economic stimulus. Any premature relaxation of the basic policies of restraint could whipsaw the economy and financial markets. Interest rates and the rate of inflation could easily be driven back up again, with serious consequences for auto production, housing construction and the entire economy. Instead, the proper course to follow is one of continued discipline, to ensure progress in reducing the rate of inflation.

THE BUDGET AND TAX CUTS

The key to the current situation is maintaining close control over federal spending. That now lies well within the reach of the Congress, and you and your colleagues deserve full public support in this crucial effort. If the economy runs close to the path projected in late March and federal spending is tightly controlled, the proposed budget would show a surplus. Even if the recession is a somewhat worse than forecast, the budget proposed by the Administration could still be in balance. In any event, in the present situation, with inflation still deeply imbedded in the economy, it is essential to maintain discipline by controlling federal spending.

Most importantly the steps that were taken on March 14 must be seen as a crucial element of longer-term efforts to bring the growth of federal spending under control. During the 1970's we have had continuous budget deficits in both good times and bad. If we are to improve productivity and bring inflation under control, the Federal government cannot continue to place ever escalating demands on the economy and capital markets. It is essential that we return a larger share of our national output to the private sector where it can be more effectively utilized.

It is far too soon to be talking of tax cuts. Instead, we need to demonstrate our ability through the legislative process to bring expenditures under control. Tax cuts purely for the purpose of economic stimulus and attempted quick fixes for the economy are not appropriate in the current situation. Instead, any tax cuts need to be preceded by clear progress in reducing the rate of growth in federal spending, and justified on the basis of their contribution to longer range goals of productive efficiency and lower inflation rates.

In recent years, this committee has played an extremely important role in directing attention to the need for a different approach to the economic problems of the 1980's. More emphasis does need to be placed on productive efficiency—the supply-side approach in the current terminology. Greater incentives do need to be offered for saving and investment, and less for immediate consumption. Therefore, we must carefully chart our near-term course in the fiscal area. Otherwise, the latitude required for sensible fiscal action to deal with the deep seated problems of productivity and capital formation could be frittered away through a piecemeal process of tax reduction to encourage consumption.

Our tax system has important effects on our economy, and many of the so-called supply side effects have been unduly neglected in the past. Research in the last few years has sought to address this omission, but the real value of such research becomes evident only when it is integrated into a coherent view of the economy as a whole. Tax cuts affect aggregate demand as well as the composition and growth of aggregate supply. If we are to fight inflation as well as increase productivity growth, both sides of this equation must be taken into consideration.

CONCLUSION

The need at the present time is to demonstrate our resolve to deal with the inflation problem. What is required is consistency and persistence, coupled with a readiness to adapt sound economic policies to changing economic circumstances. That readiness was demonstrated at mid-March and subsequently. The task remaining is to follow through with steady policies that will guide the economy onto a less inflationary long-term path.

Senator BENTSEN. Mr. Secretary, of course, I'm in agreement with holding down Government spending, but I'm convinced that we are heading into a deficit budget in spite of our efforts to try to balance it. But we are going to have a deficit budget that will not do what should be done in the way of long-term correction of inflation.

Look at the situation as shown on this chart [indicating]. Here, the ratio of capital stock to the labor force shows a disastrous trend line in the investment of capital stock to the labor force.

This can result in nothing else but a continuing decline in productivity in this country.

All of the current figures show that of all the major industrial nations of the world, this country has the lowest increase in productivity. Any time you allow that to continue its just has to lead finally to a lowering of the standard of living for the people of America.

Traditionally what has happened in this country when we have had a recession is that we come along with a tax cut after the fact, usually when the country is already coming out of a recession. I don't see how you can have a balanced budget with assumptions that I have seen in the budget resolution calling for some increase in taxes—one of them the independent broker, the other withholding on dividends and interest. That has been defeated time and time again in the Finance Committee and I assume in the Ways and Means Committee. The other day I was one of four—there were only four of us—on the Finance Committee who voted to sustain the President's position on the import bill. That doesn't bode well for what's going to happen, and I saw what happened in the Ways and Means Committee.

When you talk about the differences between 1974 and 1975 and now, we should also talk about some of the similarities. What are we really doing differently from what we did then?

Now if you look at the increase in the price of oil, that's a tax increase and it's a tax on the economy. The increase in 1979 was more than it was in 1974, but the difference is that you had a respite after the 1974 increased, and you don't see that out in OPEC today. They are going ahead right into 1980 and continuing to increase that price. So they are raising taxes on the American people to that extent and that's just that much more drag on the economy.

Then you take monetary policy measured by the growth of the money aggregates, and it's tighter today than it was then.

Then you look at fiscal policy, measured by the swing in high employment budget as a percentage of GNP, and that's also tighter now than it was then.

Now you talk about lean inventories, and I hope you're right, Mr. Secretary, but I can't help but remember that they were talking about lean inventories at the beginning of 1974 and it wasn't until afterward that they decided they had some fat inventories and that they were in excess. Hindsight finally showed that.

Your comments about the inflow to savings institutions, are still a mixed bag. I'm getting conflicting reports on that one as to what's actually happening there.

So my concern is that it all adds up to a deficit in the 1981 budget and it's the kind of deficit that in the long run doesn't accomplish what we are trying to do here in turning this economy around. The average recession of 1929 was a decline in the real GNP of about 2.5 to 3 percent. The 1974–75 was 5.5 percent. The early projections for this one were 3.5 to 4 percent.

Now if you take a look at what the first quarter GNP projection now is, it looks like we are going to be in a recession. But the frustration to me is that with all of this happening, and what looks to me like close to a repeat of 1974–75, we have not done the fundamental things that have to be done to get this country's economy moving again to retool America, to increase its productivity, and to curb inflation over the long run.

If you would comment on that I'd like to hear your response to it.

Secretary MILLER. Mr. Chairman, yes, please. I would like to first support a good deal of your analysis. The red line on your chart [indicating] is a trend of the postwar period up to 1973 and as we know during the period when the capital stock was growing in relation to labor force, the United States had one of the more promising rates of growth of productivity and that supported annual increases in real income for America.

What's happened in the last 10 years has been a gradual decrease in capital relative to labor as the labor force, particularly in recent years, has expanded very rapidly.

We could add to that the fact that the percent of gross national product which we spend on fixed investment is considerably lower than other industrialized countries, and that's part of this same equation and confirms what you're saying.

So I think we are in complete agreement that we have a fundamental problem of underinvestment and overconsumption, and that this has resulted in lower productivity and has fed the inflationary forces. So we are in agreement on the need to reindustrialize America and agreed to the conditions that will tilt us more toward investment and ways to reduce consumption.

So again, I think we come back to timing. I would just make a couple comments about the total approach to how we do create conditions that will provide more incentive or more encouragement for investment.

One, of course, is capital markets, and I want to just point out another underlying problem that is related to why the capital stock relative to labor has fallen off and that is what is the availability of financial capital, where does it go? In 1976, the Federal Government borrowed 26 percent of all the new financial capital raised in America and, therefore, it really did squeeze out the private sector from availability or cost because with the Federal Government taking out 26 percent, the cost of capital is bound to be higher and it's bound to be inflationary.

Why does the Federal Government borrow? Because it has deficits. Therefore, the efforts of Congress and the administration to begin to move down the deficit and to move the Government more and more out of the capital markets is part of the process to create conditions for more investment.

In this fiscal year, the Federal Government will borrow less than 10 percent of total funds raised. If we can control spending, and regardless of the economic cycle, that will result in a lower deficit or a lower demand and we will even further reduce the credit required by the Federal Government, and we are hoping to see that down to a very, very low level.

Senator BENTSEN. Mr. Secretary, I don't argue with you a bit. We are in agreement on that point.

Secretary MILLER. I just wanted to point this out because the reason we are doing this isn't for some simplistic view that a deficit per se has this effect. I wanted to explain to everyone that our purpose is a deeper purpose, that is, to reduce the claim of the Federal Government on capital markets and thereby create conditions where businesses can borrow at reasonable rates and have assurance of a long-term capital market.

Now I say that because if we put the order of priority to reduce spending, control deficits, and to reduce Government borrowing, and, second, having done that, to then look at the tax adjustments, I think there is where our discussion with you and this committee comes into focus.

Our view is that if we don't control the spending first that the initial impact of any tax proposal, any tax reduction, no matter how well-directed, how well-targeted, is to increase the deficit and the immediate effect is for the Government to be back into the capital markets again and for a while we help the business sector or the private sector on the one hand, and we take it away with the other. I think we have to accomplish both to get ourselves where we are not demanding the credit and then feed in the additional tax measures that will create conditions for better cash flow and better investment.

So therein is our difference. It's true, as you point out, that the increases in oil prices are equivalent to a tax on our economy. They draw money out. They are sent abroad. It's true also that the President, in taking the step on his own initiative, his own responsibility, to impose a gasoline conservation fee, was endeavoring, even in a moderate way, to begin to contribute to reducing consumption of oil, reducing imports of oil, and beginning to break the pattern of our constantly being taxed by foreigners, but at least to begin to tax ourselves, if you will, and keep it in our economy and recycle it.

Senator BENTSEN. Mr. Secretary, I proposed a 35-cent-per-gallon gasoline tax in 1974, and that that money be used for alternative sources of energy and development. We would have been a long way down the road if we had done it then.

Secretary MILLER. We would have been much better off.

Senator BENTSEN. I must say, I got in trouble in my State with them raising cain over it, and I don't think we are going to have much chance with it this time. I hear so much about protectionism, about tariffs, about quotas. That isn't the way we should be going. We ought to be doing the things that have to be done to encourage that capital investment to increase productivity so we can compete with our foreign competition.

Now you're talking about business going ahead with its capital spending, and I sure hope you're right and that currently that's correct, but I can also remember when they had that economic summit meeting at the White House when Alan Greenspan told me with great assurance that capital spending was going to be high in 1975. It just didn't happen because when those board rooms saw the recession coming on they turned off the spigot and shut it off.

Now what assurance do you have they are not going to do it again?

Secretary MILLER. Mr. Chairman, I can't give you great assurance. I can give you an analysis which I think is correct. I do believe that, for very important reasons, including the decontrol of domestic crude oil prices and the increase of world oil prices, that there is going to be and is underway a boom in spending in the energy area in this country, capital spending.

As you know, we have more oil drilling rigs at work now than we have had in many a moon and we know that in parts of the country that are resource rich that the effects of recession are very much attenuated by this major investment thrust.

Congress has now completed its conference work on the Energy Security Corporation. That should come into being soon. It will become a mechanism for direct financing assistance for energy-related projects.

So, based both on the cash flow to energy producers through decontrol, the cash flow through higher world prices, the tax incentives that have been created already in that field, and the financing assistance, I think we will have a boom in that area.

So that's one reason why I think we have capital spending underway there which will contribute greatly to, I believe, our overall productivity.

Senator BENTSEN. Mr. Secretary, I would like to interrupt you now because I have monopolized your time.

Secretary MILLER. Without impinging on Senator Javits' time, I would say that I could go on and say that the automobile industry also is in a major retooling proces which I do not believe can or will be interrupted by a recession because it is a life or death conversion of the automobile busines to provide the kind of automobiles needed by our market and it's a result of the energy price increases. So I think there are different factors now that are sustaining business investment that we didn't have back in 1974.

Senator BENTSEN. Mr. Secretary, I'd like to also say that Representative Bolling would like very much to be here, but they are having, as you know, a very serious problem in the Rules Committee this morning on the debt limitations.

Secretary MILLER. Yes.

Senator BENTSEN. And I'm sure you would want him there.

Secretary MILLER. It's very important we do not have a temporary suspension of the debt limits. We have serious problems next week. So I encourage him to be there doing the work of the Nation.

Senator BENTSEN. Senator Javits, who has been a major contributor to the policy of this committee.

Senator JAVITS. Thank you, Mr. Chairman.

Mr. Secretary, welcome on behalf of the minority of which I'm the only representative this morning.

Mr. Secretary, personally, I don't go for the crowding out theory which you place such store by because though you said we took 26 percent of all the borrowing, the question is, on what? In other words, the Nation is awash in money. Isn't that true? There are all kinds of money around. Look at these open market funds, huge amounts of money available. So the only question is—and I ask you this question—isn't it a fact that the question is what's the available investment pool before you deal with the crowding out? Twenty-six percent of what?

Secretary MILLER. In this case, I believe that the capital needs of the Nation would have been better served if we might have had a more constrained growth of available credit, but 26 percent still was an enormous takeoff of what was available, and I believe it affected interest rates and affected prices and affected availability of credit for the more productive investments in the economy.

You're correct; if we just increase the supply of credit enormously, we could have plenty of credit for the private sector, even with the Government being a large borrower, but at an enormous inflationary cost, because when you do that to monetize or fund a big deficit you obviously create inflation along with it.

Senator JAVITS. We've been talking about inflationary costs, but you haven't said a word about unemployment. Haven't we got, since this recession set in, a million more unemployed and it's going up, isn't it?

Secretary MILLER. We have a 7-percent unemployment rate and I think it will go higher before the year is out; yes, sir.

Senator JAVITS. Well, those are real bodies and souls, aren't they.

Secretary MILLER. It's a very serious concern.

Senator JAVITS. And it's not just cutting down the nice way in which Americans live. It's living or not living, depending on what you can get from the union and the unemployment fund and so on. It's not very helpful to the economy, is it? We're paying a big price, aren't we?

Secretary MILLER. We are paying a big price and we have not yet found a way to repeal the business cycle. This most recent business expansion period was, I think, the longest in peacetime history, and there was certainly no desire on our part to see a recession or higher unemployment. I do believe that the enormous increase in oil prices and the drain off of purchasing power and inflationary spiral that was set off by that has been a major factor resulting in reducing business activity and bringing on this unemployment.

Our job long term, if we are to avoid such cycles and such distress, is to make it a higher and higher priority to wring out inflation, to gain control of our own destiny and reduce our dependence on foreign oil and get into a position where we can maintain a rate of balanced growth in the economy that is consistent with full employment and with price stability.

Senator JAVITS. Mr. Secretary, you have just said something which seems to me to challenge us all very greatly. You said you didn't want a recession. As I understand it, this is one of the first planned recessions in history. You have been saying for months that the only way to abate inflation is to induce a recession by tightening the reins of credit and thereby guaranteeing it. Now isn't that true?

Secretary MILLER. No. I think——

Senator JAVITS. That's not what the administration has been saying?

Secretary MILLER. No, sir. I think we have not said that and perhaps that is an interpretation or perhaps that's the view of many independent commentators. I have noticed many commentators and many philosophers who believe a long, deep, and disastrous recession is the way to cure inflation. We do not believe that because we believe that recessions set off forces that do not wring out inflation but quite often result in counterforces that set off another cycle.

We have over the last 2 years that I have been in Washington, both with the Federal Reserve and now with the administration, sought to dampen excess demands in the economy and to constrain the rate of growth of money and credit consistent with more price stability. We did not intend to bring on a recession, but as I pointed out, the blowup of oil price increases over the last 16 months has been about 140 percent. This set off a whole cycle of events and I think made it impossible for business activities to carry on as usual.

So I think despite our desire to slow the rate of growth and dampen inflation but not to bring on a recession, that a recession has been triggered by events we couldn't control.

Senator JAVITS. Mr. Secretary, you're telling me you want me to believe that your top economic experts, including all your budget people, haven't been telling the Congress that we are going to have more unemployment and that we've got to accept it in order to wring inflation out of the economy?

Secretary MILLER. I think we have been saying—I think it's the first time the administration ever submitted a budget that projected a recession. That was not because one sought it as a policy but because one must be honest and say these conditions are bringing on a recession and that the recession will involve higher unemployment, and I think it's better for us to be factual and we can't hide our head in the sand and suggest that won't happen. It isn't that we desire it.

Senator JAVITS. Well, I could hardly think that you would advertise the fact that you desired it, but giving us the fact that it's coming and you're accepting it seems to me to be the same thing. What I'm trying to ascertain is not to particularly criticize you but to find out what we are getting in return and whether this is the right direction of policy. I have grave doubts about it because it seems to me to be a garrison philosophy; that is, you're retrenching. You're not going out to seek more markets or to do a better job in competition or to do what my colleague and friend, the chairman, has just stated—wasting all these years while we wrangled around about how to have money on oil and not even producing synthetics—in which, incidentally, we are all at fault, not me particularly, but all of us as members of a body. I believe, if it does wrong, you have to take the responsibility even if you didn't vote that way, and we wrangled around here for years really draining the lifeblood of this country in these OPEC prices, and I think it's shocking. It really is.

Secretary MILLER. Senator, let me just point out some of the facts. This is a national problem. It isn't congressional or administration. It goes back for a long time—the problem of energy. As a nation, we became very slow to recognize the peril. The peril is very high.

This year, this calendar year, we will spend $90 billion to import oil. In 1970 we spent $3 billion. In that period of time we've gone from $3 billion to $90 billion a year and it's shocking. But it's even worse if you look at it in the short term. Last year we spent $60 billion to import oil. This year we will spend $90 billion, a $30 billion increase, which is the equivalent of a $30 billion tax.

Now, how can we replace that $30 billion in our economy without increasing the demand for the oil, increasing the price, without driving inflation up to the sky? We face, all of us in common, tremendous, serious problems. To try to stimulate and pump up the economy to replace that kind of drain would set us off into inflation much higher than we have seen and would destine us for disaster.

So those problems relate to the failure over a very long period of time to do what the chairman was talking about, and that is to much earlier face up to the realities of how much oil we can really afford to use and to make adjustments in our process of use of it.

The gasoline conservation fee is a case in point; 40 percent of our oil is used for gasoline. We use almost 7 million barrels a day of oil for gasoline. Of that, 2.5 million barrels is discretionary. It is use that is not related to jobs or transport of goods or services, but just discretionary. If we stopped that, it wouldn't change our standard of living.

In an effort to save part of that, the President put on this fee and it's not receiving the kind of support that it deserves. And the fee, if allowed to go forward, when it has its impact, will allow us to save, at today's prices, $3 billion from export prices. We'll be saving an amount of oil that it would take $8 billion or $10 billion in investment to create if we went to synthetic fuels.

So it's the kind of thing the Nation has to make up its mind about, and start someplace. We started too late, and we're paying a heavy price for it. We would like to have started sooner and received support for it.

Senator JAVITS. Mr. Secretary, the best talk I've heard about the 10-cent fee is it would save 100,000 barrels a day. That's the best I've heard.

Mr. Secretary, in my opinion, that won't last 4 weeks and you will still be selling as much gasoline as you're selling now with the 10-percent fee. Either you've got to hit it hard if it's going to be with money or else you have to have the guts to be for rationing or some regulation to make cutting back mandatory. There's no other way if you really mean business. Everything you say—and I love you dearly, personally—but it sounds dreary and tired and like a broken record. We have been over this so often before, the same pedestrian approach, instead of going out there and doing what the Germans and Japanese have done, which is modernize and sell. Those are the two big words—modernize and sell. We haven't done either.

Mr. Secretary, what's your aim this year for inflation? What do you want to bring it down to and hold it down to?

Secretary MILLER. Our economic projection would indicate for the year inflation, measured by the CPI, would be about 13 percent. That means that by the end of the year we would expect to see inflation, measured by the CPI, in the single-digit range because, as you know, we've got 13 for the year and we've got to offset the 18 percent we had in the first quarter and we have seen the CPI come down recently to about 11.5 percent, so we are beginning. Of course, that's just 1 month and it's not necessarily the final answer, but as I have mentioned, there are reasons for us to believe we will see continuing reduction over the second half of the year.

Senator JAVITS. Now we have 2 million more unemployed. As the man around here who handled all the previous unemployment bills in the last decade or so, I can give you the price tag. It's a minimum of $20 billion. What's that going to do to all your plans? That's got to be accounted for. You can't duck that one.

Secretary MILLER. We will, to the extent that there is high unemployment, have an impact on the budget along the lines you suggest. Our own projections would indicate 7¾-percent unemployment in the fourth quarter, and that's taken into account in our budget projections.

If it's slightly worse than that, it will have an impact upon the budget. I think you can figure that for every 1-percent increase in unemployment it will impact the budget deficit about $15 or $20 billion.

Senator JAVITS. Here's a quote from Alfred Kahn repeated in the Wall Street Journal. Speaking to a group in Dallas, he says, "It seems clear that there is a danger that the recession will be severe."

Now do you think we can fine tune this recession?

Secretary MILLER. I don't believe we can fine tune the economy. I believe that there are certain policies we should apply. The economy has self-healing characteristics because there are built-in countercyclical devices. There are the protections of income. There are the transfers that will take place to cushion the effects of hardship. We also have felt, Senator Javits, that in these conditions it would be appropriate for us to have a new attitude about economic policy and that we should look toward the countercyclical policy of a monetary policy coming into play and that we should not use fiscal policy to swing because it doesn't seem to mesh very well and unleashes other problems.

That is the reason why we have felt that gaining control over the rate of growth of money and using the targeted credit controls temporarily and breaking the back of inflationary expectations and bringing us back to lower interest rates, and therefore having the conditions for improved outlook for housing, being able to finance business investment and consumer investments of autos and other things, is the preferable way to counter it rather than trying to push out a lot of spending which we then can't get control of in the later cycle.

Senator JAVITS. Nobody is asking you to push out a lot of spending, Mr. Secretary.

Secretary MILLER. I realize that.

Senator JAVITS. You're telling us. We're not telling you. What we are telling you is we want to push out a lot of productivity and we aren't doing it. What we're telling you is we want to conserve on gasoline and you aren't going to do it with a 10-cent fee, and we don't see modernization and selling as a part of our Government policy. In other words, we don't see a strategy of going out and generally expanding the field but rather we see something which is an analogy with other nations which have been subdued by the garrison idea in order to acquire new wealth. With 40 percent of our trading going on with the developing countries, it seems to a few of us that that's where the opportunities lie, not by cutting down, but by expanding in the right direction.

If you had a business and you were in trouble but you had a good business like the U.S.A. and you had been a business leader, you would go out and borrow $50 million to buck up your company, put in modern machinery, cut out a lot of old division, get rid of a lot of deadwood, and go out and sell. You wouldn't hesitate to do that at all. You wouldn't be retrenching. You would be expanding.

That's what I think has got to be our course because there's no other way. I mean, this way you're going to settle for 13-percent inflation. Big deal; 13-percent inflation will ruin us in 5 years. So instead of 4, it will be 5. It's just like the 10-cent fee for gasoline. It isn't going to do anything but just cause us a lot of annoyance. That's all. Thank you, Mr. Chairman.

Secretary MILLER. Senator, I certainly do not concur that we have a garrison attitude. I think the merchandise trade figures will be out this afternoon. I think you will find from those a confirmation that we have had a remarkable growth in exports in the last few years and that in the manufacturing area they have expanded dramatically and that we have made substantial progress in offsetting this enormous cost of oil which is the thing that is killing us and causing us our inflationary problem at this time, along with the longer term prospects for productivity.

Our strategy is not garrison. It is, first, to restore capital markets and to make them more attractive and more available for the long-term financing of business investment. It has been to encourage exports, which has happened and is happening. It is to create conditions for greater business investment. It is to curtail consumption, particularly of discretionary spending such as part of the gasoline, and divert resources into investment, and to develop these new directions in economic policy take a considerable shift.

We have a very large ship of state. It moves like a large tanker with a certain degree of inertia. It's taken us some time to apply pressure to the rudder. I think we are seeing the ship on the right direction and I think we will be on a sounder course.

We support your philosophy that what we need is to be more competitive. We believe it comes from capital market improvement creating incentives for business investment, from convincing all of us that we should use less imported oil and that we should engage in a 10-year program that is greater than the Marshall plan to build ourselves greater energy independence, and those are the courses that are terribly important, and many of them have been hammered out in Congress with excruciating difficulty, but I think with great leadership and statesmanship in the last few years; and I think they bode well for our possibilities, but not in 1 or 2 years but over 10 years.

Senator BENTSEN. Mr. Secretary, to get back to the basics, it seems to me from what I'm seeing and what I'm hearing is that we're seeing a repetition of 1973, 1974, and 1975. I don't see that new attitude in economic policy. I don't see the dramatic breakthrough. I don't see the daring that I think has to be shown in turning this country around and giving hope to America.

I believe in this kind of situation that the American people are really ahead of the Congress and ahead of setting of economic policy that we have seen. I believe your figures on unemployment are hopelessly out of date when you talk about a 7¾ percent unemployment rate by the fourth quarter, and the last report went up from 6.2 to 7 percent, when unemployment claims have already gone up 600,000. So we know the figures that are going to come out in June are going to be up substantially, probably on the order of 7.5 percent unemployment.

If that is correct, that will put us beyond your projections for the end of the year. So you're going to face a deficit.

Now with that kind of a situation, I think that's the time that we ought to make the dramatic turnaround and make a tax cut that is not inflationary with the drag we have on the economy, one that will lead to the retooling of America and help make us competitive.

Now you spoke about Government borrowing and that concerns me. It concerns all of us. But you have to look at total Government borrowings. You have to look not just at the Federal Government, but look at the State and the municipalities, and see what's happened there; and in 1976 they were actually higher than they are now. They have substantially declined for 1979. So headway has been made on that.

Mr. Secretary, I have watched tax cuts through this Congress and I know how long it takes to work up the policy and try to see that they are realistic and take care of all the conflicts, and I really believe it's important that you folks come up with some dramatic tax cuts that will retool this country and make it more competitive and keep the jobs at home, instead of seeing the jobs go overseas. And I believe that's the answer to this current wave of protectionism and tariffs, and that is the way we ought to be going.

Secretary MILLER. We don't disagree, Mr. Chairman. I think you know our stated policy is that we are prepared in the administration, if Congress is able to confirm the control over spending—we are then prepared to discuss specific tax proposals along the lines you suggest, and the sooner we can complete the appropriation process and confirm the control on spending, the sooner we will be prepared to send you some specific proposals which we have in mind which we think will contribute to your personal objective and the objective of this committee.

Senator BENTSEN. Do you have anything further?

Senator JAVITS. One question that occurs to me concerns how to deal with the OPEC price situation. Is there any other plan in the works other than the hope of restraining gasoline use by this 10-cent fee, Mr. Secretary, that the administration figures will be important to energy conservation?

Secretary MILLER. There are a series of initiatives, Senator Javits. Let me point out that as a matter of logic there are two ways we can restrain the use of and reduce the dependence on demand for imported oil through conservation.

One is to ration it, as you pointed out, and the other is to let price be the allocator rather than rationing; allocate by rationing or allocate by price.

We frankly have been unsuccessful in finding congressional support for a rationing program that could be put into effect. As you know, there has been a rationing program but it requires there be a very serious shortfall before we can use it. So our hands are tied and we found no support.

We have consulted with Congress about the possibility of a gasoline tax of a significant order of magnitude. As Chairman Bentsen pointed out, he once proposed a 35-cent one and we have found zero support for this.

The President therefore endeavored to take a modest step in this regard.

Now there are other ways, as you know. There are a whole list of initiatives that have been taken, including the credits for weatherization of homes, looking at alternate sources of energy, programs in support of pending legislation to back utilities out of the use of oil into coal or other energy, the use of the backing of solar projects, and so on and so on. There are very many.

The trouble with most of them is they take either capital or time. The fastest, surest, quickest way to conserve, of course, would be to hit on the most discretionary and to do it promptly without requiring new investment, new systems, and that's why we felt that either rationing or pricing in the gasoline area was the more important thing we could do short term.

We have so far failed to sell either concept and are not receiving all that great enthusiasm for the President's own initiative which he admits is modest.

Let me point out, if we have a large gasoline tax, as John Anderson proposes, it would be our view that we would need to recycle that. Otherwise, the impact on the economy would be too hard. We would be prepared to do that, putting on a tax and recycling it so the economy isn't drained of the money. It's merely giving the country the choice of where it spends the money and if it chooses not to spend it on gasoline it can spend it on something else. That's fine and we would do that with Congress.

When the President puts in a fee he can't recycle it. So if he put in a 50-cent fee, it would ruin the economy. So he put in a 10-cent fee because it is going to have an effect, in our view, and it's going to send a message and it's been well received by our allies and it's been well received by the producers who see we are doing something, but it's manageable in the economy. If the President put in a 30-cent fee, the impact on the economy is so great that he would have to get Congress then to recycle it and we haven't found an agreement on how to do this. That's our problem. We have an administrative problem of how to proceed.

We can't get support for legislation and we are doing what we can do on our own presidential power and we feel that we just can't do it to a degree that is heavier on the economy but yet reasonable. So it's not some irrational approach. It's a rational, logical, moderate step to send a message, to deliver a result.

Senator JAVITS. Mr. Secretary, I feel an obligation to be responsive, so I agree with your analysis of the reaction of the Congress to rationing. There are few votes for it. There ought to be more but there aren't.

However, as to a fee, I'd like to suggest this to you. If the President did put on a 30-, a 35-, or a 50-cent fee, then the Congress would face a real issue because that would admittedly cut consumption very terribly, and you might get a lot more supporters than you have today for what we think is not effective. If the Congress complains that the tax money has to be recycled the President's attitude should be to say, "Great, I invite you to do it. I'm not standing in your way." Aren't you in a stronger position if you do that than to do what you're doing, which doesn't even satisfy your friends like me, because I don't think it means anything?

Secretary MILLER. Well, our view of it is when it becomes effective it will save 250,000 barrels a day, which is costing us at current prices about $3 billion of imports, but we could join that issue because we are not proposing a fee as the perpetual solution but as a solution temporarily within the President's authority and proposing to submit to Congress an ad valorem gasoline tax which Congress then can deal with and we can deal at that time with whether the gasoline tax should be more or less and whether it should be recycled.

But what we wanted to do is get going on something that is effective and is here and is done and is showing that we will exercise leadership.

You know, the complaint is that we show no leadership; and then when we show leadership the complaint is we show leadership. So it's sort of that kind of cycle we're in.

Senator JAVITS. I don't think that's quite accurate, Mr. Secretary, if you will forgive me.

Secretary MILLER. It's a good phrase.

Senator JAVITS. You're not showing leadership and that's what I have said and I derive that's what my colleague has said, that's adequate to the purpose. That's bold enough to do what needs to be done, and that's certainly what I'm interested in.

Secretary MILLER. Senator, I just want you to appreciate that if the President put in a 30-cent fee that would mean $30 billion drained out of the economy with an enormous recessionary impact.

Senator JAVITS. It isn't going to mean that. You know the Congress isn't going to let you horse around with $30 billion.

Secretary MILLER. Or even $10 billion.

Senator BENTSEN. You know, Mr. Secretary, on the budget resolution we passed in the Senate, we specifically stated that that 10-cent tax in effect would have to be recycled with a tax cut, and then the Budget Committee accepted my amendment that half of that tax cut would go to productivity, so Congress obviously——

Secretary MILLER. It's been addressing it.

Senator BENTSEN. As Senator Javits said, it has to be recycled.

Senator JAVITS. Just one other thing. We are deeply concerned about the thinking which goes into the question of the dollar. Now there's no question about the fact that your reduction of interest rates today, which also is an indicator of a very serious deficiency in spending plans and expansion plans by American business, certainly involves a grave possibility of a very serious weakening of the dollar. I mean, that's a side effect which may be more important than the direct effect.

We notice that the so-called substitution account has been pretty well scrubbed. I question whether you're not going to need that account and need it badly now. And I question whether not getting it will have an adverse impact on accelerating that weakness of the dollar. So I'm challenging you. I'd like to know what your game plan is in this regard.

Secretary MILLER. Well, the total approach, of course, in the first place, we believe and are committed to maintaining a stable dollar. Even with the current relative change in interest rates, the dollar has fared quite well. I think it's part of the belief that our actions are beginning to dampen inflation. So even with the 8-percent drop in short-term interest rates, which tends to depress the dollar, the dollar has declined in a trade-weighted basis only a few percentage points and it's still about 6 percent higher on the trade-weighted basis than it was on November 1, 1978, when we started our serious efforts to stabilize the dollar.

In terms of the diversification of reserve assets which you're talking about in the world monetary system, we do favor some sort of international monetary account technique that would create a possibility for diversification of the market to avoid the pressure.

I would not be so discouraged as you would indicate, Senator, about the future for such an account. There were some problems and there have been imperceptions in countries on such complex matters. In our recent meeting in Hamburg there was some—quite a few countries that just weren't prepared to complete the negotiations. They were not ripe for completion, but hopefully some progress could be made.

Our view is still positive. Our support is still positive. We believe that in due course it will develop. It took about half a decade to develop the SDR concept. We have been at this about 1½ years now, seriously, so I think we are going to make progress. It just takes that long. It will probably take another year to do this one.

Senator JAVITS. Mr. Secretary, might I say that you're our administration; Carter is our President; and it's our job—this is America.

It is our country. It's our job to hold up his hands and give him as much backing and good advice as we humanly can muster here by way of necessary votes and consensus.

I would, as one American and Senator, strongly urge upon you the consideration of a far more offensive plan of action with real consideration of having the guts, if you want to call it that, to have a targeted encouragement of a productivity tax cut, to have it now, for the modernization of American business, and take many other actions which are directed toward that end in terms of technology, in terms of markets, in terms of the hope of discovering oil in the developing countries where you've got a big problem that you may be inducing, which is our calling what others call taxes development fees, et cetera.

I would strongly commend to you, as I say, as one Senator and one American, looking into a far more activist approach to what's happening, notwithstanding that it's a Presidential election year. Great things can happen between now and next January which could be very helpful and which could be very harmful to our country.

I consider it my duty, whatever may be the politics, to help those great things which can be helpful rather than harmful or just neutral. I don't think as nonalined countries you can stand still today.

Thank you, Mr. Chairman.

Senator BENTSEN. Senator, I share very strongly those feelings. I don't know when I have been as disturbed about the long-term economic outlook of my country as I am today, but I am also totally convinced we have the resources to turn it around, but that it's going to require a major change in economic thinking in this country. We have the political stability. We have more in the way of natural resources than any other major industrial nation in the world.

I look at the situation where Japan imports all of its oil; Germany almost all of its oil; and we are still importing less than half of the oil that we use. It's a problem for them even in a higher percentage of degree than for us and yet they are doing a better job with curbing inflation than we are doing. I think we have it within us to do a much better job than they have done, but, again, we are going to have to learn from the mistakes we made in the past and that means that we have to do the things to see that our workmen have better and more efficient tools in their hands than do their competitors.

It's just like one fellow sitting over here with a hand saw and the other fellow with the power saw. Both of them are willing workers, putting in the same amount of hours, and you know as well as I do, Mr. Secretary, who's going to turn out the most units of work and why. It's reflected by figures like that. It means that we have to have the courage to do some pretty dramatic things in turning this situation around.

I think we can, but the longer we wait, the more difficult the job. Thank you very much.

Secretary MILLER. Well, thank you. We very much appreciate your counsel in this regard and I hope we will come back one day with proposals you're looking for.

Senator BENTSEN. Thank you.

The committee stands in recess.

[Whereupon, at 11:15 a.m., the committee recessed, to reconvene at 10 a.m., Thursday, May 29, 1980.]

THE STATE OF THE ECONOMY

THURSDAY, MAY 29, 1980

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

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

Present: Senators Bentsen, Javits, and Roth.

Also present: John M. Albertine, executive director; Charles H. Bradford, minority counsel; Kent H. Hughes, Mary E. Eccles, Lloyd C. Atkinson, Keith B. Keener, and Mayanne Karmin, professional staff members; Betty Maddox, administrative assistant; and Stephen J. Entin and Carol A. Corcoran, minority professional staff members.

OPENING STATEMENT OF SENATOR BENTSEN, CHAIRMAN

Senator BENTSEN. This hearing will come to order.

This is the second of 2 days of hearings on the economy. I think we're very fortunate this morning to have three very distinguished witnesses: Professors Alan S. Blinder, Princeton University; Dale W. Jorgenson, Harvard University; and Paul W. McCracken, formerly Chairman of the Council of Economic Advisers, and presently from the University of Michigan.

We welcome all of you. It finally is clear the long-anticipated recession is here. It's also becoming clear that this recession will not be a shallow one; indeed, many private forecasters are now telling us that the 1980–81 recession could be as bad as the 1974–75 recession. And that was the worst recession, of course, in post-World War II history.

If the consensus forecast that is emerging is correct, it means that the American people can look forward to a period of sharply declining real GNP, and soaring unemployment rates.

Yesterday we had a witness that was still using the figure of 7¼ percent as the year-end forecast on unemployment. Obviously, that figure is out of date. The unemployment trend is up sharply. We are seeing soaring unemployment rates, increasing plant idleness and continued double-digit rates of inflation. And that is certainly not what you consider a healthy outlook.

Our main reason for inviting you here this morning is we really want your counsel on the kinds of policy actions that we ought to be taking here in the Congress—what we ought to do to combat this recession and to bring inflation under control. In my estimation what is called for now is a moderate tax cut designed to permanently lower inflation permanently lower unemployment and to raise the standard of living for Americans.

Toward these ends we need to start now the process that will cause a dramatic change in the mix of our Nation's output and consumption toward savings and investment. In short, we need a tax cut now to expand our Nation's productive capacity, to retool America's industry, and to foster the development of new high growth, high productivity industries. The administration has told us repeatedly that it has no quarrel with that idea and that the next tax cut ought to be targeted toward raising savings and investment; the only argument is in the timing of that tax cut. However, in my estimation, there is no better time than the present.

In the time that I've been here, and that's not too long, 10 years in the Senate, the tax cuts that I have seen have generally come when we have started out of a recession. It takes a while for the Congress to act, to have hearings, to listen to all of the varieties of interested groups that testify. They have a right to present their case. And when we finally pass that tax cut, too often it has encouraged inflation and the economy has been well on the way to its slump.

We have seen this economy turn down very sharply in the past few months. A moderate tax cut aimed at raising the rate of capital formation would limit the decline in the overall level of economic activity without adding to inflation. And it would also put us on a new growth path characterized by a higher investment GNP ratio.

And I think that's sensible if we're going to get this economy moving again.

Of course a tax cut that I would recommend is only one element of a comprehensive program. It is clear we must do more to reduce our vulnerability to the machinations of Mideast oil producers. And it seems to me clear that more attention needs to be devoted to regulatory reform, to targeted structural employment programs that are consistent with targeted investment policies, and to monetary-fiscal mix issues.

We are hopeful that these three witnesses with us today will provide us with the direction that we so need.

I recommend your attention to the chart up there [indicating] showing the ratio of capital stock to labor force; you can see the decline taking place.

We've also seen as of this morning, I understand, the revised figures on the loss of productivity; they are even worse than the last figures we had had.

Mr. Blinder, I'm going to call on you first, if you will, please, sir, to make your statement. I would say to you, Mr. McCracken, that I'm going to put you on hold. I understand one of the Senators that is going to be here particularly wants to ask you some questions.

STATEMENT OF ALAN S. BLINDER, PROFESSOR OF ECONOMICS, PRINCETON UNIVERSITY, PRINCETON, N.J.

Mr. Blinder. Senator Bentsen, I would like to thank you for this opportunity to address the committee at such a critical time in our economic policy formulation.

In your letter, you asked me to discuss the near-term economic outlook and give my views on some recent past economic policies and also offer some suggestions on possible future policy initiatives, especially on the question of whether and how to cut taxes.

I would like to take up those topics more or less in that order.

As you just mentioned, the clear signs of a deteriorating economy are all around us now. Real GNP was almost flat in the first quarter of this year and seems very likely to fall through the rest of 1980. Housing starts are way down; the automobile industry is in a serious depression; industrial production, retail sales, and business investments are all falling.

There are three basic ways to forecast economic activity: reading the economic tea leaves, using economic models, and what I would call analysis of fundamentals. I personally do not believe much in reading tea leaves.

Econometric models have a better historical record but, as is well known, have had a good deal of trouble recently and have never been very good at calling turning points. My preferred method of forecasting—studying the fundamental forces that are buffeting the economy—has the disadvantage that it does not lead to numerical forecasts. And I will offer none today. But it does have the advantage of being relatively immune both to current fads and to month-to-month quirks in the data.

The fundamentals are now, and have been for some time, pointing very strongly to recession, and perhaps to a very deep recession. What are these fundamentals? First, and probably also foremost, are the enormous oil price hikes of 1979, which have contractionary effects on both the demand and supply sides of the economy.

Second, and definitely much less severe this time around, are the food price hikes of 1978 and the early months of 1979.

Third is the extremely tight monetary policy that has been in effect for some time now.

And fourth is the rather restrictive stance of Federal budget policy—despite the persistent, and misleading, budget deficits.

All of these forces are strikingly similar to the situation in 1974 when, following severe food and oil price shocks, both monetary and fiscal policy turned contractionary, thereby helping OPEC push us into our most severe recession since the Great Depression.

I find it somewhat ominous.

In view of the recent track record of recession forecasters, it is hardly necessary to point out that the forecast of a serious recession that is currently popular may prove to be wrong—just as it was in the past. But I would also like to point out that the forecast might err in the opposite direction: It could prove too optimistic.

If the consumer, who has been singlehandedly propping up the economy by his unprecedented spending, should decide to restore saving rates to something approaching historical norms, the prospects are frightening.

Let me give an example. The saving rate for the first quarter of this year was 3.4 percent. Had it instead been 5 percent—a number well below the postwar average—consumer spending would have been $26 billion lower. This is a huge drop in spending that would require a personal income tax cut in excess of $30 billion to offset it. There is, in a word, considerable downside risk.

Washington is not, of course, stumbling into this recession unawares. On the contrary, the administration and the Federal Reserve have been working very hard to bring it on as a remedy for inflation. So I would like to spend a few minutes reviewing the nature of our current inflation problem.

My theme is that we really have two very different inflation problems. The first is the increase in the so-called "baseline" or "underlying" rate of inflation from 6 to 7 percent in the mid-1970's to perhaps 8 to 10 percent today.

The second is the stunning increase in the difference between the actual and baseline inflation rates—the part of inflation that is attributable to special transitory factors. Inflation from these special factors appears to have jumped from about zero in 1977 to perhaps 8 to 10 percent in recent months, and this has accounted for most of the observed increase in the inflation rate.

While it is the latter type of inflation that grabs the most headlines, it is the former that presents the more serious problem and the problem on which economic policy should be focused. The reasons for this are as follows:

First. The Consumer Price Index badly exaggerates the recent acceleration of inflation.

Second. The special factors component of the current inflation is, the most part, beyond our control and will most likely disappear of its own accord. There is, therefore, little that policy can or should do about it. Better just to weather the storm.

Third. The rise in the baseline rate of inflation of perhaps 2 to 3 percentage points is a long-term problem that will not simply perish under its own weight. Furthermore, this part of the inflation problem can be treated by policy—albeit slowly. There are no quick fixes.

I would like to elaborate on each of these three points with the aid of the first two tables in my prepared statement.

Table 1, in which inflation is measured by the CPI, breaks down inflation during 1977–80 into the parts contributed by three particular trouble spots—food, energy, and homeowners' financing costs—mostly mortgage interest rates— and a catchall "everything else" category that comprises most of the index.

Table 2 does the same for the implicit deflator for personal consumption expenditures in the national income accounts, the PCE deflator. These data are all I need to elaborate my three points: My first point is that the Consumer Price Index has exaggerated the increase in inflation. You can see that by comparing the top lines of the two tables. According to the widely publicized CPI figures, inflation skyrocketed from under 7 percent in 1977 to over 13 percent in 1979, and to 18 percent in the first 3 months of 1980. But according to the PCE deflator, which most economists view as a far more reliable gage, the acceleration was only from 6 percent in 1977 to 10 percent in 1979 and to 12.5 percent according to preliminary data for the first quarter of 1980. There is obviously a yawning gap between the two indexes recently.

There are a couple of reasons for this. The first is well-known by now and that's the CPI's treatment of mortgage interest rates, which acts as if every homeowner was refinancing his home every 3 months. And line 4 of table 1 shows how important that has been in pushing the CPI inflation rate up recently.

But there is also a second measurement problem in the CPI that's gotten a little less attention, and that is that the CPI is based on a fixed market basket of goods and services that was selected by the Bureau of Labor Statistics in 1972–73. And that means it was selected back in the good old days of cheap food and cheap energy. Since then, consumers have responded to the drastic changes in relative prices in some obvious ways, such as by conserving on gasoline usage. But none of these efforts have been reflected in the CPI, which therefore overstates inflation.

My second point is that there is little we can do about the part of the recent acceleration of inflation that is caused by these special factors. But this inflation in turn will probably disappear of its own accord.

The reasons for this are again apparent in the table. Rising energy prices, in an unholy alliance with mortgage interest rates, have been the major force pushing inflation, as measured by the CPI, above its baseline rate. Short of breaking up OPEC, there is little we can or should do to stop the rise in energy prices.

However, it does seem likely that the rise in energy prices during the last 9 months of 1980 will be far less than in 1979 and the early months of 1980—unless OPEC does it to us again in 1980. A slowing of energy price rises, in conjunction with declining mortgage interest rates, would bring about a prompt and dramatic reduction in the measured inflation rate—even if there is no recession. Just as the CPI exaggerated the upsurge of inflation, so will it also exaggerate the decline of inflation.

A simple numerical example, which is not a forecast, will illustrate how dramatic the drop in inflation may be. Suppose that: (a) The baseline rate of inflation continues at the high rate recorded in the first 3 months of 1980—probably a pessimistic assumption—and that food prices do this—probably an optimistic assumption; (b) energy prices rise at a 20-percent annual rate for the balance of 1980; and (c) homeowners' financing costs are level from March until December 1980, which seems a pessimistic assumption, given the recent behavior of mortgage rates.

Under these assumptions, the annual rate of inflation for the last 9 months of 1980 will be only 8.4 percent, a drop of almost 10 percentage points from recent rates. This is an enormous change. It totally dwarfs anything that can possibly be accomplished by a recession. And it will come more or less automatically if we are just patient and wait. Indeed, last week's CPI announcement suggests that the process has already begun.

Third, the real inflation problem is the 2 to 3 point rise in the baseline inflation rate. This is what current policy should focus on. In the current environment of near hysteria over 18 percent inflation, it is important to keep in mind that the baseline inflation rate, which I prefer to measure by the last line in table 2, may be as low as 8 percent. The sky is not falling.

67-218 O - 80 - 5

Nonetheless, there is no reason to put our heads in the sand. Both tables indicate a rise in the baseline rate of some 2 to 3 percentage points—a development that no one can be happy about. Since it is this development, not the special factors inflation, that the policy of deliberate recession is aimed at, let me now turn to a discussion of current economic policy.

To be perfectly honest, I'm much less sure right now about what Government should be doing with its short-run stabilization policy than I was a year ago. Let me explain the source of my ambivalence.

About a year ago, it seemed to me the storm clouds of recession were beginning to form. OPEC, if you will pardon the pun, had us over a barrel. Fiscal policy had turned sharply in a contractionary direction: the high employment deficit had declined by about $23 billion within a few quarters, and there was continual talk about new efforts to balance the budget. Monetary policy under the helmsmanship of Paul Volcker was soon to turn clearly in a more restrictive direction. All of this seemed quite likely to produce a substantial recession.

Yet Wall Street was crying for blood. In this atmosphere, a turn toward recklessly contractionary policy seemed possible, so I wrote a letter to The New York Times urging moderation—not a turn toward expansionary policy, mind you, just a steady-as-you-go posture. I felt strongly then that this was the right thing to do at the time. Having written a book on the policy errors of the 1974–75 episode, I was worried that we would instead press the panic button.

In my view, the panic button was indeed pressed. The OPEC shock turned out to be more severe than most people had expected. Despite that, the high employment budget swung toward surplus by an additional $21 billion between third quarter 1978 and second quarter 1979. Monetary growth, which undoubtedly needed to be slowed from the exuberant pace witnessed in the summer of 1979, was throttled back dramatically by the Fed's new monetary policy starting in October 1979. All of this reminded me of the events leading up to the 1974–75 recession.

But Wall Street was apparently not appeased. In response to what seemed to be an insatiable desire for contractionary policy, the administration and the Congress engaged in further, though apparently minor, budget cutting in March of this year, and the Fed tightened the credit screws yet another notch—this time combining a further slowing of monetary growth, to negative rates very recently, with a Rube Goldberg array of credit controls.

I view this latest round of contractionary policies as a serious mistake. The restrictive policies already in place by January 1980, in conjunction with soaring oil prices, had set in motion forces strong enough to produce a significant recession. All we had to do was wait patiently for the medicine to work—remembering, as we waited, that recession works on inflation only weakly and with long delays.

But we did not wait. And it now seems to me very unlikely that we can avoid a serious recession. What can be done now to avoid this eventuality? Not very much. A large and permanent cut in personal income taxes, amounting to at least $35 billion and quite possibly more, might do the trick. But I am reluctant to recommend such a policy now because:

First, it would heighten the impression of an indecisive, vacillating economic policy that is already so prevalent;

Second, it might exacerbate what appear to be very volatile inflationary expectations;

Third, given legislative delays and economic lags, the effects of such a tax cut might come too late to avert a serious recession anyway.

Still, it might be advisable for the Congress to start contingency planning now for an emergency tax cut to be enacted in the event that the recession starts to get out of hand. A rollback of payroll taxes might be a particularly efficient vehicle for propping up consumer incomes in a hurry, and would also have some salutary effects on business costs. At the very least, Congress should prepare to extend unemployment benefits—as it has done in past recessions.

I cannot emphasize too strongly that only cuts in personal taxes—income taxes or payroll taxes—can stem the tide into recession. No cut in business taxation can possibly work fast enough to have any appreciable effect on the severity of the coming downswing. Decisions on whether and how to cut business taxes should be geared to long-run capital formation considerations, not to the exigencies of short-run stabilization policy. There is no point in rushing through hastily conceived legislation to spur investment as if there were some sort of emergency. Better to take the time to do it right.

I take it as a political datum that there will soon be some sort of tax relief for business aimed at providing greater incentives for investment. I'll therefore not discuss the merits or demerits of doing so, but only the form that I think such tax relief should take.

My first point has been made already, but it is important enough to be worth reiterating. Decisions over the magnitude and nature of business tax cuts ought to be divorced from current short-run stabilization policy. Such tax cuts should not be considered as short-run palliatives for either our current inflation problem or our coming unemployment problem. The focus should be squarely on long-run problems such as capital formation and productivity.

My second point is that, under current law, Congress has entirely abdicated its authority to set taxes on income from capital--ceding it by default to OPEC, the weather, and the Federal Reserve.

Regardless of what the statute books say, the rate of taxation on capital income now is determined almost entirely by the rate of inflation, not by any act of Congress. I believe that Congress should reassert its constitutional authority to set taxes by indexing the corporate and personal income tax codes for inflation.

Since I have been told that this idea is dead politically, let me take a few minutes to try to explain why I think it is important enough to raise here today.

Under current law, nominal income from capital is taxed. But when there is inflation, a portion—and perhaps most—of this nominal income is merely a return of capital since nominal assets decline in real value during inflation. By taxing the nominal return on assets, not the real return, the law levies incredibly severe tax rates on capital income whenever inflation is high.

Table 3 of my prepared statement illustrates this by considering the case of an individual in the 40 percent marginal tax bracket who invests $1,000 in a 1-year taxable bond. It is assumed that no matter what the rate of inflation, the bond pays a nominal interest rate two points above the inflation rate—compare columns 1 and 2.

That is, the real interest rate is 2 percent regardless of the rate of inflation. Column 3 shows the nominal interest income that will be earned over the year, and column 6 shows the income tax that will be due on this amount—40 percent of interest income.

However, inflation erodes the principal of the bond by an amount proportional to the rate of inflation—column 4—which is why nominal interest rates on such assets rise with inflation in the first place.

Column 5 shows that the real before-tax income from this bond is always $20, regardless of the inflation rate. This was assumed.

Hence, in an indexed tax system, the resulting tax liability, whatever it is, would also be unaffected by inflation. But column 6 shows that tax liabilities under our present unindexed tax system rise swiftly with inflation. The implied tax rate rises from 40 percent at zero inflation to 360 percent at 16 percent inflation—column 7.

This example, while unimportant in itself, raises two points which apply generally to all income from capital. First, tax rates on income from capital can become astronomical when inflation is high and the tax code is not indexed. Second, the tax rate varies widely as the inflation rate changes.

Of the two, the second is by far the more important. Congress may decide that capital should be taxed heavily or lightly, and can fix the statutory rates accordingly. But, in an unindexed tax system, there is no way that Congress can make this decision stick. Whatever it decides, if inflation comes in higher than expected, the tax burden on capital will be higher than Congress intended; conversely, if inflation comes in lower than expected, the tax burden on capital will be lower than intended.

Only by indexing the tax code can Congress exercise any real authority over the rate of taxation.

The argument I am presenting here is really a brief for exercising congressional control over tax rates, not necessarily for cutting them. Still, it would be disingenuous of me not to point out that indexing the corporate and personal income tax codes at this time would almost certainly amount to a tremendous reduction in the taxation of income from capital.

High inflation rates have carried the rates of taxation on dividends, interest, and profits well beyond the rates that Congress presumably intended.

Thus, a decision by Congress to reassert its constitutional authority to set tax rates by indexing the tax code would probably also be a decision to cut taxes on capital quite drastically. On equity grounds, therefore, I would urge that, simultaneously, the tax treatment of income from labor also be indexed.

I have encountered two major objections to indexing the tax structure—one political, and the other technical.

The political objection, which is probably most telling, holds that the rapid growth of tax receipts that results from high inflation when the tax system is not indexed gives Congress opportunities to make periodic tax cuts—opportunities Congress does not wish to relinquish.

I will not try to evaluate the validity or importance of this argument; every member of this committee is far better qualified to do that than I am. I would only ask that you balance it against the restoration of congressional control over taxation that indexing would make possible.

The technical objection raised is that it is difficult to know exactly how to rewrite the tax code to make it "inflation proof." This argument is true. But it is also unimportant. The plain fact is that it is extremely easy to get the answer about 90 percent right. The hard part comes in reaching agreement over a number of details and fine points.

These are issues that academics and other specialists can, and should, argue about—probably interminably. They are not subjects that Members of Congress should fret much about.

I conclude that, of the many ways now being considered to provide additional tax incentives for saving and investment, indexing the tax code probably scores most highly both on grounds of equity and on grounds of efficiency. In addition, it offers the important side benefit of restoring to Congress the right to set tax rates that was assigned to it by the Constitution but was usurped by inflation, and I would therefore recommend that this be the vehicle for any contemplated cut in tax legislation.

Thank you.

Senator BENTSEN. You bring to mind a number of questions, but I will pass until all the members are here.

[The prepared statement of Mr. Blinder follows:]

PREPARED STATEMENT OF ALAN S. BLINDER

Economic Policy for 1980: Short-Term Problems and Long-Term Remedies

Mr. Chairman and members of the committee, I am very grateful for this opportunity to address the committee at such a critical juncture. Senator Bentsen asked me to discuss the near-term economic outlook, to give my views on recent past economic policies, and to offer suggestions on possible future policy initiatives—especially on the question of whether and how to cut taxes. I will take up these topics more or less in that order.

THE COMING RECESSION

Clear signs of a deterioration in economic activity are all around us. Real GNP was almost flat in the first quarter of this year, and seems likely to fall during the rest of 1980. Housing starts are way down; the automobile industry is in a serious depression; industrial production, retail sales, and business investment are all falling.

There are three basic ways to forecast economic activity: reading the economic tea leaves, using econometric models, and what I would call analysis of fundamentals. I personally do not believe much in reading tea leaves (such as the leading indicators), and think that the poor track record of such forecasts speaks for itself. Econometric models have a better historical record but, as is well known, have had a good deal of trouble recently and have never been very good at calling turning points. My preferred method of forecasting—studying the fundamental forces that are buffeting the economy—has the disadvantage that it does not lead to numerical forecasts. And I will offer none. But it does have the advantage of being relatively immune both to current fads and to month-to-month quirks in the data.

The fundamentals are now, and have been for some time, pointing very strongly to recession, and perhaps to a very deep recession. What are these fundamentals? First, and probably also foremost, are the enormous oil price hikes of 1979, which have contractionary effects on both the demand and supply sides of the economy. Second, and definitely much less severe this time around, are the food price hikes of 1978 and the early months of 1979.

Third is the extremely tight monetary policy that has been in effect for some time now. And fourth is the rather restrictive stance of federal budget policy—despite the persistent (and misleading) budget deficits.

All of these forces are strikingly similar to the situation in 1974 when, following severe food and oil price shocks, both monetary and fiscal policy turned contractionary, thereby helping OPEC push us into our most severe recession since the Great Depression. I find it somewhat ominous to recall that the worst part of the 1974–75 recession came about one year after the OPEC shock of 1973–74. Depending on how you date the 1979 OPEC shock, this is just about where we find ourselves today.

In view of the recent track record of recession forecasters, it is hardly necessary to point out that the forecast of a serious recession that is currently popular may prove to be wrong—just as it was in the past. But I would also like to point out that the forecast might err in the opposite direction: it could prove too optimistic. If the consumer, who has been singlehandedly propping up the economy by his unprecedented spending, should decide to restore saving rates to something approaching historical norms, the prospects are frightening. Let me give an example of what I mean. The saving rate for the first quarter of this year was 3.4 percent. Had it instead been 5 percent—a number well below the postwar average—consumer spending would have been $26 billion lower. This is a huge drop in spending that would require a personal income tax cut in excess of $30 billion to offset it. There is, in a word, considerable downside risk.

THE RECENT INFLATION

Washington is not, of course, stumbling into this recession unawares. On the contrary, the administration and the Federal Reserve have been working very hard to bring it on as a remedy for inflation. So I would like to spend a few minutes reviewing the nature of our current inflation problem.

My theme is that we really have two very different inflation problems. The first is the increase in the so-called "baseline" or "underlying" rate of inflation from 6–7 percent in the mid 1970s to perhaps 8–10 percent today. The second is the stunning increase in the difference between the actual and baseline inflation rates—the part of inflation that is attributable to special transitory factors. Inflation from these special factors appears to have jumped from about zero in 1977 to perhaps 8–10 percent in recent months, and this has accounted for most of the observed increase in the inflation rate. While it is the latter type of inflation that grabs the most headlines, it is the former that presents the more serious problem and the problem on which economic policy should be focused. The reasons for this are as follows:

(1) The Consumer Price Index (CPI) badly exaggerates the recent acceleration of inflation.

(2) The special factors component of the current inflation is, for the most part, beyond our control and will most likely disappear of its own accord. There is, therefore, little that policy can or should do about it. Better just to weather the storm.

(3) The rise in the baseline rate of inflation of perhaps 2–3 percentage points is a long term problem that will not simply perish under its own weight. Furthermore, this part of the inflation problem *can* be treated by policy—albeit slowly. There are no quick fixes.

I would like to elaborate on each of these three points with the aid of the following two tables. Table 1, in which inflation is measured by the CPI, breaks own inflation during 1977–80 into the parts contributed by three particular trouble spots—food, energy, and homeowners' financing costs (mostly mortgage interest rates)—and a catch-all "everything else" category that comprises most of the index. Table 2 does the same for the implicit deflator for personal consumption expenditures in the national income accounts (PCE deflator). These data are all I need to elaborate my three points.

1. The CPI has exaggerated the recent inflation.—By comparing lines 1 in the two tables, we clearly see that the CPI has registered far more inflation in recent years than has the PCE deflator. According to the widely publicized CPI figures, inflation skyrocketed from under 7 percent in 1977 to over 13 percent in 1979, and to 18 percent in the first three months of 1980. But according to the PCE deflator, which most economists view as a far more reliable guage, the acceleration was only from 6 percent in 1977 to 10 percent in 1979 and to 12.5 percent according to preliminary data for the first quarter of 1980. There is obviously a yawning gap between the two indexes recently. Why?[1]

TABLE 1.—COMPOSITION OF CPI INFLATION, 1977–80

[In percent]

	1977[1]	1978[2]	1979[3]	1st 3 mos. of 1980
1. Rate of inflation of CPI	6.8	9.0	13.3	18.1
Contributions of:				
2. Food	1.5	2.1	1.8	.7
3. Energy	.5	.7	3.5	6.7
4. Home financing	1.0	1.4	2.8	4.8
5. Everything else	3.8	4.8	5.1	6.0
6. Inflation rate of "everything else"	5.9	7.6	8.2	9.8

[1] January 1977 to January 1978.
[2] December 1977 to December 1978.
[3] December 1978 to December 1979.

TABLE 2.—COMPOSITION OF PCE INFLATION, 1977–80

[In percent]

Item	1977[1]	1978[1]	1979[1]	1st quarter of 1980
1. Rate of inflation:				
(a) PCE deflator	5.7	7.6	9.9	12.5
(b) PCE chain index	6.0	7.8	10.3	[2] 13.4
Contributions of:[3]				
2. Food	1.2	2.3	1.7	1.3
3. Energy	.6	.6	3.1	4.6
4. Everything else	4.2	4.8	5.4	7.5
5. Inflation rate of everything else	5.8	6.6	7.6	10.6

[1] From 4th quarter of previous year to 4th quarter of stated year.
[2] Estimate.
[3] Except for rounding error, lines 2–4 add up to line 1(b).

The first reason, which is by now well known, is that the CPI treats mortgage interest expenses as if all homeowners had renegotiated their mortgages within the past few months. Since higher inflation breeds higher interest rates, inflation as measured in the CPI thus feeds on itself. Any rise in inflation is exaggerated. Ironically, the decision to fight inflation through tight credit and high interest rates was doomed to failure from the start—if success was to be measured by the CPI.

It is worth noting that if the contribution of rising mortgage rates to inflation (line 4 in table 1) were subtracted from total inflation (line 1 of table 1), we would get an inflation index that behaves very much like the PCE deflator (line 1 of table 2).

There is a second measurement problem in the CPI that is worth pointing out. The CPI is based on a fixed market basket of goods and services that was selected by the Bureau of Labor Statistics (BLS) in 1972–73, that is, back in the good old days of cheap food and cheap energy. Consumers have responded to the drastic changes in relative prices that have occurred since then in obvious ways (e.g., by conserving on gasoline usage). But none of these efforts are reflected in the CPI, which therefore overstates inflation. Two examples show that this is not a trivial problem. First, calculations I have made with Bureau of Economic Analysis (BEA) data show that the differing weights in the two indexes on gasoline alone caused the CPI to show nearly 1½ points more inflation in 1979 than the PCE deflator. Second, a comparison of line 6 of table 1 with line 5 of table 2 shows that the CPI registered a higher estimate of the economy's baseline inflation rate in 1978 and 1979.

[1] It is worth pointing out that there is no such gap historically. Over the 30-year period from 1947 to 1977, the average inflation rate was 3.38 percent according to the CPI and 3.31 percent according to the PCE deflator.

2. There is little we can do about the part of the recent acceleration of inflation that is caused by special factors. But this inflation probably will disappear of its own accord.—The reasons for this are apparent in the table. Rising energy prices, in an unholy alliance with mortgage interest rates, have been the major force pushing inflation (as measured by the CPI) above the baseline rate. Short of breaking up OPEC, there is little we can or should do to stop the rise in energy prices. However, it seems likely that the rise in energy prices during the last nine months of 1980 will be far less than in 1979 and the early months of 1980—unless OPEC does it to us again in 1980. A slowing of energy price rises, in conjunction with declining mortgage interest rates, would bring about a prompt and dramatic reduction in the measured inflation rate—even if there is no recession. Just as the CPI exaggerated the upsurge of inflation, so will it also exaggerate the decline of inflation.

A simple example (which is not a forecast) will illustrate how dramatic the drop in inflation may be. Suppose that:

(a) The baseline rate of inflation continues at the high rate recorded in the first three months of 1980 (probably a pessimistic assumption), and that food prices also do this (probably an optimistic assumption);

(b) Energy prices rise at a 20 percent annual rate for the balance of 1980;

(c) Homeowners' financing costs are level from March until December 1980 (which seems a pessimistic assumption, given the recent behavior of mortgage rates).

Under these assumptions, the annual rate of inflation for the last 9 months of 1980 will be only 8.4 percent—a drop of almost 10 percentage points from recent rates. This is an enormous change. It totally dwarfs anything that can possibly be accomplished by a recession. And it will come more or less automatically if we are just patient and wait. Indeed, last week's CPI announcement suggests that the process has already begun.

3. The real inflation problem is the 2–3 point rise in the baseline inflation rate. This is what current policy should focus on.—Economic problems are best approached by imitating neither Chicken Little nor an ostrich. In the current environment of near-hysteria over 18 percent inflation, it is important to keep in mind that the baseline inflation rate (which I prefer to measure by the last line in table 2) may be as low as 8 percent. The sky is not falling. Nonetheless, this is no reason to put our heads in the sand. Both tables indicate a rise in the baseline rate of some 2–3 percentage points—a development that no one can be happy about. Since it is this development, not the special-factors inflation, that the policy of deliberate recession is aimed at, let me now turn to a discussion of current economic policy.

CURRENT STABILIZATION POLICY

Frankly, I am much less sure about what the government should be doing with its short-run stabilization policy (monetary and fiscal) today than I was six months or a year ago. Let me explain the nature of my ambivalence.

About a year ago, it seemed to me, the storm clouds of recession were beginning to form. OPEC, if you will pardon the pun, had us over a barrel. Fiscal policy had turned sharply in a contractionary direction: the high employment deficit had declined by about $23 billion within a few quarters,[2] and there was continual talk about new efforts to balance the budget. Monetary policy under the helmsmanship of Paul Volcker was soon to turn clearly in a more restrictive direction. All of this seemed quite likely to produce a substantial recession. Yet Wall Street was crying for blood. In this atmosphere, a turn toward recklessly contradictionary policy seemed possible, so I wrote a letter to The New York Times urging moderation—not a turn toward expansionary policy mind you, just a steady-as-you-go posture. I felt strongly then that this was the right thing to do. Having written a book on the policy errors of the 1974–75 episode,[3] I was worried that we would instead press the panic button.

---

[2] The numbers cited are the Council of Economic Advisers' (CEA) estimates. As these are based on an outmoded definition of high employment, we should probably pay little attention to the *level* of this series. (A $30 billion deficit in 1977:4 fell to $7 billion by 1978:3.) However, for staiblization policy purposes, it is the change in the high-employment budget that matters, and for this purpose the CEA numbers are probably serviceable.

[3] Alan S. Blinder, "Economic Policy and the Great Stagflation" (New York: Academic Press), 1979.

In my view, the panic button was indeed pressed. The OPEC shock turned out to be more severe than most people had expected. Despite this, the high employment budget swung toward surplus by an additional $21 billion between 1978:3 and 1979:2.[4] Monetary growth, which undoubtedly needed to be slowed from the exuberant pace witnessed in the summer of 1979, was throttled back dramatically by the Fed's new monetary policy starting in October 1979. All of this reminded me of the events leading up to the 1974–75 recession.

But Wall Street was apparently not appeased. In response to what seemed to be an insatiable desire for contradictionary policy, the administration and the Congress engaged in further (though apparently minor) budget cutting in March of this year, and the Fed tightened the credit screws yet another notch—this time combining a further slowing of monetary growth (to negative rates very recently) with a Rube Goldberg array of credit controls. I view this latest round of contradictionary policies as a serious mistake. The restrictive policies already in place by January 1980, in conjunction with soaring oil prices, had set in motion forces strong enough to produce a significant recession. All we had to do was wait patiently for the medicine to work—remembering, as we waited, that recession works on inflation only weakly and with long delays.[5]

But we did not wait. And it now seems to me very unlikely that we can avoid a serious recession. What can be done now to avoid this eventuality? Not very much. A large and permanent cut in personal income taxes, amounting to at least $35 billion might do the trick. But I am reluctant to recommend such a policy now because:

(a) It would heighten the impression of an indecisive, vacillating economic policy that is already so prevalent;

(b) It might exacerbate what appear to be very volatile inflationary expectations; and

(c) Given legislative delays and economic lags, the effects of such a tax cut might come too late to avert a serious recession anyway.

Still, it might be advisable for the Congress to start contingency planning now for an emergency tax cut to be enacted in the event that the recession starts to get out of hand. A rollback of payroll taxes might be a particularly efficient vehicle for propping up consumer incomes in a hurry, and would also have some salutary effects on business costs. At the very least, Congress should prepare to extend unemployment benefits—as it has done in past recessions.

I cannot emphasize too strongly that only cuts in personal taxes (income taxes or payroll taxes) can stem the slide into recession. No cut in business taxation can possibly work fast enough to have any appreciable effect on the severity of the coming downswing—unless the magnitude of the cut is totally unreasonable. Decisions on whether and how to cut business taxes should be geared to long-run capital formation considerations, not to the exigencies of short-run stabilization policy. There is no point in rushing through hastily conceived legislation to spur investment as if there were some sort of emergency. Better to take the time to do it right. (More on business taxation shortly.)

While I suffer from this ambivalence about what should be done with tax policy right now, there are other policy issues about which I feel much less uneasy.

First, the fetish about balancing the budget in the face of a recession can be very dangerous. Recessions make tax receipts dwindle. To try to re-balance the budget by cutting expenditures or by raising tax rates will only aggravate the recession. I stress that this is not a brief against a balanced budget or reduced government spending in general, only a warning that there are better times to balance the budget than when a recession is gathering steam.

Second, I believe that the Fed should continue to dismantle the array of controls and ceilings that it promulgated in March (many of which have been rendered non-binding by the collapsing demands for credit anyway), and should quickly restore monetary growth rates to moderate levels (perhaps 5–7 percent per year for M1B). I noted in the newspapers last week that the Fed appears to be moving in this direction.

TAX CUTS AND INVESTMENT INCENTIVES

I take it as a political datum that there will soon be some sort of tax relief for business aimed at providing greater incentives for investment. I'll there-

---

[4] From a $7 billion deficit to a $14 billion surplus.

[5] Recent econometric evidence suggests that it takes 2 percent additional unemployment for a year to cut the inflation rate by 1 percentage point.

fore not discuss the merits or demerits of doing so, but only the form that such tax relief might take.

My first point has been made already, but is important enough to be worth reiterating. Decisions over the magnitude and nature of business tax cuts ought to be divorced from current short-run stabilization policy. Such tax cuts should not be considered as short-run palliatives for either our current inflation problem or our coming unemployment problem. The focus should be squarely on long-run problems such as capital formation and productivity.

My second point is that, under current law, Congress has entirely abdicated its authority to set taxes on income from capital—ceding it by default to OPEC, the weather, and the Federal Reserve. Regardless of what the statute books say, the rate of taxation on capital income now is determined almost entirely by the rate of inflation, not by any act of Congress. I believe that Congress should reassert its constitutional authority to set taxes by indexing the corporate and personal income tax codes for inflation.

Since I have been told that this idea is dead politically, let me take a few minutes to try to explain why I think it is important enough to raise here today. Under current law, nominal income from capital is taxed. But when there is inflation, a portion—and perhaps most—of this nominal income is merely a return of capital since nominal assets decline in real value during inflation. By taxing the nominal return on assets, not the real return, the law levies incredibly severe tax rates on capital income whenever inflation is high.

Table 3 illustrates this by considering the case of an individual in the 40 percent marginal tax bracket who invests $1,000 in a one-year taxable bond. It is assumed that no matter what the (fully anticipated) rate of inflation, the bond pays a nominal interest rate two points above the inflation rate (compare columns 1 and 2). That is, the real interest rate is 2 percent regardless of the rate of inflation. Column 3 shows the nominal interest income that will be earned over the year, and column 6 shows the income tax that will be due on this amount (40 percent of interest income). However, inflation erodes the principal of the bond by an amount proportional to the rate of inflation (column 4)—which is why nominal interest rates on such assets rise with inflation in the first place. Column 5 shows that the real before-tax income from this bond is always $20, regardless of the inflation rate. (This was assumed.) Hence, in an indexed tax system, the resulting tax liability—whatever it is—would also be unaffected by inflation. But column 6 shows that tax liabilities under our present unindexed tax system rise swiftly with inflation. The implied tax rate (taxes divided by income before tax) rises from 40 percent at zero inflation to 360 percent at 16 percent inflation (column 7).

This example raises two points which apply generally to all income from capital. First, tax rates on income from capital can become astronomical when inflation is high and the tax code is not indexed. Second, the tax rate varies wildly as the inflation rate changes.

TABLE 3.—ILLUSTRATION OF EFFECT OF INFLATION ON TAX BURDEN ON INTEREST INCOME

Inflation rate	Interest rate (percent)[1]	Interest income on $1,000[2]	Capital loss due to inflation[3]	Real income before tax[4]	Income tax[5]	Tax rate[6] (percent)
(1)	(2)	(3)	(4)	(5)	(6)	(7)
0	2	$20	0	$20	$8	40
4 percent	6	60	$40	20	24	120
8 percent	10	100	80	20	40	200
12 percent	14	140	120	20	56	280
16 percent	18	180	160	20	72	360

[1] Assumed to be 2 percent above inflation rate.
[2] Col. (2) times $1,000.
[3] Col. (1) times $1,000, equals annual income needed to preserve value of capital.
[4] Col. (3) minus col. (2); equals 2 percent of $1,000.
[5] Based on assumed 40-percent tax rate on nominal interest income.
[6] Col. (6) divided by col. (5).

Of the two, the second is by far the more important. Congress may decide that capital should be taxed heavily or lightly, and can fix the statutory rates accordingly. But, in an unindexed tax system, there is no way that Congress can make this decision stick. Whatever it decides, if inflation comes in higher than expected the tax burden on capital will be higher than Congress intended; conversely, if inflation comes in lower than expected, the tax burden on capital will be lower than intended. Only by indexing the tax code—that is, taking the $20 real return as the tax base—can Congress exercise any real authority over the rate of taxation.

The argument I am presenting here is really a brief for exercising Congressional control over tax rates, not necessarily for cutting them. Still, it would be disingenuous of me not to point out that indexing the corporate and personal income tax codes at this time would almost certainly amount to a tremendous reduction in the taxation of income from capital. High inflation rates have carried the rates of taxation on dividends, interest, and profits well beyond the rates that Congress presumably intended. Thus a decision by Congress to reassert its constitutional authority to set tax rates by indexing the tax code would probably also be a decision to cut taxes on capital quite drastically. On equity grounds, therefore, I would urge that the tax treatment of income from labor also be indexed.

I have encountered two major objections to indexing the tax structure—one political, and the other technical.

The political objection, which is probably most telling, holds that the rapid growth of tax receipts that result from high inflation when the tax system is not indexed gives Congress opportunities to make periodic tax cuts—opportunities Congress does not wish to relinquish. I will not try to evaluate the validity or importance of this argument; every member of this committee is far better qualified to do that than I am. I would only ask that you balance it against the restoration of Congressional control over taxation that indexing would make possible.

The technical objection is that it is difficult to know exactly how to rewrite the tax code to make it "inflation proof." This argument is true. But it is also unimportant. The plain fact is that it is extremely easy to get the answer about 90 percent right. The hard part comes in reaching agreement over a number of details and fine points (such as which price index to use for which purposes). These are issues that academics and other specialists can, and should, argue about—probably interminably.[6] They are not subjects that members of Congress should fret much about. After all, if you stop to think about the many problems that arise in defining the "taxable income" of either a family or a corporation, you will immediately realize that this problem is probably insoluble also. Figuring out how to index the income tax properly is far simpler than figuring out how to define "income" properly in the first place. Neither problem admits of a perfect solution, but we can probably do tolerably well at each.

Indexing the tax system is probably logically prior to enacting any of the other tax incentives now being discussed, since it is hard to know what these other incentives really mean as long as the tax base is defined in nominal terms.

Lack of indexing has caused the tax system to distort investment decisions in a number of ways (e.g., favoring shorter-lived projects) which will not be corrected by raising the investment tax credit nor by reducing the statutory corporate tax rate.

Accelerating depreciation allowances yet further is probably a clumsy, inefficient, and even inequitable way to achieve what indexed depreciation allowances would accomplish naturally and equitably.

It seems to me quite likely that the high effective rates of tax being levied on illusory capital gains were a major reason why Congress reduced the tax rate on capital gains last year, over the President's objections—thereby widening what is without doubt the biggest loophole in our entire tax code. Indexing would have benefited the recipients of these illusory "capital gains" much more, and would have done so much more fairly.

I conclude that, of the many ways now being considered to provide additional tax incentives for saving and investment, indexing the tax code probably scores most highly both on grounds of equity and on grounds of efficiency. In addition, it offers the important side benefit of restoring to Congress the right to set tax rates that was assigned to it by the Constitution but was usurped by inflation.

---

[6] See Henry Aaron, "Inflation and the Income Tax" (Washington: Brookings), 1976, for the proceedings of a conference on this topic.

SUMMARY

The long-awaited recession seems now to have begun, and will probably be a severe one. While there was much that policy could have done to cushion the blow, by now most of the gates have swung closed behind us. We probably will soon suffer the consequences of fiscal and monetary overkill.

The only policy initiative that might appreciably reduce the severity of the coming recession at this late date would be a large permanent cut in personal taxes. But such a policy action would aggregate inflationary expectations and add to the growing impression of vacillation and indecisiveness in economic policy.

No conceivable change in business taxation can have important effects on economic activity quickly enough to have any major influence on the shape of the recession. It therefore makes sense to consider such policy changes deliberately, with an eye on long run consequences.

Of the many ways to reduce the currently high tax burden on income from capital, indexing the tax code seems most appropriate on both efficiency and equity grounds. In addition, it is the only way that Congress can reassert its constitutional authority over tax rates—an authority that has been ceded to the inflation rate.

The current inflation problem is really two very distinct problems. Most of the rise in the inflation rate from 9 percent in 1978 to 18 percent in early 1980 came from special factors such as energy and mortgage interest rates. The baseline or underlying inflation rate increased only 2–3 points.

Due to its treatment of mortgage interest rates and its obsolete market basket, the Consumer Price Index badly exaggerated the recent acceleration of inflation.

Partly for these same reasons, there are good reasons to expect a dramatic drop soon in the inflation rate as measured in the CPI. And just as the CPI exaggerated the rise in inflation on the way up, so may it also exaggerate the fall in inflation on the way down.

Nonetheless, even a return to the baseline inflation rate will leave us with an inflation rate that is too high—something like 8–10 percent. This baseline rate has been rising gradually for 15 years, and there is no way to get it down in a hurry.

The recession will help reduce the baseline inflation rate, but only a little. A long-term policy of running the economy with moderate slack, coupled with whatever "supply side" initiatives we can dream up to improve productivity growth, offers the only anti-inflation medicine that is not pure snake oil.

But we should not expect quick results. Above all, what we need now is patience—an ingredient that has been sadly lacking in past economic policy. We must face up to the fact that an inflation problem that has been building for 15 years may take just as long to be cured.

Senator BENTSEN. Professor Jorgenson, if you will proceed.

STATEMENT OF DALE W. JORGENSON, PROFESSOR OF ECONOMICS, HARVARD UNIVERSITY, CAMBRIDGE, MASS.

Mr. JORGENSON. Thank you, Senator Bentsen. It is a pleasure for me to address the committee this morning. I would like to focus my attention on the intermediate term outlook and policy recommendations that relate to recovery from recession. The recession has already arrived so that it is already too late for tax measures or monetary measures to avert a downturn. I would like to talk about the problems that we're going to face in recovery. I want to put us in the frame of mind of looking at the situation as if we were, let's say, in 1975. We want to think about how to get out of a recession that was induced in order to deal with inflation. That was essentially where we were then.

I'd like to begin by outlining a few policy recommendations and then to go into the economic rationale, reversing the usual order. I usually like to start by going through the economic rationale and to end up with a policy recommendation. In this case, I think it would be a good idea to put policy recommendations first. I'd then like to focus on my prognosis for the next 5 years or so, the recession and recovery of 1980 to 1985, let's say. Then I would like to deal more specifically with the policy measures that should be adopted. I will conclude by summarizing my recommendations and their implication for the outlook.

To begin with, let me say that I agree with the opening statement by Senator Bentsen that we certainly need a tax cut as soon as possible. In fact, I argued before the Senate Budget Committee last year in July, that a tax cut was needed by January 1, 1980. I would have liked to see a tax cut that would have been in effect for tax year ending in 1980, so that the tax cut would have affected income received during 1979. I thought that would have been the right timing for a tax cut, given the situation we were in.

Of course, we can all benefit from hindsight and I can well understand that the Senate Budget Committee took my advice as something that didn't seem to merit a great deal of attention on their part. In the current circumstances, I would simply say that the appropriate way to describe the appropriate time for a tax cut would be as soon as possible.

So far as the character of the tax cut is concerned——

Senator BENTSEN. Are you reading from your prepared statement?

Mr. JORGENSON. No, I'm summarizing the part that is at the end of the statement. I'm not reading from it. But it's a summary of the material.

I would like to see a tax cut that has two parts to it. First of all, I would like to see a reform in the provisions for capital recovery, which has been the main focus for tax reform under discussion by the Senate Finance Committee and by the House Ways and Means Committee. And I would also like to see a cut in payroll taxes, which has been the focus of discussion here in the Joint Economic Committee. I know you, Mr. Chairman, have proposed a tax cut that would be balanced with roughly 50 percent for business and 50 percent for individuals, oriented toward payroll taxes.

It seems to me that the size of the tax cut is something which we're not going to be able to resolve today. I would resolve that largely in terms of what seems feasible in terms of budgetary considerations. For a target figure I would say that we should begin the bidding at something like $20 billion for the first year. The difficulty with this proposal, however, is that it seems to me that it lacks, or so far, at least, it has lacked a convincing economic rationale. I would like to turn to the economic rationale for the balanced approach.

The economic rationale depends on an analysis of the uncertainties in projecting future U.S. economic growth. This begins on section 1 of my prepared statement. Again I am summarizing. My analysis of the slowdown since 1973 reveals that the whole problem has been a decline in productivity rather than a fall in the growth of capital and labor inputs. In fact, employment has grown at spectacular rates, given the growth of output during this period; capital spending, even until now, is at roughly average proportions to GNP. This would be lower than the average at the peak of the business cycle, but nonetheless, in line with the slower growth of output. Capital and labor inputs have more than kept pace with expansion.

The consequence, of course, has been a tremendous decline in productivity. To be precise about that, the level of productivity in this country today is essentially what it was in 1973. There has been no productivity growth over this whole period. That is a very depressing thought because productivity growth over the post-World War period accounts for approximately 40 percent of the growth that has taken place. That has simply vanished over the period since 1973. That, however, leaves open the question of what has affected productivity growth. Of course, there are many opinions about that as there are economists.

The explanation that I would supply is that the decline in productivity growth has been a consequence of the tremendous increase in energy prices that has occurred since 1973. Other factors in the productivity picture are essentially negligible and have contributed nothing to the productivity slowdown. The productivity slowdown for the economy as a whole is mirrored by productivity slowdowns at the sectoral level in almost every industry throughout the country. Recent data, in fact, data released yesterday, suggest that we are now going to face a decline in productivity from the peak level which was attained in 1978. So the picture will get worse before it gets better.

To proceed, then, with an analysis of the slowdown, we have to analyze the decline in productivity growth at the sectoral level. I would like you to turn to table 3 of my prepared statement, where we can establish a direct link between the decline in productivity and higher energy prices. Increases in energy prices reduce productivity growth in 29 of 35 industrial sectors listed in that table. These are major industrial sectors—what economists call two-digit industries—industries like steel, motor vehicles, food processing, agriculture, construction, mining, and so on.

If you look at the 35 industries listed there, it turns out an increase in energy prices has the effect of reducing productivity growth in 29 out of those 35 industries. So it is an economy-wide phenomenon. However, these figures also reveal that decreases in the wage rates would stimulate productivity growth in 31 of the 35 industries. In other words, if we could figure out some way to reduce the effective cost of labor from the point of view of the employer by reducing the wedge between what the employer pays and what the worker actually receives, we could stimulate productivity growth. That, of course, is the key rationale for a cut in payroll taxes. We have to cut payroll taxes in order to offset higher energy prices.

Decreases in the price of capital, annualized to what we call rental rate, would stimulate productivity growth in 25 of the 35 industries. Compare that with what I said earlier about energy. Higher energy prices reduce productivity growth in 29 out of the 35 sectors. Similarly, higher wages reduce productivity growth; therefore, lower wages would stimulate productivity growth in 31 out of the 35 sectors. And a reduction in the price of capital that would result from a tax cut—for example, a tax cut through more generous provisions for capital recovery—would, in fact, stimulate growth in 25 of the 35 industries. The conclusion is that the rationale for a payroll tax cut is even stronger in terms of its impact on future economic activity in the United States than a rationale for tax cuts that are oriented toward stimulating investment.

The slowdown since 1973 is due to the higher energy prices. The figures that underlie table 3 show that these increased energy prices have the effect of reducing the productivity growth across the board in 29 of the 35 industrial sectors discussed there. However, these figures also reveal that because of the impact of a reduction in payroll taxes and a reduction in taxes on capital income to counteract high energy prices; productivity growth in 31 of 35 industries would benefit from the payroll tax cut and 25 of the 35 industries would benefit from the tax cut through enhanced capital recovery.

Now in terms of my prognosis, I think it's important to recall how we got where we are, what the economic developments have been that have led up to the present recession. Since December 1978, petroleum prices have risen—this is the price of imports into the United States—about 130 to 140 percent. You can also see these increases in uncontrolled domestic petroleum prices. For example, so-called stripper wells, small producing wells in the United States have had increases in the prices of their output by a similar margin. Within the past month, we have had a further increase in world petroleum prices by about $2 a barrel as a result of the unsuccessful stabilization effort by the Saudi Government.

In May 1979, at President Carter's initiation, we began a process of deregulating petroleum prices, which was a very desirable move in order to stimulate energy conservation. President Carter, as you know, has recently proposed, unsuccessfully, to implement a petroleum fee to raise gasoline prices to provide a further stimulus to conservation. We have had two separate forces that are raising energy prices: One, the tremendous increase in world petroleum prices that accompanied the Iranian revolution and its aftermath; two, the decontrol of domestic energy prices.

Higher energy prices will be strongly adverse to productivity growth and will slow productivity growth even further relative to the zero productivity growth that we have had since 1973. Now this is a little bit paradoxical. For a committee like yours, or an organization which would be its counterpart in the administration, the Council of Economic Advisers, the idea that productivity can actually decrease is something that is completely foreign to the way of thinking of staff members, committee members, and council members. Since the heyday of economic growth in the 1960's, we have relied on the idea that productivity is like manna from heaven, dropping at the rate of 2 to 2½ percent a year forever.

What I would like to now do is to supply the rationale for the prognosis, which is a very dismal one, that we could have productivity regress. In other words, instead of level productivity from 1973 to 1979, we could have declining productivity as a result of the higher energy prices that occurred during 1979 and 1980. The reason for this is, that to bring about energy conservation, we are resorting to technologies that have not undergone substantial research and development in 50 years. We are now facing real energy prices that are above the levels of the 1930's, even of the 1920's. Whereas during the 1950's and 1960's, again the heyday of economic growth, we had declining real energy prices throughout the whole period.

The whole backlog of our scientific and technological knowledge that supports economic activity by providing the underlying technology has been made obsolete. We are now going back to technologies that, as I say, have not undergone any serious development over 40 to 50 years. To give you a graphic example of that, we can look at the example of synthetic fuel production. This is always before us as a possible policy alternative in the energy area. Synthetic fuel technology, for example, the process for liquefaction of coal, was developed back in the 1920's and was used extensively by the Germans during the Second World War because of a lack of domestic petroleum supplies. There has been very little research and development on that process since then.

The proposals that have been made to develop synthetic liquid fuels in this country—and these proposals as you know are being implemented on a pilot scale—are based on technology which is 25, or 30, or 40, or even 50 years old. So there is no difficulty in appreciating the fact that productivity can regress and higher energy prices could, in fact, bring about a development over the next 5 to 10 years that is dismal even by comparison with the slow economic growth we have had since 1973.

Let's proceed then to more detailed analyses of the policy measures that I have discussed. As I indicated, the best way to counteract higher energy prices, is to reduce the wedge between the wage that the employer pays and the income that the worker receives.

In the absence of a complete overhaul of the social security trust funds, the best approach would be a tax credit in which individual contributions to social security and other social insurance programs are partially credited to the personal income taxes. That would be, of course, an effective reduction in personal income taxes.

Remember that at the beginning of 1981 we are going to confront a very substantial increase in payroll taxes; that is already in the law. We are going to have an increase in the coverage of social security, an increase in the rate. These increases must be offset by a tax cut that takes effect at the same time in the form of a credit.

The second question is, how should we counteract the negative impact of higher energy prices by reducing the wedge between what the businesses have to pay for capital and what is received by the owners of the capital, the stockholders and the bondholders. As you know, there are a number of proposals that have been discussed before the Congress. The most prominent, undoubtedly, is the Conable-Jones proposal, which I understand you, Mr. Chairman, are sponsoring in the Senate.

The Conable-Jones proposal will have a very substantial impact on capital formation, which I think the sponsors desire. Unfortunately, it will reduce the allocative efficiency of the use of the capital. It will result in lower growth of capital stock for a given amount of capital formation than a proposal which implements the view Professor Binder has just discussed—to index the tax system for capital income.

What I would propose in fact as an alternative to the Conable-Jones proposal, is a scheme which I have developed with a colleague at Harvard, Alan Auerbach, which we call first year capital recovery system. And that system is effectively equivalent to an indexing scheme, but it works like this: Every year the taxpayer would be allowed to deduct in the year in which an asset is acquired, the present value of capital consumption over the whole lifetime. That would be, perhaps, 75 cents on the dollar in case of equipment, 50 cents on the dollar in the case of plant.

The deduction the taxpayer would receive would be in the dollars of the same year as the asset is acquired. The figures that appear on the tax return to justify the deduction would give rise to deduction in the same year. Now as you can see, this scheme has the enormous advantage that it is absolutely inflation-proof. The deduction that the taxpayer would receive under current law depends on the rate of inflation because it is spaced out over time. Under our proposal the deduction would be received in the same year; as the rate of inflation goes up or down, it would leave the deduction absolutely unchanged. Our proposal is a direct attack on the problem that tax policymakers are dealing with, namely how to cope with the problem of inflation.

Senator BENTSEN. Let me understand.

You are talking about discounting back to the present value and taking a complete deduction in that year?

Mr. JORGENSON. That's exactly it, sir.

This proposal produces about the same level of capital formation as the Conable-Jones proposal in exchange for a loss of Federal revenue of the same order of magnitude. It increases capital formation by about $10 million a year. The revenue loss is a magnitude of about $50 billion over the 5-year period. Those figures would be roughly comparable to those for the Conable-Jones bill. However, it has roughly double the impact on the rate of growth of capital stock, so it increases capital stock in relationship to the labor force about twice as fact as the Conable-Jones proposal. That is, because of its increased allocative efficiency.

The conclusion is that it is not only important to think about a tax cut, it is important to think about a balanced program that involves both a payroll tax cut and also a cut through capital recovery. Second, it is very important to make the payroll cut in such a way that the integrity of the trust funds that underlie the social security system is left intact. And that, it seems to me, would be the consequence of a tax credit which is now under discussion in the Congress.

So far as a tax cut in business is concerned, it seems to me the proposals which are under discussion in Congress, chiefly the Conable-Jones bill, would be ineffective relative to the scheme that I have described here, the first-year capital recovery system. The Conable-Jones bill would have the disadvantage of leaving our tax structure vulnerable to the impact of higher or lower inflation rates, which produce tremendous variation not only in the effective tax rate, which provides a stimulus or a deterrent to capital formation, but in the allocation of the capital stock among different kinds of assets which, of course, produces the impact on productivity. So the conclusion is that it is important to think about the precise form in which taxes should be cut.

My overall conclusion is that we have a very heavy agenda in front of us. It is important to cut payroll taxes in advance of the increases that are scheduled on January 1981. That is only slightly more than

7 months away. We have to do something immediately about capital recovery. I think it should have been done last year, but I would be perfectly prepared to see it done for tax years ending year 1981. It seems to me that we have to base the reform of capital recovery on a scheme that is going to produce the maximum impact on productivity and on economic growth. Unfortunately, that is not the Conable-Jones proposal that is before the Congress. Therefore, what should be adopted is the first-year capital recovery system that I described.

Let me say I don't want to elaborate on this because I have in fact testified about the features of this first-year capital recovery system before the Senate Finance Committee, House Ways and Means Committee, Senate Budget Committee, and the House Budget Committee; that covers the main bases. I hope there is enough material on the first-year system to go on. At any rate, I feel it is very important to take these steps now and to have these tax cuts in place no later than January 1981.

So far as the future is concerned, I have presented a very dismal prognosis. It seems to me we are running a serious risk of having a less satisfactory growth experience than we have had since 1973, which has been disappointing to all of us. Therefore, it seems to me that the Joint Economic Committee should take the lead in designing a program of future tax cuts to reduce payroll taxes, and taxes on business income. Once the first-year capital recovery system is in place, I would favor future reductions in taxes on business incomes through corporate rate cuts.

So far as the payroll taxes are concerned, I would favor reducing payroll taxes by absorbing all of the individual contributions to the social security system into the personal income tax, by using a system of tax credits. And once that is——

Senator BENTSEN. I am having trouble following you. I am not following your prepared statement, and I don't think you are. But let me understand again what you said just before this last point.

You would favor a cut in the corporate rate at what?

Mr. JORGENSON. After the first-year capital recovery system is in—let's suppose Congress has enacted the capital recovery system, we have done what we wanted to do about capital recovery. At that point, beyond this year, when hopefully we will have this system in place, I would like to see further business tax cuts. And I would like to see them take the form of corporate rate cuts.

As far as payroll taxes are concerned, I would like that same program of tax cuts to take the form, as I say, of gradually absorbing the whole of the individual contribution to social security as a tax credit against the personal income tax, and then beyond that to begin worrying about absorbing part of the employer's contribution. In general we have got to take drastic steps to reduce payroll taxes. My analysis of productivity shows that those payroll tax cuts, together with business tax cuts are needed to offset the impact of higher real energy costs.

My overall conclusion is that we are facing a recession from which the recovery is going to be even more disappointing than the recovery from the severe recession of 1974–75. The reason we are facing a dismal future for economic growth is that productivity growth has slowed since 1973 as a result of higher energy prices. Productivity is going to slow further—in fact, it has already slowed as a result of the big runup in energy prices since 1979.

We didn't do anything to counteract higher energy prices between 1973 and 1980. We are sitting here today without having offset the impact of those higher energy prices by corresponding tax measures, like reductions in the payroll tax and reductions of the business income taxes. Given the fact we are facing an even less satisfactory recovery than the one we have been through since 1974–75, it seems to me absolutely mandatory to take these tax measures now. Thank you.

[The prepared statement of Mr. Jorgenson follows:]

Prepared Statement of Dale W. Jorgenson

Energy Prices and Productivity Growth

1. INTRODUCTION

The growth of the U.S. economy in the postwar period has been very rapid by historical standards. The rate of economic growth reached its maximum during the period 1960 to 1966. Growth rates have slowed substantially since 1966 and declined further since 1973. A major source of uncertainty in projections of the future of the U.S. economy is whether patterns of growth will better conform to the rapid growth of the early 1960's, the more moderate growth of the late 1960's and early 1970's or the disappointing growth since 1973.

In this paper our first objective is to identify the sources of uncertainty about future U.S. economic growth more precisely. For this purpose we decompose the growth of output during the postwar period into contributions of capital input, labor input, and productivity growth. For the period 1948 to 1976 we find that all three sources of economic growth are significant and must be considered in analyzing future growth potential. For the postwar period capital input has made the most important contribution to the growth of output, productivity growth has been next most important, and labor input has been least important.

Focusing on the period 1973 to 1976, we find that the fall in the rate of economic growth has been due to a dramatic decline in productivity growth. Declines in the contributions of capital and labor input are much less significant in explaining the slowdown. We conclude that the future growth of productivity is the main source of uncertainty in projections of future U.S. economic growth.

Our second objective is to analyze the slowdown in productivity growth for the U.S. economy as a whole in greater detail. For this purpose we decompose productivity growth during the postwar period into components that can be identified with productivity growth at the sectoral level and with reallocations of output, capital input, and labor input among sectors. For the period 1948 to 1976, we find that these reallocations are insignificant relative to sectoral productivity growth. The combined effect of all three reallocations is slightly negative, but sufficiently small in magnitude to be negligible as a source of aggregate productivity growth.

Again focusing on the period 1973 to 1976, it is possible that the economic dislocations that accompanied the severe economic contraction of 1974 and 1975 could have resulted in shifts of output and inputs among sectors that contributed to the slowdown of productivity growth at the aggregate level. Alternatively, the sources of the slowdown might be found in slowing productivity growth at the level of individual industrial sectors. We find that the contribution of reallocations of output and inputs among sectors was positive rather than negative during the period 1973–1976 and relatively small. Declines in productivity growth for the individual industrial sectors of the U.S. economy must bear the full burden of explaining the slowdown in productivity growth for the economy as a whole.

The decomposition of the growth of output among contributions of capital input, labor input, and productivity growth is helpful in isolating the sources of uncertainty in future growth projections. The further decomposition of productivity growth among the reallocations of output, capital input, and labor input among sectors and growth in productivity at the sectoral level provides additional detail. The uncertainty in future growth projections can be resolved only by providing an explanation for the fall in productivity growth at the sectoral level. For this purpose an econometric model of sectoral productivity growth is required.

Our third objective is to present the results of an econometric analysis of the determinants of productivity growth at the sectoral level. Our econometric model determines the growth of sectoral productivity as a function of relative prices of sectoral inputs. For each sector we divide inputs among capital, labor, energy, and materials inputs. We allow for the fact that the value of sectoral output includes the value of intermediate input—energy and materials—as well as the value of primary factors of production—capital and labor. Differences in relative prices for inputs are associated with differences in productivity growth for each sector.

After fitting our econometric model of productivity growth to data for individual industrial sectors we find that productivity growth decreases with an increase in the price of capital input for a very large proportion of U.S. industries. Similarly, productivity growth falls with higher prices of labor input for a large proportion of industries. The impact of higher energy prices is also to slow the growth of productivity for a large proportion of industries. By contrast we find that an increase in the price of materials input is associated with increases in productivity growth for almost all industries.

Since 1973 the relative prices of capital, labor, energy, and materials inputs have been atlered radically as a consequence of the increase in the price of energy relative to other productive inputs. Higher world petroleum prices following the Arab oil embargo of late 1973 and 1974 have resulted in sharp increases in prices for all forms of energy in the U.S. economy—oil, natural gas, coal, and electricity generated from fossil fuels and other sources. Although the U.S. economy has been partly shielded from the impact of higher world petroleum prices through a system of price controls, all industrial sectors have experienced large increases in the price of energy relative to other inputs.

Our econometric model reveals that slower productivity growth at the sectoral level is associated with higher prices of energy relative to other inputs. Our first conclusion is that the slowdown of sectoral productivity growth after 1973 is a consequence of the sharp increase in the price of energy relative to other productive inputs that began with the run-up of world petroleum prices in late 1973 and early 1974. The fall in sectoral productivity growth after 1973 is responsible in turn for the decline in productivity growth for the U.S. economy as a whole. Slower productivity growth is the primary source of the slowdown in U.S. economic growth since 1973.

Our final objective is to consider the prospects for future U.S. economic growth. Exports of petroleum from Iran dropped sharply during 1979, following the revolution in that country in late 1978. During 1979 world petroleum prices have jumped 130 to 140 percent, resulting in large and rapid price increases for petroleum products in the United States. During 1979 the prices of petroleum products began to move to world levels as a consequence of the decontrol of domestic prices by the U.S. government over the period 1979 to 1981. Prices of natural gas will also be allowed to rise through decontrol by 1985 or, at the latest, by 1987. Prices of energy confronted by individual industries within the United States have already increased relative to other productive inputs and can be expected to increase further.

Based on the performance of the U.S. economy since 1973, we can anticipate a further slowdown in the rate of economic growth, a decline in the growth of productivity for the economy as a whole, and declines in sectoral productivity growth for a wide range of industries. These dismal conclusions suggest that a return to rapid growth of the early 1960's is highly unlikely, that even the slower growth of the late 1960's and early 1970's will be difficult to attain, and that the performance of the U.S. economy during the 1980's could be worse than during the period from 1973 to the present. We conclude the paper with a discussion of policy measures to ameliorate the negative effects of higher energy prices on future U.S. economic growth.

2. THE GROWTH SLOWDOWN

In this section we begin our analysis of the slowdown in U.S. economic growth by decomposing the growth of output for the economy as a whole into the contributions of capital input, labor input, and productivity growth.[1] The results are given in Table 1 for the postwar period 1948–76 and for the following seven subperiods—1948–53, 1953–57, 1957–60, 1960–66, 1966–69, 1969–73, and 1973–76.[2] Except for the period from 1973 to 1976, each of the subperiods covers economic activity from one cyclical peak to the next. The last period covers economic activity from the cyclical peak in 1973 to 1976, a year of recovery from the sharp downturn in economic activity in 1974 and 1975.

TABLE 1.—GROWTH OF OUTPUT AND INPUTS FOR THE U.S. ECONOMY, 1948–76

	1948–76	1948–53	1953–57	1957–60	1960–66	1966–69	1969–73	1973–76
Growth rates:								
Output	0.0350	0.0457	0.0313	0.0279	0.0483	0.0324	0.0324	0.0089
Capital input	.0401	.0507	.0393	.0274	.0376	.0506	.0396	.0312
Labor input	.0128	.0160	.0023	.0099	.0199	.0185	.0116	.0058
Productivity	.0114	.0166	.0146	.0113	.0211	.0004	.0095	−.0070
Contributions:								
Capital input	.0161	.0194	.0154	.0109	.0156	.0211	.0161	.0126
Labor input	.0075	.0097	.0013	.0057	.0116	.0108	.0068	.0033

We first present rates of growth for output, capital input, labor input, and productivity for the U.S. economy. For the postwar period as a whole, output grew at 3.50 percent per year, capital input grew at 4.01 percent, and labor grew at 1.28 percent. The growth of productivity averaged 1.14 percent per year. The rate of economic growth reached its maximum at 4.83 percent during the period 1960–66 and grew at only 0.89 percent during the recession and partial recovery of 1973–76. The growth of capital input was more even, exceeding 5 percent in 1948–53 and 1966–69 and falling to 3.12 percent in 1973–76. The growth of labor input reached its maximum in the period 1960–66 at 1.99 percent and fell to 0.58 percent in 1973–76, which was above the minimum of 0.23 percent in the period 1953–57.

We can express the rate of growth of output for the U.S. economy as a whole as the sum of a weighted average of the rates of growth of capital and labor inputs and the growth of productivity. The weights associated with capital and labor inputs are average shares of these inputs in the value of output. The contribution of each input is the product of the average share of this input and corresponding input growth rate. We present contributions of capital and labor inputs to U.S. economic growth for the period 1948–76 and for seven subperiods in table 1. Considering productivity growth, we find that the maximum occurred from 1960 to 1966 at 2.11 percent per year. During the period 1966–69 productivity growth was almost negligible at 0.04 percent. Productivity growth recovered to 0.95 percent during the period 1969–73 and fell to a negative 0.70 percent during 1973–76.

Since the value shares of capital and labor inputs are very stable over the period 1948–76, the movements of the contributions of these inputs to the growth of output largely parallel those of the growth rates of the inputs themselves. For the postwar period as a whole the contribution of capital input of 1.61 is the most important source of output growth. Productivity growth is next most important at 1.14 percent, while the contribution of labor input is the third most important at 0.75 percent. All three sources of growth are significant and must be considered in an analysis of the slowdown of economic growth during the period 1973–76. However, capital input is clearly the most important contributor to the rapid growth of the U.S. economy during the postwar period.[3]

Focusing on the period 1973 to 1976, we find that the contribution of capital input fell to 1.26 percent for a drop of 0.35 percent from the postwar average, the contribution of labor input fell to 0.33 percent for a drop of 0.42 percent, and that productivity growth at a negative 0.70 percent dropped 1.84 percent. We conclude that the fall in the rate of U.S. economic growth during the period 1973–76 was largely due to the fall in productivity growth. Declines in the contributions of capital and labor inputs are much less significant in explaining the

[1] The methodology that underlies our decomposition of the growth of output is presented in detail by Jorgenson (1979).

[2] The results presented in table 1 are those of Fraumeni and Jorgenson (1979), who also provide annual data for output and inputs.

[3] This conclusion contrasts sharply with that of Denison (1979). For a comparison of our methodology with that of Denison, see Jorgenson and Griliches (1972).

slowdown. A detailed explanation of the fall in productivity growth is needed to account for the slowdown in U.S. economic growth.

To analyze the sharp decline in productivity growth for the U.S. economy as a whole during the period 1973 to 1976 in greater detail we employ data on productivity growth for individual industrial sectors. For this purpose it is important to distinguish between productivity growth at the aggregate level and productivity growth at the sectoral level. At the aggregate level the appropriate concept of output is value added, defined as the sum of the values of capital and labor inputs for all sectors of the economy. At the sectoral level the appropriate concept of output includes the value of primary factors of production at the sectoral level—capital and labor inputs—and the value of intermediate inputs—energy and materials inputs. In aggregating over sectors to obtain output for the U.S. economy as a whole the production and consumption of intermediate goods cancel out, so that values of energy and materials inputs do not appear at the aggregate level.

We can express productivity growth for the U.S. economy as a whole as the sum of four components. The first component is a weighted sum of productivity growth rates for individual industrial sectors. The weights are ratios of the value of output in each sector to value added in that sector. The sum of these weights over all sectors exceeds unity, since productivity growth in each sector contributes to the growth of output in that sector and to the growth of output in other sectors through deliveries of intermediate inputs to those sectors. The remaining components of aggregate productivity growth represent the contributions of reallocations of value added, capital input, and labor input among sectors to productivity growth for the economy as a whole.[4]

The role of reallocations of output, capital input and labor input among sectors is easily understood. For example, if capital input moves from a sector with a relatively low rate of return to a sector with a high rate of return, the quantity of capital input for the economy as a whole is unchanged, but the level of output is increased, so that productivity has improved. Similarly, if labor input moves from a sector with low wages to a sector with high wages, labor input is unchanged, but productivity has improved. Productivity growth for the economy as a whole is a combination of improvements in productivity at the sectoral and reallocations of output, capital input and labor input among sectors. Data on reallocations of output, capital input, and labor input for the postwar period 1948 to 1976 and for seven subperiods are given in Table 2.[5]

For the postwar period as a whole productivity growth at the aggregate level is dominated by the contribution of sectoral productivity growth of 1.24 percent per year. The contributions of reallocations of output, capital input, and labor input are a negative 0.16 percent, a positive 0.08 percent, and a negative 0.02 percent. Adding these contributions together we find that the combined effect of the three reallocations is a negative 0.10 percent, which is negligible by comparison with the effect of productivity growth at the sectoral level. Productivity growth at the aggregate level provides an accurate picture of average productivity growth for individual industries; this picture is not distorted in an important way by the effect of reallocations of output and inputs among sectors.

TABLE 2.—PRODUCTIVITY GROWTH FOR THE U.S. ECONOMY, 1948–76

	1948–76	1948–53	1953–57	1957–60	1960–66	1966–69	1969–73	1973–76
Sectoral productivity growth..	0.0124	0.0219	0.0177	0.0145	0.0217	0.0025	0.0048	0.0113
Reallocation of value added..	−.0016	−.0075	−.0030	−.0010	−.0016	−.0025	.0030	.0046
Reallocation of capital input..	.0008	.0022	.0008	−.0001	.0002	.0001	.0010	.0008
Reallocation of labor input...	−.0002	−.000	−.0008	−.0021	.0008	.0004	.0006	−.0011

Again focusing on the period 1973–76, we find that the contribution of sectoral productivity growth to productivity growth for the economy as a whole fell to a negative 1.13 percent for a drop of 2.37 percent from the postwar average. By contrast the contribution of reallocations of output rose to 0.46 percent for a

[4] The methodology that underlies our decomposition of productivity growth is presented in detail by Jorgenson (1979).

[5] The results presented in table 2 are those of Fraumeni and Jorgenson (1979), who also provide annual data for productivity growth.

grain of 0.62 percent from the postwar average. The contribution of the reallocation of capital input was unchanged at 0.08 percent, while the contribution of labor input fell to a negative 0.11 percent for a drop of 0.09 percent from of the postwar average. The combined contribution of all three reallocations rose 0.53 percent, partially offsetting the precipitous decline in productivity growth at the sectoral level. We conclude that declines in productivity growth for the individual industrial sectors of the U.S. economy are more than sufficient to explain the decine in productivity growth for the economy as a whole.

To summarize our findings on the slowdown of U.S. economic growth during the period 1973–76, we find that the drop in the growth of output of 2.61 percent per year from the postwar average is the sum of a decline in the contribution of labor input of 0.42 percent per year, a sharp dip in sectoral rates of productivity growth of 2.37 percent, a rise in the role of reallocations of output among sectors of 0.62 percent per year, no change in the rellocations of capital input, and a decline in the contribution of reallocations of labor input of 0.09 percent per year. Whatever the causes of the slowdown, they are to be found in the collapse of productivity growth at the sectoral level rather than a slowdown in the growth of capital and labor inputs at the aggregate level or the reallocations of output, capital input, or labor input among sectors.

The decomposition of economic growth into the contributions of capital input, labor input, and productivity growth is helpful in pinpointing the causes of the slowdown. The further decomposition of productivity growth for the economy as a whole into contributions of sectoral productivity growth and reallocations of output, capital input, and labor input is useful in providing additional detail. However, our measure of sectoral productivity growth is simply the unexplained residual between growth of sectoral output and the contributions of sectoral capital, labor, energy, and materials inputs. The problem remains of providing an explanation for the fall in productivity growth at the sectional level.

3. SECTORAL PRODUCTIVITY GROWTH

We have now succeeded in identifying the decline in productivity growth at the level of individual industrial sectors within the U.S. economy as the main culprit in the slowdown of U.S. economic growth that took place after 1973. To provide an explanation for the slowdown we must go behind the measurements to identify the determinants of productivity growth at the sectoral level. For this purpose we require an econometric model of sectoral productivity growth. In this section we present a summary of the results of applying such an econometric model to detailed data on sectoral output and capital, labor, energy, and materials inputs for 35 individual industries in the United States.

Our complete econometric model is based on sectoral price functions for each of the thirty-five industries included in our study.[6] Each price function give the price of the output of the corresponding industrial sector as a function of the prices of capital, labor, energy, and materials inputs and time, where time represents the level of technology in the sector.[7] Obviously, an increase in the price of one of the inputs, holding the prices of the other inputs and the level of technology constant, will necessitate an increase in the price of output. Similarly, if productivity in a sector improves and the prices of all inputs into the sector remain the same, the price of outputs must fall. Price functions summarize these and other relationships among the prices of output, capital, labor, energy, and materials inputs, and the level of technology.

Although the sectoral price functions provide a complete model of production patterns for each sector, it is useful to express this model in an alternative and equivalent form. We can express the shares of each of the four inputs—capital, labor, energy, and materials—in the value of output as functions of the prices of these inputs and time, again representing the level of technology.[8] We can add

---

[6] Econometric models for each of the 35 industries are given by Jorgenson and Fraumeni (1980).

[7] The price function was introduced by Samuelson (1953). A complete characterization of the sectoral price functions employed in this study is provided by Jorgenson and Fraumeni (1980).

[8] Our sectoral price functions are based on the translog price function introduced by Christensen, Jorgenson, and Lau (1971, 1973). The translog price function was first applied at the sectoral level by Berndt and Jorgenson (1973) and Berndt and Wood (1975). References to sectoral production studies incorporating energy and materials inputs are given by Berndt and Wood (1979).

to these four equations for the value shares an equation that expresses productivity growth as a function of the prices of the four inputs and time.[9] In fact, the negative of the rate of productivity growth is a function of the four input prices and time. This equation is our econometric model of sectoral productivity growth.[10]

Like any econometric model, the relationships determining the value shares of capital, labor, energy, and materials inputs and the negative of the rate of productivity growth involve unknown parameters that must be estimated from data for the individual industries. Included among these unknown parameters are biases of productivity growth that indicate the effect of changes in the level of technology on the value shares of each of the four inputs.[11] For example, the bias of productivity growth for capital input gives the change in the share of capital input in the value of output in response to changes in the level of technology, represented by time. Similarly, biases of productivity growth for labor, energy, and materials inputs give changes in the shares of labor, energy, and materials inputs in the value of output that results from changes in the level of technology.

We say that productivity growth is capital using if the bias of productivity growth for capital input is positive, that is, if changes in the level of technology result in an increase in the share of capital input in the value of output, holding all input prices constant. Productivity growth involves an increase in the quantity of capital input as technology changes, so that we say that the change in technology is capital using. Similarly, we say that productivity growth is capital saving if the bias of productivity growth for capital input is negative. As technology changes, the production process uses less capital input, so that the change in technology is capital saving.

Similarly, we can say that productivity growth is labor using or labor saving if the bias of productivity growth for labor input is positive or negative. As technology changes, the production process uses more or less labor input, depending on whether the change in technology is labor using or labor saving. We can associate energy using or energy saving productivity growth with positive or negative biases of productivity growth for energy energy input. Finally, we can associate materials using or materials saving productivity growth with positive or negative biases of productivity growth for materials input. Since the shares of all four inputs—capital, labor, energy, and materials—sum to unity, productivity growth that "uses" or "saves" all four inputs is impossible. In fact, the sum of the biases for all four must be precisely zero, since the changes in all four shares with any change in technology must sum to zero.

We have pointed out that our econometric model for each industrial sector of the U.S. economy includes an equation giving the negative of sectoral productivity growth as a function of the prices of the four inputs and time. The biases of technical change with respect to each of the four inputs appear as the coefficients of time, representing the level of technology, in the four equations for the value shares of all four inputs. The biases also appear as coefficients of the prices in the equation for the negative of sectoral productivity growth. This feature of our econometric model makes it possible to use information about changes in the value shares with time and changes in the rate of sectoral productivity growth with prices in determining estimates of the biases of technical change.

The biases of productivity growth express the dependence of value shares of the four inputs on the level of technology and also express the dependence of the negative of productivity growth on the input prices. We can say that capital using productivity growth, associated with a positive bias of productivity growth for capital input, implies that an increase in the price of capital input decreases the rate of productivity growth (or increases the negative of the rate of productivity growth). Similarly, capital saving productivity growth, associated with a negative bias for capital input, implies that an increase in the price of capital input increases the rate of productivity growth. Analogous relationships hold between biases of labor, energy, and materials inputs and

[9] Productivity growth is represented by the translog index introduced by Christensen and Jorgenson (1970). The translog index of productivity growth was first derived from the translog price function by Diewert (1980) and by Jorgenson and Lau (1980).

[10] This model of sectoral productivity growth is based on that of Jorgenson and Lau (1980).

[11] The bias of productivity growth was introduced by Hicks (1932). An alternative definition of the bias of productivity growth was introduced by Binswanger (1974a, 1974b). The definition of the bias of productivity growth employed in our econometric model is due to Jorgenson and Lau (1980).

the direction of the impact of changes in the prices of each of these inputs on the rate of productivity growth.[12]

Jorgenson and Fraumeni [1980] have fitted biases of productivity growth for 35 industrial sectors that make up the whole of the producing sector of the U.S. economy. They have also fitted the other parameters of the econometric model that we have described above. Since our primary concern in this section is to analyze the determinants of productivity growth at the sectoral level, we focus on the patterns of productivity growth revealed in table 3. We have listed the industries characterized by each of the possible combinations of biases of productivity growth, consisting of one or more positive biases and one or more negative biases.[13]

TABLE 3.—*Classification of industries by biases of productivity growth*

Pattern of biases	*Industries*
Capital using, labor using, energy using, material saving.	Agriculture, metal mining, crude petroleum and natural gas, nonmetallic mining, textiles, apparel, lumber, furniture, printing, leather, fabricated metals, electrical machinery, motor vehicles, instruments, miscellaneous manufacturing, transportation, trade, finance, insurance and real estate, services.
Capital using, labor using, energy savings, material saving.	Coal mining, tobacco manufactures, communications, government enterprises.
Capital using, labor saving, energy using, material saving.	Petroleum refining.
Capital using, labor saving, energy saving, material using.	Construction.
Capital saving, labor saving, energy using, material saving.	Electric utilities.
Capital saving, labor using, energy saving, material saving.	Primary metals.
Capital saving, labor using, energy using, material saving.	Paper, chemicals, rubber, stone, clay and glass, machinery except electrical, transportation equipment and ordnance, gas utilities.
Capital saving, labor saving, energy using, material using.	Food.

The pattern of productivity growth that occurs most frequently in table 3 is capital using, labor using, energy using, and materials saving productivity growth. This pattern occurs for 19 of the 35 industries analyzed by Jorgenson and Fraumeni. For this pattern of productivity growth the bias of productivity growth for capital input, labor input, and energy input are positive, and the bias of productivity growth for materials input is negative. This pattern implies that increases in the prices of capital input, labor input, and energy input decrease the rate of productivity growth, while increases in the price of materials input increase the rate of productivity growth.

Considering all patterns of productivity growth included in table 3, we find that productivity growth is capital using for 25 of the 35 industries included in our study. Productivity growth is capital saving for the remaining ten industries. Similarly, productivity growth is labor using for 31 of the 35 industries and labor saving for the remaining 4 industries: productivity growth is energy using for 29 of the 35 industries included in table 3 and is energy saving for the remaining six. Finally, productivity growth is materials using for only 2 of the 35 industries and is materials saving for the remaining 33. We conclude that

[12] A complete characterization of biases of productivity growth is given by Jorgenson and Fraumeni (1980).

[13] The results presented in Table 3 are those of Jorgenson and Fraumeni (1980). Of the fourteen logically possible combinations of biases of productivity growth, only the eight patterns presented in Table 3 occur empirically.

for a very large proportion of industries the rate of productivity growth decreases with increases in the prices of capital, labor, and energy inputs, and increases in the price of materials inputs.

The most striking change in the relative prices of capital, labor, energy and materials inputs that has taken place since 1973 is the staggering increase in the price of energy. The rise in energy prices began in 1972 before the Arab oil embargo, as the U.S. economy moved toward the double-digit inflation that characterized 1973. In late 1973 and early 1974 the price of petroleum on world markets increased by a factor of four, precipitating a rise in domestic prices of petroleum products, natural gas, coal, and uranium. The impact of higher world petroleum prices was partly deflected by price controls for petroleum and natural gas that resulted in the emergence of shortages of these products during 1974. All industrial sectors of the U.S. economy experienced sharp increases in the price of energy relative to other inputs.

Slower growth in productivity at the sectoral level is associated with higher energy prices for 29 of the 35 industries that make up the producing sector of the U.S. economy. The dramatic increases in energy prices resulted in a slowdown in productivity growth at the sectoral level. In the preceding section we have seen that the fall in sectoral productivity growth after 1973 is the primary explanation for the decline in productivity for the U.S. economy as a whole. Finally, we have shown that the slowdown in productivity growth during the period 1973–76 is the main source of the fall in the rate of U.S. economic growth since 1973.

We have now provided a solution to the problem posed by the disappointing growth record of the U.S. economy since 1973. By reversing historical trends toward lower prices of energy in the U.S. economy, the aftermath of the Arab Oil Embargo of 1973 and 1974 has led to an end to rapid economic growth. The remaining task is to draw the implications of our findings for future U.S. economic growth. Projections of future economic growth must take into account the dismal performance of the U.S. economy since 1973 as well as the rapid growth that has characterized the U.S. economy during the postwar period. In particular, such projections must take into account the change in the price of energy input for individual industrial sectors, relative to prices of capital, labor, and materials inputs.

4. PROGNOSIS

Our objective in this concluding section of the paper is to provide a prognosis for future U.S. economic growth. For this purpose we cannot rely on the extrapolation of past trends in productivity growth or its components. The year 1973 marks a sharp break in trend associated with a decline in rates of productivity growth at the sectoral level. Comparing the period after 1973 with the rest of the postwar period, we can associate the decline in productivity growth with the dramatic increase in energy prices that followed the Arab oil embargo in late 1973 and early 1974. The remaining task is to analyze the prospects for a return to the high sectoral productivity growth rates of the early 1960's, for moderate growth of sectoral productivity growth like that of the late 1960's and early 1970's, or for continuation of the disappointing growth since 1973.

During 1979 there has been a further sharp increase in world petroleum prices, following the interruption of Iranian petroleum exports that accompanied the revolution that took place in that country in late 1978. Although prices of petroleum sold by different petroleum exporting countries differ widely, the average price of petroleum imported into the United States has risen by 130 to 140 percent since December 1978. In April 1979, President Carter announced that prices of that petroleum products would be gradually decontrolled over the period from May 1979 to September 1981. As a consequence domestic petroleum prices in the United States will move to world levels in a relatively short period of time. Domestic natural gas prices will also be subject to gradual decontrol, moving to world levels as early as 1985 or, at the latest, 1987.

Given the sharp increase in the price of energy relative to the prices of other productive inputs, the prospects for productivity growth at the sectoral level are dismal. In the absence of any reduction in prices of capital and labor inputs during the 1980's, we can expect a decline in productivity growth for a wide range of U.S. industries, a decline in the growth of productivity for the U.S. economy as a whole, and a further slowdown in the rate of U.S. economic growth. To avoid a repetition of the unsatisfactory economic performances of the 1970's it is essential to undertake measures to reduce the price of capital input and labor inputs. The price of capital input can be reduced by cutting taxes on income from capital.[14] Similarly, payroll taxes can be cut in order to reduce the price of labor input.

The prospects for changes in tax policy that would have a substantial positive impact on productivity growth in the early 1980's are not bright. Any attempt to balance the Federal budget during 1981 in the face of a sharp recession during the last half of 1980 and the first half of 1981 will require tax increases rather than tax cuts. Higher inflation rates have resulted in an increase in the effective rate of taxation of capital. Payroll taxes are currently scheduled to rise in 1981. For these reasons it appears that a return to the rapid growth of the 1960's is out of the question. Even the moderate growth of the 1960's and early 1970's would be difficult to attain. In the absence of measures to cut taxes on capital and labor inputs, the performance of the U.S. economy during the 1980's could be worse than during the period from 1973 to the present.

For economists the role of productivity in economic growth presents a problem comparable in scientific interest and social importance to the problem of unemployment during the Great Depression of the 1930's. Conventional methods of economic analysis have been tried and have been found to be inadequate. Clearly, a new framework will be required for economic understanding. The findings we have outlined above contain some of the elements that will be required for the new framework for economic analysis as the U.S. economy enters the 1980's.

At first blush the finding that higher energy prices are an important determinant of the slowdown in U.S. economic growth seems paradoxical. In aggregative studies of sources of economic growth energy does not appear as an input, since energy is an intermediate good and flows of intermediate goods appear as both outputs and inputs of individual industrial sectors, canceling out for the economy as a whole.[15] It is necessary to disaggregate the sources to economic growth into components that can be identified with output and inputs at the sectoral level in order to define an appropriate role for energy.[16]

Within a framework for analyzing economic growth that is disaggregated to the sectoral level it is not sufficient to provide a decomposition of the growth of sectoral output among the contributions of sectoral inputs and the growth of sectoral productivity.[17] It is necessary to explain the growth of sectoral productivity by means of an econometric model of productivity growth for each sector. Without such econometric models the growth of sectoral productivity is simply an unexplained residual between the growth of output and the contributions of capital, labor, energy, and materials inputs.

Finally, the parameters of an econometric model of production must be estimated from empirical data in order to determine the direction and significance of the influence of energy prices on productivity growth at the sectorial level.[18] From a conceptual point of view a model of production is consistent with positive, negative, or zero impacts of energy prices on sectoral productivity growth. From an empirical point of view the influence of higher energy prices is negative and highly significant. There is no way to substantiate this empirical finding without estimates of the unknown parameters of the econometric model of productivity growth.

The steps we have outlined—disaggregating the sources of economic growth down to the sectoral level, decomposing the rate of growth of sectoral output into sectoral productivity growth and the contributions of capital, labor, energy, and materials inputs, and modeling the rate of growth of productivity econometrically—have been taken only recently. Much additional research will be required to provide an exhaustive explanation of the slowdown of U.S. economic growth within the new framework and to derive the implications of the slowdown for future growth of the economy.

---

[14] An analysis of alternative proposals for cutting taxes on income from capital is presented by Auebach and Jorgenson (1980).

[15] See, for example, Denison (1979).

[16] Kendrick (1961, 1973) has presented an analysis of productivity growth at the sectoral level. However, his measure of productivity growth is based on value added at the sectoral level, so that no role is provided for energy and materials inputs in productivity growth. For a more detailed discussion, see Jorgenson (1979).

[17] Gollop and Jorgenson (1980) have presented an analysis of productivity growth at the sectoral level based on the concept of output that includes both primary factors of production and intermediate inputs.

[18] Estimates of the parameters of an econometric model of sectoral productivity growth are presented by Jorgenson and Fraumeni (1980).

REFERENCES

Auerbach, Alan J., and Dale W. Jorgenson (1980), "The First Year Capital Recovery System," Harvard Business Review, forthcoming.

Berndt, Ernst R., and Dale W. Jorgenson (1973), "Production Structure," Chapter 3 in Dale W. Jorgenson and Hendrik S. Houthakker, eds., U.S. Energy Resources and Economic Growth, Washington, Energy Policy Project.

Berndt, Ernst R., and David O. Wood (1975), "Technology, Prices, and the Derived Demand for Energy," Review of Economics and Statistics, Vol. 56, No. 3, August, pp. 259–268.

——— (1979), "Engineering and Econometric Interpretations of Energy-Capital Complementarity," American Economic Review vol. 69, No. 3, September, pp. 342–354.

Binswanger, Hans P. (1974a), "The Measurement of Technical Change Biases With Many Factors of Production," American Economic Review, vol. 64, No. 5, December, pp. 964–976.

——— (1974b), "A Microeconomic Approach to Induced Innovation," Economic Journal, vol. 84, No. 336, December, pp. 940–958.

Christensen, Lauritis R., and Dale W. Jorgenson (1970), "U.S. Real Product and Real Factor Input, 1929–67," Review of Income and Wealth series 16, No. 1, March, pp. 19–50.

Christensen, Lauritis R., Dale W. Jorgenson, and Lawrence J. Lau (1971), "Conjugate Duality and the Transcendental Logarithmic Production Function," Econometrica, vol. 39, No. 4, July, pp. 255–256.

——— (1973), "Transcendental Logarithmic Production Frontiers," "Review of Economics and Statistics," vol. 55, No. 1, February, pp. 28–45.

Denison, Edward F. (1979), "Accounting for Slower Economic Growth," Washington: The Brookings Institution.

Diewert, W. Erwin (1980), "Aggregation Problems in the Measurement of Capital," in Dan Usher, ed., "The Measurement of Capital," Chicago, University of Chicago Press, forthcoming.

Fraumeni, Barbraa M. and Dale W. Jorgenson (1979), "The Role of Capital in U.S. Economic Growth, 1948–76," in George M. von Furstenberg, ed., "Capital, Efficiency and Growth," Cambridge, Ballinger, forthcoming.

Gollop, Frank M., and Dale W. Jorgenson (1980), "U.S. Productivity Growth by Industry, 1947–73," in John W. Kendrick and Beatrice M. Vaccara, eds., New Developments in Productivity Measurement, Chicago, University of Chicago Press.

Hicks, John R. (1932), The Theory of Wages, London, Macmillan (2d edition, 1963).

Jorgenson, Dale W., and Barbara M. Fraumeni (1980), "Substitution and Technical Change in Production," in Ernst R. Berndt and Barry Field, Ballinger, forthcoming.

Jorgenson, Dale W. and Zvi Griliches (1972), "Issues in Growth Accounting: A Reply to Edward F. Denison," Survey of Current Business, vol. 52, No. 5, part II, pp. 65–94.

Jorgenson, Dale W., and Lawrence J. Lau (1980), Transcendental Logarithmic Production, Amsterdam, North-Holland, forthcoming.

Kendick, John W. (1961), Productivity Trends in the United States, Princeton, Princeton University Press.

——— (1973), Postwar Productivity Trends in the United States, 1948–69, New York, National Bureau of Economic Research.

Samuelson, Paul A. (1953), "Prices of Factors and Goods in General Equilibrium," Review of Economic Studies, vol. 21, No. 1, October, pp. 1–20. 342–354.

Senator BENTSEN. Professor McCracken, may we have your statement?

STATEMENT OF PAUL W. McCRACKEN, EDMUND EZRA DAY UNIVERSITY PROFESSOR OF BUSINESS ADMINISTRATION, UNIVERSITY OF MICHIGAN, ANN ARBOR, AND CHAIRMAN, COUNCIL OF ACADEMIC ADVISERS, AMERICAN ENTERPRISE INSTITUTE FOR PUBLIC POLICY RESEARCH

Mr. McCRACKEN. Thank you very much, Mr. Chairman and members of the committee. I do very much appreciate the opportunity to be here today and to appear again before the Joint Economic Committee, a committee before whom I have spent many hours.

While this committee has confronted many complex, difficult and important problems during the roughly three-and-a-half decades of its existence, the urgency of our problems has probably never been greater than today. There is the usual one of the needed adjustments in demand management policies, but there is the more fundamental issue of whether government can make the hard decisions and deploy the major changes in policies that are required to achieve a fundamental revitalization of the economy.

If we do not begin this year to set in motion these major changes, then we must reluctantly concede that Arthur Krock in his "Memoirs" may have been right when he observed:

> As an eyewitness of governmental and other public action throughout these years, I formed the opinion that the United States merits the dubious distinction of having discarded its past and its meaning in one of the briefest spans of modern history.

First, I would like to make a few comments about the current economic situation and current demand management policy, though that is not the major focus of the paper. I think we would all agree that, beginning in April, the economy seemed to go into very much the kind of a phase which the economy went into in September 1974.

One sees this, for example, in the reports of the purchasing agents. If one looks simply at the net figure of the percent of the responding companies reporting an increase in new orders less the percent indicating a reduction, the figures there show rather dramatically the kind of cliff that the economy apparently went over. That figure was a minus 2 percent in March, minus 33 in April, and minus 48 in May—almost a discontinuity in the figures.

In my prepared statement, I make a few preliminary comments about Federal Reserve policy. I think I need not——

Senator BENTSEN. Let me get your time reference again. You're talking about April 1980 being comparable to September 1974?

Mr. McCRACKEN. Right, September 1974. And once again, if one looks at the purchasing agent figure, the figures coming out in the monthly report of the purchasing executive, you see very much the same kind of a profile, a very sharp decline beginning in September 1974 and continuing for a few months. We see very much the same kind of thing beginning in April of this year, although the figures this year are a little more dramatic than they were in 1974—in other words, the turnabout to very large negative figures.

The figure I'm talking about here once again is the percentage of the companies reporting an increase in orders less the percentage reporting a reduction. That figure was only slightly minus in March, then minus 33 percent in April, and minus 48 percent in May—very sharp deterioration.

I don't want to concentrate my comments here specifically on demand management policy problems in the very short run, although we can discuss those perhaps in the question period. Let me just make two comments in regard to monetary policy.

At the present time it seems to me very clear that navigating monetary policy via interest rates, whether targets are specified for rates of growth in the aggregate or not, has clearly tended toward an unnecessarily unstable path for the economy. In an expansion, the expansion itself tends to validate the higher target and tends toward an overshooting of the rate of expansion of the monetary aggregates. And very much the reverse is true on the downturn.

Let me say, finally, in regard to monetary policy, I have concluded that gradualism is not an appropriate strategy for monetary policy in dealing with a severe inflation. And I believe in my first appearance before this committee as Chairman of the Council of Economic Advisers I articulated the case for gradualism at that point. It seems to me we are dealing with a different kind of problem now.

Classical central banking lore has, of course, called for hitting an inflation boom hard to break its momentum. But then, of course, it also called for backing away promptly when that had been accomplished. Incidentally, on that basis Federal Reserve policies from about 1929 to early 1931 were in the same mode, but of course they were appalling, from 1931 to 1933.

As for budget policy, budget policy must in 1980 make progress on three fronts, not just one. It ought to make its contribution to stabilization of the economy. It must also provide the clearly needed additinal resources for national security. And it must reflect policies to achieve an urgently needed revitalization to deliver gains in productivity and real incomes.

The verdict of history is apt to be, at least on the basis of where we are at present, that the Government's 1980 academic grade should be about a C minus on defense needs and stabilization and something close to an F on the need for revitalization of the economy. I am not myself an expert on matters of defense, so I have very little to say on that subject.

The problem of appraising the budget's short-term stabilization effects is to guess what the fiscal path will be in 1981—illustrating once again that a major source of instability for the economy is uncertainty about what to assume for economic policies themselves.

One reason for concern is that the budget for 1981 fiscal year is apparently going to be the product of a spasm of interest in a balanced budget, or at least in pasting together something that can be put forward in advance as a balanced budget. This apparently is having some disciplinary effect on spending, which is good, but spasms are not apt to produce steady and orderly economic policies. Moreover, if actual outlays for fiscal 1981 were to overrun the early projections by as much as will have occurred for this year, the budget will continue to be inflationary.

The most urgent concern about the budget, however, must center on the revenue side. Even with the President's original budget, the probable rise in Federal, State and local revenues in fiscal 1981 would be equal to at least half the projected rise in the national income. And this leads me to my central concern about economic policy at this juncture.

And some of the comments that I am making here are naturally dealing with matters which have already been discussed by my two colleagues on the panel this morning.

One must reluctantly conclude that the American economy has virtually lost any capability to deliver gains in productivity and real income. The American economy, whose vigor was once our own pride and the envy of the world, began to show some tendency toward slower gains in productivity after 1965, with sharp further reductions in the 1970's and an outright decline in productivity last year. Moreover, U.S. rates of gain in productivity have for years been the lowest of the "Big Seven" in the industrial world, lower than for the United Kingdom.

If this represented an explicit decision by the citizenry to forego further gains in material levels of living, the current complacency about this enfeebled performance would at least be understandable, but the rate at which we are piling new claims and demands on the economy indicates that quite clearly such an explicit disavowal of mammon has not been made.

The sources of this economic enfeeblement are complex, and there is probably much that we do not understand, but there are some things that can be said. For one thing, the evidence strongly suggests that there has been a sharp deterioration in the rate at which new technology is being generated. If, for example, we were spending the same proportion of our national income on research and development as in 1965, these outlays would be one-third higher.

Circumstantial evidence suggests that this more sluggish generation of new technology occurring is to be found also in patents for new inventions. This is a rather crude measure, but I think it may have some significance. There were 72 patent applications per billion of real GNP in 1972 prices in 1978, compared with 96 for 1970 and 108 in 1960.

Moreover, sluggish investment has retarded the rate at which the new technology we do generate is introduced into the economy. Historically, the net stock of nonresidential fixed capital has increased at the average rate of about 2½ percent per year, indicated by the chart—not surprisingly, at about the same rate as the gain in productivity. Since 1970 there has been little net gain in our capital stock. Indeed, the stock of capital per person employed has actually declined since 1975.

The problem, however, almost certainly extends beyond these identifiable factors. A major part of this enfeeblement is probably the strangulating effect of Government regulation. Obviously, complaints by businesses about Government redtape are not new, but analytical and circumstantial evidence suggests that this has exploded too fast and carried us into the zones where costs are exceeding benefits.

This is clearly indicated by the growing analytical literature on regulation. This would be expected by the rapidity of the growth of social and economic regulation. The number of people employed for social regulation, according to the current issue of "Regulation," has been rising at the rate of 20 percent per year during the last decade. And it should not surprise us that as the scope of Government regulation of the details of economic life enlarges exponentially, the quality of the economy's overall performance deteriorates—since government-managed economies internationally have a remarkably uniform pattern of poor performance.

Three, we are, in other words, seeing there, as it were, through a magnifying glass, what would be expected. The American economy's poor performance, poor compared to our own history and poor compared to other industrial nations, forces us also to wonder if something is causing a decline in entrepreneurship. This cannot be that entrepreneurship declines as affluence makes people less hungry for income, since other economies with high income levels—for example, Japan or Germany—still seem to have their quota of aggressive entrepreneurs.

Perhaps—this is, by the way, a facetious comment—perhaps theologians are winning their war on our economic system generally—with, of course, people generally now denied the opportunity to look forward to gains in the real purchasing power of their pay checks being the victims of this victory.

These comments do carry with them some implications for policy. As for monetary policy, it seems to be on about the right track. I say this a little diffidently because a great deal will depend on whether the outright decline in monetary aggregates that we have seen in the last month or two is essentially temporary and associated with a turnabout we saw in the economy. If that decline continues very long, then I would retract that comment.

But, in any case, the basic strategy of navigating monetary policy by observing the aggregates rather than by interest rates seems to me to be the correct strategy and does at least reduce the probability of overdoing both the expansiveness of monetary policy on the upswing and its opposite during a decline.

Budget policy, it seems to me, is more in danger of getting off course.

The current spasm will not produce a fiscal plan such that when the books are closed September 30, 1981, the budget will show a balance or surplus. It, therefore, weakens further the credibility of government. The current spasm is also saddling us or is in danger of saddling us with a tax system that bites more deeply into increases in income—thus further reducing incentives to earn and invest and create.

We are in danger, in short, of arriving at the end of fiscal year 1981 with the worst of all worlds: A budget still in the red, a tax system with stronger disincentives, and intensified cynicism about Government's candor and its ability really to manage its fiscal affairs.

The Congress this year should at least do two things about taxes. The personal income tax brackets should be adjusted enough to avoid having inflation itself increase the real burden of this tax. And action should be taken to deal with the problem of under-depreciation and overstatement of profits which has increased sharply the proportion of true corporate profits paid in taxes—and therefore reduced sharply true retained earnings and capital formation.

Very interesting, by the way, an economic report of the President, or, more specifically, the Annual Report of the Council of Economic Advisers. They point out that whereas the corporate tax rate was reduced, taxes paid as a percentage of true corporate profits actually rose from 1978 to 1979 because of the effect that inflation has given orthodox accounting procedures.

The committee should also consider a careful in-depth review of the economic consequences of the vast increase in social and economic regulation. It is quite possible that those on whom the regulations are imposed are right: that this is slowing down further an already arthritic economy.

Finally, I would urge the committee to be even more ambitious: undertaking a major inquiry, perhaps along the lines of the Temporary National Economic Committee of 40 years ago, into the whole issue of our economic malaise. It would be appropriate for this committee because of the complexity and breadth of the problem. A year from now we shall probably have passed the lower turning point cyclically, but we shall not have passed beyond our fundamental malaise. It would be good to begin the therapy in 1980. Nothing in the domestic area that will come before the Congress this year can match in importance this problem.

Senator BENTSEN. Thank you very much.

[The prepared statement of Mr. McCracken follows:]

PREPARED STATEMENT OF PAUL W. MCCRACKEN

Mr. Chairman and Members of the Committee, I appreciate deeply this opportunity again to appear before the Joint Economic Committee. While this Committee has confronted many complex, difficult, and important problems during its 3½ decades, the urgency of our problems has never been greater than today. There is the usual one of the needed adjustments in demand management policies, but there is the more fundamental issue of whether government can make the hard decisions and deploy the major changes in policies that are required to achieve a major revitalization of the economy. If we do not begin this year to set in motion these major changes, then we must reluctantly concede that Arthur Krock in his Memoirs may have been right when he observed:

> * * * as an eyewitness of governmental and other public action throughout these years, I formed the opinion that the United States merits the dubious distinction of having discarded its past and its meaning in one of the briefest spans of modern history.

I

First, a few comments on demand management policies in the conventional context. The Federal Reserve System seems now to be on the right course, and my comments about their policies will be brief. Some basic axioms about the management of monetary policies should be clear from our experience in recent years. The first is that we cannot sustain low rates of unemployment by being willing to accept yet a little more inflation. This strategy has brought us to rates of inflation completely out of context with our history, and confronting sharp further increases in rates of unemployment already high by historical standards.

The second is that while the economy is probably not more prone to an acceleration in the rate of inflation in response to overly expansive policies, the price level is clearly more resistant to disinflationary policy pressures than used to be the case. This presumably reflects both such institutional rigidities as three-year labor contracts and also the credibility problem the managers of policy now face because of the failure of successive stabilization efforts extending back to the mid-1960's. This should "bias" demand management policies, once a reasonable stability of the price level has been achieved, in the direction of not again building inflationary pressures through the kind of policies that we had for much of the time in 1978 and 1979 (up to October).

Third, navigating monetary policy via interest rates (whether targets for rates of growth in the aggregates are specified or not) tends toward an unnecessarily unstable path for the economy. In an expansion the expansion itself exerts upward pressure on rates and monetary policy tends to be overly expansive incident to avoiding an over-shooting of the specified interest rate target. And with a decline in business activity weakening the demand for credit, the monetary aggregates will tend to drift below the path consistent with the best route to stabilization for the economy. The willingness of the Federal Reserve this time to allow interest rates to fall sharply, and to rise sharply after last October, will mean a better route to a more stable economy.

Finally, "gradualism" is not an appropriate strategy for monetary policy in dealing with a severe inflation. Classical central banking lore calls for hitting the inflationary boom hard to break its momentum—but backing away promptly when that has been accomplished. (On that basis Federal Reserve policies were well-deployed from 1929 to early 1931, and appalling from 1931–33.)

II

Budget policy must make progress on three fronts in 1980, not just one. Fiscal policy should make its contribution to a stabilization of the price level. It must provide the clearly needed additional resources for national security. And it must reflect policies to achieve an urgently needed revitalization to deliver gains in productivity and real incomes. The verdict of history is apt to be that the Government's 1980 grade should be a C– on defense needs and stabilization, and something close to an "F" on the needs for revitalization of the economy. I am, of course, a layman on matters of defense and have little to say on that subject. One does have an uneasy feeling. however, that some time in this decade we shall be looking back on 1980 and wondering, as we did in 1941, why the nation allowed a dangerous imbalance in the provision for national security to go so far and run for so long.

The problem in appraising the budget's short-term stabilization effects is to guess what the fiscal path will be in 1981—illustrating once again that a major source of instability for the economy is uncertainty about what to assume for economic policies themselves. One reason for concern is that the budget for fiscal year 1981 is apparently going to be the product of a spasm of interest in a balanced budget—or at least in pasting together something that can be put forward in advance as a balanced budget. This is apparently having a disciplinary effect on spending, and stronger budget discipline is needed, but spasms are not apt to produce steady and orderly economic policies. Moreover, if actual oulays for fiscal year 1981 over-run the early projection by as much as will have occurred for this year, the budget will continue to be inflationary.

The most urgent concern about the budget, however, must center on the revenue side. Even with the President's original budget the probable rise in Federal, State, and local revenues in fiscal year 1981 would be equal to at least half of the projected rise in national income. And this leads me to my central concern about economic policy.

III

One must reluctantly conclude that the American economy has virtually lost any capability to deliver gains in productivity and real income. The American economy, whose vigor was once our own pride and the envy of the world, began to show some tendency toward slower gains in productivity after 1965 with sharp further reductions in the 1970's and an outright decline in productivity last year. Moreover, U.S. rates of gain in productivity have for years been the lowest of the "Big Seven" in the industrial world, lower than for the United Kingdom. If this represented an explicit decision by the citizenry to forego further gains in material levels of living, the current complacency about this enfeebled performance would at least be understandable. but the rate at which we are piling new claims and demands on the economy indicates that quite clearly such an explicit disavowal of mammon has not been made.

Average annual increase in U.S. output per man-hour

Period:	Percent increase
1889–1919	2.0
1919–48	2.4
1948–65	2.6
1965–73	2.0
1973–78	0.8
1978–79	−1.1

Source: 1889–1948—John Kendrick, "Productivity Trends and the Recent Slowdown: Historical Perspective, Causal Factors, and Policy Options" in William Fellner, editor, "Contemporary Economic Problems" (American Enterprise Institute for Public Policy Research, 1979), p. 22. 1948–79.

AVERAGE ANNUAL RATES OF GROWTH IN REAL GNP PER EMPLOYED WORKER

[In percent]

Country	1963–73	1973–78
Canada	2.4	0.4
France	4.6	2.7
Germany	4.6	3.2
Italy	5.4	1.6
Japan	8.7	3.4
United Kingdom	3.0	.3
United States	1.9	.1

Source: Economic Report of the President, January 1980, p. 85, O.E.C.D. data.

The sources of this economic enfeeblement are complex, and there is probably much that we do not understand, but there are some things that can be said. For one thing the evidence strongly suggests that there has been a sharp deterioration in the rate at which new technology is being generated. If, for example, we were spending the same proportion of our national income on research and development in 1965, these outlays would be one-third higher. Circumstantial evidence that this more sluggish generation of new technology is occurring is to be found also in patents for new inventions. There were 72 patent applications per billion of real GNP (1972 prices) in 1978 compared with 96 for 1970 and 108 in 1960.

PATENT APPLICATIONS AND PATENTS ISSUED

Year	GNP [1]	Applications [2]		Issued	
		Number [3]	Per billion GNP	Number [3]	Per billion GNP
1950	$533.5	67.3	126	43.0	81
1955	654.8	77.2	118	30.4	46
1960	736.8	79.6	108	47.2	64
1965	925.9	94.6	102	62.9	68
1970	1,075.3	102.9	96	64.4	60
1975	1,202.3	101.0	84	76.8	64
1978	1,399.2	100.9	72	70.5	50

[1] In billions, 1972 prices.
[2] For inventions.
[3] In thousands.

Source: Basic data from U.S. Department of Commerce and U.S. Patent and Trademark Office.

Moreover, sluggish investment has retarded the rate at which the new technology we do generate is introduced into the economy. Historically the net stock of nonresidential fixed capital has increased at the average rate of about 2½ per year—not surprisingly at about the same rate as the gain in productivity. Since 1970 there has been little net gain in our per capital stock. Indeed, the stock of capital per person employed has actually declined since 1975.

The problem, however, almost certainly extends beyond these identifiable factors A major part of this enfeeblement is probably the strangulating effect of government regulation. Obviously complaints by businesses about government red tape are not new, but analytical and circumstantial evidence suggests that this has exploded too fast and carried us into the zones where costs are exceeding benefits. This is clearly indicated by the growing analytical literature on regulation. This would be expected by the rapidity of the growth of social and economic regulation. The number of people employed for social regulation, according to the current issue of Regulation, has been rising at the rate of 20 percent per year during the last decade. And it should not surprise us that as the scope of government regulation of the details of economic life enlarges exponentially, the quality of the economy's overall performance deteriorates—since government-managed economies internationally have a remarkably uniform pattern of poor performance.

NET STOCK OF NONRESIDENTIAL FIXED CAPITAL

[In 1972 dollars]

Year	Total (billions)	Amount per person	
		In civilian labor force	Employed
1955	$451	6,940	$7,260
1960	533	7,660	8,100
1965	646	8,670	9,080
1970	833	10,080	10,600
1975	981	10,600	11,600
1979	1,097	10,660	11,320

Source: Basic data from Department of Commerce and Labor.

The American economy's poor performance, poor compared to our own history and poor compared to other industrial nations, forces us also to wonder if something is causing a decline in entrepreneurship. This cannot be that entrepreneurship declines as affluence makes people less hungry for income, since other economies with high income levels (e.g., Japan or Germany) still seem to have their quota of aggressive entrepreneurs. Perhaps theologians are winning their war on our economic system generally—with, of course, people generally, now denied the opportunity to look forward to gains in the real purchasing power of their pay checks, being the victims of this victory.

IV

These comments do carry with them some implications for policy. As for monetary policy, it seems to be on about the right track. The navigation of monetary policy by watching the aggregates, rather than specifying targets for aggregates but managing by interest rates, reduces the probability of over-doing during both the current recedence and the subsequent expansion.

Budget policy is in danger of getting off course. The current spasm will not produce a fiscal plan such that when the books are closed September 30, 1981, the budget will show a balance or surplus. It, therefore, weakens further the credibility of government. The current spasm is also saddling us with a tax system that bites more deeply into increases in income—thus further reducing incentives to earn and invest and create. We are in danger, in short, of arriving at the end of fiscal year 1981 with the worse of all worlds—a budget still in the red, and a tax system with stronger disincentives, and intensified cynicism about government's candor and its ability really to manage its fiscal affairs.

The Congress this year should at least do two things to taxes. The personal income tax brackets should be adjusted enough to avoid having inflation itself increase the real burden of this tax. And action should be taken to deal with the problem of under-depreciation and overstatement of profits which has increased sharply the proportion of true corporate profits paid in taxes—and therefore reduced sharply true retained earnings and capital formation.

Finally, the Committee should consider a careful, in-depth review of the economic consequences of the vast increase in social and economic regulation. It is quite possible that those on whom the regulations are imposed are right—that this is slowing down further an already arthritic economy.

Indeed, I would urge the Committee to be even more ambitious—undertaking a major inquiry, perhaps along the lines of the Temporary National Economic Committee 40 years ago, into the whole issue of our economic malaise. It would be appropriate for this Committee because of the complexity and breadth of the problem. A year from now we shall probably have passed the lower turning point cyclically, but we shall not have passed beyond our fundamental malaise. It would be good to begin the therapy in 1980. Nothing in the domestic area that will come before the Congress this year can match in importance this problem.

Senator BENTSEN. Professor McCracken, you are talking about the interest rate and monetary policy and moving away from gradualism. But then, one must react by lowering the rates once the effect is gained.

With that in mind, how do you interpret the drop in discount rate today, 13 to 12 percent, I understand?

Mr. McCRACKEN. Were you talking to me?

Senator BENTSEN. Yes.

Mr. McCRACKEN. If I had been on the board, I would have voted for it. I am not unaware that in foreign circles they are interpreting what they observe as a massive move back toward inflationary monetary policy. I had a long telephone conversation with a person in Paris just 2 days ago in which he was appalled at what he saw, what he interpreted, because he was watching only interest rates. But if one looks at the monetary aggregates, I don't see—I think what we are seeing is what we ought to see.

Well, may I amend it? I think if one looks at the monetary aggregates, what we are seeing in interest rates is what we ought to see.

Senator BENTSEN. Professor Jorgenson, we are pleased to see you again. It's a very interesting approach, and I want to touch on some of the things in your prepared statement.

For instance, you talked about a payroll tax cut as having a greater effect than cutting taxes.

How do you explain the substantial growth in labor relative to capital, as shown on the chart? Why wouldn't a cut in taxes on capital be more effective in raising productivity.

Mr. JORGENSON. Well, there are two ways to look at that, Senator. When I was referring to productivity, I was referring to a relatively abstract view of it. Let me make that explicit. Productivity, in the sense in which I used it throughout our discussion here, is the productivity of all factors, in other words, capital, labor, and energy—everything in the economy that goes to produce output.

If we focus on the question of labor productivity itself, then we want to think of two components: One is the increase in the ratio of the capital stock to the labor force, and the other is underlying rate of total growth in overall productivity. Both of those are essential components. It is certainly the case, as you are pointing out, that cutting business taxes will influence the growth of capital stocks, and stimulate the growth of capital stocks. By leading to higher rates of return, we can induce people to consume less and save more, stimulating the growth of the capital stock, and therefore substituting capital for labor in a way that will produce an increase in labor productivity.

Now, that is a desirable thing to do in itself. But if you look at the analysis of economic growth which underlies my testimony, it turns out that a whole of the slowdown that has occurred since 1973, can be attributed to the slowdown in the underlying rate of growth of total factor productivity. I have been trying to focus on economic policies that can stimulate the growth of productivity. I was neglecting the question of what can we do to increase the capital intensity of production. But you are right; they are both important considerations. The cut in business taxes will produce increased capital intensity of production, increasing labor productivity, and will simultaneously stimulate the growth of overall productivity.

Cutting payroll taxes will also stimulate the growth of overall productivity. Both kinds of tax cuts have a role to play in an economy in which the rate of productivity growth has been essentially zero since 1973, and threatens to become negative during the period that we are now confronting, say from 1980 until 1985. I am very concerned about the underlying growth of productivity and I want to focus on policy measures that will impact on that directly.

Senator BENTSEN. Professor Blinder, you made comments about how serious the problem of recession would be if savings had been up to its norm instead of the 3.4 percent of the last year, how much that would contribute to the problem in the worsening of the recession.

But does that give credit for those savings, for example, that would go into the thrift institutions, where that money would be available, where capital formation would be homebuilding or whatever? Don't you get yourself a feedback there that helps moderate that kind of a situation?

Mr. BLINDER. I think the answer, Senator, is that there are very different effects of savings in the short run and in the long run. In the short run, a rise in savings is a reduction in spending, which has the usual demand-side effects on the economy.

In the longer run, savings, if funneled properly through a well-functioning allocative mechanism, will, of course, go into some productive form—housing, industrial capacity, or something like that—which will raise the potential GNP of supply, the potentiality of the economy to supply output 1, 2, 3, or 4 years down the road.

Senator BENTSEN. The administration's plans for spurring investment productivity really seem limited so far. The gradual loosening of credit—but no action taken on the fiscal front.

Do you approve of that kind of monetary-fiscal mix? What constitutes, in your view, the best mix for the long-run objectives?

Mr. BLINDER. Are you addressing it to me?

Senator BENTSEN. Any one of you.

Mr. BLINDER. I think it's usually best to fight with both hands. And I think it is necessary to ease up on credit restrictions, especially the quantitative restrictions that have been started recently, if we are going to restore industrial investment and capacity.

By the same token, we also have a fiscal hand that can be used—and I argue in the testimony that it should be used via the mechanism of indexing the corporation and personal taxes. And I would view Professor Jorgenson's scheme of changing the depreciation system as one step on the road toward indexing. It takes care of the depreciation problem, but leaves unaddressed several other problems caused by nonindexing.

So this kind of balanced approach of a monetary policy that eases up—I guess I have to differ with Professor McCracken, that I still do believe in monetary gradualism in this sort of an environment, and am worried that the last 2 months are a bad omen—coupled with some sort of tax incentive on the fiscal side, together make the kind of program which we should be thinking about.

Mr. JORGENSON. I'd like to make a comment on your question about fiscal policy, Senator, that may not be directly responsive. But it may be enlightening. As I said a moment ago, I would like to see this committee consider a program of tax cuts that begins with the sizable cuts, say, $20 billion this year, to be in place by the beginning of 1981. That would be my first reommendation.

But I would like to emphasize the other part of the reommendation, which is that we need at least a 5-year program of tax cuts of similar magnitude with corresponding reductions in spending plans to keep the budget more or less in balance. I would like to supply the rationale for that in a little bit more detail.

It seems to me the administration, through OMB, which supplies the forecasts that are used by the Budget Committee as the administration viewpoint, the 5-year outlook, as well as the Congress, through the Congressional Budget Office, which supplies corresponding forecasts, have presented a totally unrealistic picture of the future of economic growth in the United States. In bringing in those forecasts in January—we're going to be looking at another set of forecasts in July—that's only a month away—they were still projecting rates of growth, real growth over the next 5 years, on the order of magnitude of 5 percent.

That, to my mind, is head-in-the-sand, total unrealism—it's just out of line with the experience that we have had since 1973. Therefore, when I am speaking about a program of tax cuts which is intended to deal with the problems of economic malaise that Professor McCracken referred to, it seems to me we have got to speak about changing the whole outlook of the Congress and the administration about the next 5 years of the American economy and what kind of spending it's going to sustain.

It seems to me, with the tax cuts that we are going to need—we will need a slowdown in Federal spending of the order of magnitude of the slowdown in the American economy. As I say, that seems to me to mean a maximum of, say, 3-percent real growth in Federal spending over this period. I would like to see it cut below that. But I'd like to see Federal spending proportion of GNP decline, because it seems to me that Congress and the administration together were very slow to get the message about what happened in 1973. Maybe some people haven't got it yet.

We're in a new economic era and it seems to me that the fiscal policy of the Federal Government and the forecast that sustains that policy from year to year are predicated on completely unrealistic expectations about how the economy is going to be able to perform. So I would like to see a complete revamping of fiscal policies. It seems to me that the prime objective should be to have a 5-year program of tax cuts and corresponding spending cuts. Once that is in place, then tax can begin to talk about the fiscal and monetary mix.

Senator BENTSEN. May I ask one question? Then I defer to my colleagues here. Professor McCracken, you're talking about interest rates, talking about monetary aggregates—and you're talking about your colleagues, your associates, and your friends in Europe calling in their concern about a precipitous drop in interest rates and how it is perceived—and their perception is important.

Now, does that mean what we do to monetary aggregates will have to be moderated by a perception as to what's happened to interest rates? Or does this mean that you think we have seen the major drop of the rates; that you're not going to see much change in interest rates, short-term rates, now, for a while? How do you read this?

Mr. McCracken. Well, as I mentally review the history of my forecast of interest rates, I don't have much confidence in it. [Laughter.]

In my response—I would expect them to decline further. But we do have to keep that issue of perception—in other words, we have to keep in mind not only what the substance of our policies ought to be but we have to keep in mind how it's going to be interpreted by the rest of the world, and particularly since we are so interlaced with the world economy now.

On the other hand, I guess my recommendation would be that we lean in the direction of pursuing the right substantive policy and if we are right, we ought to be able to win on the front of explaining why it is the right policy.

Senator Bentsen. Thank you very much.

Mr. McCracken. In other words, I'd rather do that than pursue the wrong policy on the assumption that they will interpret it incorrectly and therefore be relieved. [Laughter.]

Senator Roth. Thank you, Mr. Chairman. Mr. McCracken, in a recent Wall Street Journal editorial, you said that Congress has the next move. Today, the House of Representatives is going to vote on our budget resolution, which the President opposes. We over here on the Senate side will be voting on that in the very near future. A few days ago we had a number of economists here and I asked the question whether any of them thought the current proposed budget—either the one being recommended by the conference or by the President—was going to do anything substantial about productivity or turning this economy around.

And the answer was generally no.

I would like to ask each of you gentlemen the same question: Do you see the current budget being proposed by Congress or by the President as having any real benefits for or effect upon our economic program?

Mr. McCracken. The basic problem?

Senator Roth. Yes.

Mr. McCracken. No; I do not.

Senator Roth. Mr. Jorgenson.

Mr. Jorgenson. Relative to what, Senator Roth? If you think of the budget the administration came in with in January, what was under consideration then, and the changes that have taken place, it seems to me the movement, this whole budget balancing exercise, has had a salutary effect on inflationary expectations in the short run. But in terms of the specific question you ask the long-term impact on productivity, I certainly agree with Mr. McCracken. I don't see there's been much to contribute in that area.

Furthermore, it seems to me the administration passed up a great opportunity. They had a prestigious task force working on the problem of innovation and productivity and they essentially struck out. There is no legislative initiative that I know of that's part of this budget that is going to arise from that lengthy effort, in which Members of the Congress, members of the business community, economists, and so on, attempted to deal with the problems of innovation and productivity.

The administration apparently got nothing out of that they can use as a basis for budgetary initiatives. To my mind that's a tremendous disappointment.

Mr. BLINDER. I'll, of course, agree that in fact, what's contained in the budget does nothing for productivity, nor is it so intended. I think perhaps most of the things you think of that are pro-productivity policies involve cutting taxes one way or another, which of course will open the budget deficit wider. And the whole focus of the recent budget exercise was on closing that deficit.

Senator ROTH. I would just note that the proposal to hold down spending beyond the original budget or to make the effort to balance it really came about because of a Senate initiative to limit Federal spending. It did not go as far as I thought it should have. I wanted them to limit it to 21 percent so there would be room for a real tax cut.

Now, again, I am just trying to get a consensus here. I regret that I missed part of the testimony. But I understand each of you gentlemen does agree that we need some tax relief now. There is no disagreement on that.

One question I have for you, Mr. Jorgenson. You emphasized in your testimony that something should be done about payroll tax, but you don't seem to favor doing anything about personal income taxes. My question is why? Why not lower the income tax rates? The income taxes are, after all, paid by the workers. They are also part of their wages. Wouldn't that help encourage personal savings as well as work effort?

Mr. JORGENSON. It would. I guess I see that as just a somewhat more complex matter. It seems to me that the problem that we are confronting involves two different components: One, the effect of inflation on tax brackets, the "creep," if you like, that increases the real tax burden associated with a given set of tax rates. That's the problem my associates and I have addressed. I think it's a real one.

I am more concerned directly with the impact of higher payroll taxes that are scheduled for January 1, 1981. I would certainly like to do something about the personal income tax, but I see the payroll tax increases that are going to occur in January 1981 as a clear and present danger that has to be dealt with very forcefully and immediately. And that's why I emphasize that.

In terms of a program of further tax cuts, though, I could easily see grounds for supporting tax relief in the form of changing the brackets so as to reduce the real tax burden. I consider that as a positive step. It's just a question of what you can afford at the present time. If you're talking about $20 billion for this year, that's barely enough to pay for the kind of capital recovery proposal I discussed and for the payroll tax.

Senator ROTH. When you say "this year," are you talking about fiscal 1980?

Mr. JORGENSON. Fiscal 1981.

Senator ROTH. The difficulty I have is that it doesn't seem to me to be readily apparent—as long as you let the workers keep the money—which vehicle to use. I would point out that, as far as the increase in social security goes, I made a proposal with respect to the windfall profits tax where we could take part of those profits to use for a nonpension trust fund and allay them. But I regret to say, I lost it by a 10 to 10 vote. However, we hope to do something.

My real concern is that we have both a short-term problem—the current one, which I think requires some tax relief—and a more important long-term problem. I don't see any evidence of the Congress or the administration really doing anything to get us back on the right course.

I'm sure a lot of you read Vogel's article recently in the Wall Street Journal which said that we're in permanent decline, that in just a matter of a few years, Japan is going to become "No 1," and that we soon will no longer be the largest industrial nation. To me, that means we should have some long-term tax proposals.

We are going to take something like an additional $1 trillion out of the private sector by 1990 with the tax system currently on the books. As you know, I have been a strong proponent of the idea that we ought to have a 3-year, across-the-board tax cut. We ought to build some tax incentives to get people to save. That was what Representative Clarence Brown and I have proposed—that we tax savings separately from earnings so that we can start both at 14 percent.

I also feel we ought to be doing something about business tax, both regular corporate rates as well as capital depreciation—that is, the 10–5–3 of your proposal, Mr. Jorgenson.

Is there any reason why we should not begin to place all these tax proposals, in light of the really tremendous increase in taxes that is going to come about in our economy in the next 10 years?

Mr. JORGENSON. We should be doing that right now. I don't want to respond directly to the proposal that you and Congressman Kemp have made. Let me simply say, I would favor a proposal that would involve a long-term view. As these things go, let's say 5 years would be a long-term view. In that sense, I'm very favorably impressed by the approach you have taken. But whether the tax cut should take that specific form or some other form I guess depends on the circumstances. I don't think it's a matter of getting us back on the track; I think it's a matter of essentially sustaining relatively unsatisfactory performance in the areas of 1973 that we're talking about. We're not talking about recreating the situation of the 1960's. That would take a much more sustained effort, with a view toward accomplishing two things:

First of all, we must deal with this problem of unrealistic expectations about what kind of growth and expenditures the economy will sustain. As I say, if you look at the official budgetary documents, the supporting evidence presented to the Budget Committees on which budget planning has been based, you still have the fact that the basic projections of economic growth are just completely out of line with reality.

The order of magnitude of 5 percent real growth in GNP and the spending and revenue planning that was done on that basis over this 5-year period—the first order of priority is to get our facts right. That just isn't the way the economy is going to develop. There's no prospect, even under a scheme that would represent a very substantial cutback in Federal spending and corresponding tax cuts, of getting back to anything like 5 percent real GNP growth. That will just be out of the question.

It seems to me once we've got the facts right, what we're going to have to do is to cut the plans for spending growth. We're going to have to look program by program and try to keep Federal spending at 21 percent of GNP or something below that. I'm certainly very strongly in favor of that. It seems to me that's going to provide the wherewithal for the tax cuts that would be of the order of magnitude of $20 billion a year.

That would not pay for the program you have proposed. It would be a much more expensive program. If we could go as far as you have proposed, I would certainly like to do that. But it seems to me that it may be out of line with what's really achievable, given the kind of spending programs that are likely to develop.

Senator ROTH. Mr. McCracken.

Mr. McCRACKEN. The thing that has impressed me here this morning is the rather broad measure of agreement on what I would call the fundamentals. We could argue about, for example, on the issue of capital recovery; there are various ways to go about it. But I think there is a broad measure of agreement that some action is needed.

The idea—it just seems to me we have to face the fact that this economic malaise, or whatever you want to call it, has gone on for so long and has become so serious that the idea, well, let's wait and see whether or not we can get spending under control and at some undefined time in the future then maybe we can do something about taxes, is simply a formula or a strategy for just jogging along on the kind of path we've been on.

I think what we have to do maybe is to have a little faith or something that if we do the right thing on the taxation side we will start at least to get a little better performance in the economy, and perhaps we can then, under the pressure—partly under that pressure—do some things on the spending side that we need.

But if we keep deferring because the short run doesn't look very good or we can't put forward something that plausibly can be called a balanced budget for fiscal year 1981, then we are sacrificing very important matters for the longer run, just for something that's substantially cosmetic.

I believe it was Alfred Marshall, the great British economist, who said: "One of the problems is that fundamental matters are always becoming a casualty of pressing matters." And we don't want to make that distinction now. We can't afford to make it now.

Senator ROTH. I can underscore that, because I have been trying to push tax relief for years. I agree with you—there are many different ways of approaching the problem. But there's always, "let's wait until tomorrow." That is still seen today.

Mr. Blinder.

Mr. BLINDER. Just very briefly, my guess is that most of that very large number, a trillion dollars between now and 1990, that you're speaking about is due to the automatic filling of the Government's coffers from inflation, which overstates capital income, causes bracket creep, and things like that. It's exactly those sorts of considerations that have led me in the testimony to recommend indexing both the corporation and the personal income taxes. I think that would get rid of quite a bit of that trillion dollars. I don't know how much.

Senator ROTH. The other side of the coin is that we reduce government spending; reducing it from today's 22 percent of GNP to 18 percent by the year 1984.

But my real concern is the one I mentioned earlier. I don't see this Congress doing anything to attack the long-range problem. I think anything we do this year, unfortunately, will be targeted for November, for the short run.

Senator Javits.

Senator JAVITS. Gentlemen, I think that you have given us a good deal of very interesting, important orthodoxy in which you have developed a rather complete measure of agreement. I would like to try you on a bit of unorthodoxy, just to see what it produces in the fine minds you all have. And I start from this point: If you were running a business and you had a choice either financing your business by the accumulation of profits and not through dividends, or by the borrowing or selling of equity in your business, I would assume, as a former business lawyer, that it would be an open and shut choice. Of course you would use the profits to build up your business, especially with Government incentives like the investment tax credit and so on.

Now, all of you are advising that this is what we should not do for the United States. Mr. Jorgenson points out, for example, that our whole attitude is, "head in the sand, total unrealism for the next 5 years."

Why? He bases it on energy. He's absolutely right. We have been fumbling around now since 1973–74 with an energy program. Essentially, if we had plowed into it Manhattan Project style, there would probably be coal slurry flowing through the pipelines from Wyoming to Pennsylvania, right now. And yet, we are not even thinking about it. Maybe it would be included in one of these new bills that we haven't even approved in conference.

We are talking about the cataclysmic effect upon our country, not just in the economy, but in security, as in the fall of U.S. productivity. After all, gentlemen, what have we got that the Russians haven't? Not armaments, nor arms factories; we have a marvelously flexible industrial plant. We have won wars with that. That's the crusher. And what are we doing to it? It's getting rapidly obsolescent.

So I ask you this question: Why don't we adopt what you want—a long-range policy now? Why don't we, as my dear friend Senator Roth and I have so much in common on many of these matters have both suggested, why don't we accumulate the money and target whatever tax reduction we do have, if we have any, to a tax cut for business?

I'm not even going to anticipate what it is, whether it's rates, or an enhanced investment tax credit, or Jorgenson's scheme, or the ADR scheme, or whatever. You fellows decide that. But just target that $20 billion for business, not for 1 year, but for 5 years.

You earn it if you modernize, if you increase research and development, if you get more patents and technology, and so on. And why don't we do it now and say to the individual, look, what do you want? A few more bucks in your jeans to buy a fishing rod that will cost you twice as much, or do you want a job in the future and security in a secure country?

I want to tell you as a politician, he'd much rather have the latter. I'm campaigning now. That's what I'm campaigning on.

So I ask you that question. You've all got fine minds. Why not—isn't that the clearly indicated answer?

Mr. JORGENSON. Let me be direct, Senator—no, The reason that it's not the answer is the following, and it follows from my diagnosis of the problem. As I say, the problem that we're dealing with is the consequence of our energy problem. I agree with you that if we had had the political fortitude to deal with the energy problem in 1974 or when we had the opportunity again in 1975 to eliminate price controls on energy when the other price controls that were the result of the so-called new economic policy of 1971 were removed, if that head been done, I agree with you—we'd be very far ahead.

That's essentially what the Japanese and Germans did and they're better off for it, even though it was hard sledding. They went through a very difficult period relative to what we went through in the United States. Now if you focus on the problem of energy prices and the fact that we've had another step increase in energy prices—we've gone up from essentially $12–$13 a barrel into the $34 a barrel range—up 130 to 140 percent—it follows that you have to do something to counteract that.

And to counteract that, you need a balanced program. You need a program that will, as you say, give incentives to savers, give incentives to businessmen to deploy capital, and more important, to use it efficiently, which is what I keep focusing on. And I think it's very important not to blunt the impact of anything done for business by doing the wrong thing.

That's why I keep emphasizing you have to have something like a first-year capital recovery system rather than something like Conable-Jones much as I respect those gentlemen and their supporters. Nonetheless, they are overlooking a very basic point—namely, the impact of tax policy on the efficiency of which capital is used.

The other point I want to make there is simply this—is to counteract higher energy prices, certainly cutting business taxes is a positive step. I am glad you are campaigning on that. I'd be very supportive of that idea. But its' equally important to cut payroll taxes. That also has some very important contribution to make to productivity.

I'm not as concerned as many people are about employment. I'm not concerned about jobs. The reason for that is that higher energy prices have the impact of creating a lot of jobs by not replacing people with energy and capital. That would have been profitable to do at a much lower level of energy prices. And I think that that's the lesson that we have learned. We've had dramatic employment increases over the recovery of 1973 to the present, and I think when we recover from the current recession, we're going to see the same thing. Employment prospects, I think, are pretty bright given higher energy prices.

The real problem is productivity. Now given that fact, it seems to me that we have to have this balanced program. Both the payroll tax cut and the business tax cut can contribute to productivity growth, which is what counts. It seems to me if we want to stimulate the growth of real income, or at least keep the growth not at the relatively unsatisfactory level we have just experienced, that we need that balanced program, that a business-oriented program by itself is really not sufficient. If we allow the payroll tax to creep up, that is going to have a very strong deterrent impact on productivity.

Senator JAVITS. So, if I may, is it your point that productivity is a matter of the morale of the worker rather than the inadequacy of the modernization of American business with the necessary machinery and innovation?

Mr. JORGENSON. No. Just that in order to modernize, we have to have the use of skills and human resources, as well as physical resources, and both are necessary. Both are needed in order to produce a growth in productivity. But it's not a morale factor. I'm not looking, in other words, at the supply side of the labor market and being concerned about who's going to work, how enthusiastically they're going to work.

What I'm concerned about is what is the effective cost that businessman we have in the back of our minds here is going to confront us in making decisions about what changes to make in his technology or whether to employ more or fewer people? It seems to me that those decisions are going to be made better if the payroll tax is lower. They will be made lower if the business tax is lower. And that's why I favor a balanced approach.

Senator JAVITS. What about the proposition of cutting the worker into the profits instead of a tax cut, cutting in the worker on the avails of increased productivity in a fair and proper way? It's been tried now a little bit, but not enough. What about that? That's really, again, proceeding on a plus, not a minus side.

Mr. JORGENSON. I can see that as a positive step.

Senator JAVITS. Then, Mr. Jorgenson, isn't it true what you have done is answered my question yes, not no?

Mr. JORGENSON. I don't think so, Senator. But I do feel there's something to what you're saying.

Senator JAVITS. Could we hear from you?

Mr. BLINDER. Yes. Senator Javits, I would like to give you two orthodox responses to your unorthodox queries. The first is that we do, in addition to the long-run problem, face a short-run problem: we are currently sliding into a recession that at this point looks serious. It's perhaps not the most likely scenario, but it's certainly not out of the question that this recession could wind up as serious or more serious than the 1974–75 recession.

If the Congress wants to do anything about that in the way of giving the economy a short-run kick in the pants, business taxation is not going to do it. No form of business taxation will do it.

The only way to do it is through personal tax cuts. That's for the short run.

Now the second thing I would like to say in response to your suggestion is that it's not the case that it only matters how many dollars we give back to business. Different types of tax incentives and disincentives set up distortions in investment planning, such as whether you invest in plant or equipment, longrun versus shortrun, how you finance the corporation, things like that. And the same $20 billion in tax relief given in 12 different ways will have 12 very different effects, both on the volume of capital formation and on the type of capital formation that is done.

So I don't think it's just a question of giving them some money and letting them do what they want.

Senator JAVITS. Mr. Blinder, you note I said I was going to leave that question to you three gentlemen. You can divvy it up as you please.

Mr. McCracken is a very old friend. Doctor, let me welcome you here. You haven't been with us in a long time. I would like to thank you for being so wonderfully generous as to have participated in the Republican Task Force which unified the Republicans on economic policy, which I think proved very helpful to the long-range views of this country.

I would greatly appreciate your views.

Mr. MCCRACKEN. In terms of priorities, I think your emphasis is where it ought to be. Let me just say parenthetically, I do think there is a strong case for a balanced package which does include at least some action to avoid the unlegislated increase in the real tax burden on individuals simply because of inflation.

But the key problem here, it seems to me, has to be something that will revitalize capital outlays in order to quicken the pace of adjustment of the economy to the kinds of problems, particularly in the energy area, to which Professor Jorgenson has alluded. It's one of our basic problems.

One of the reasons our production performance has become so poor relative to that in the industrial world generally—of course, productivity gains in most of the industrial countries have declined, but our performance is poorer relatively—is that with the low savings and low capital formation rates that we have, our capacity to adjust to these new problems is very arthritic.

And we are stuck, therefore, with a higher percentage of our capital stock reflecting the kind of—for example, the kind of real energy crisis that we had a decade or so ago. Now, if we could have had more action on the energy front earlier, that would have helped. Given the energy crisis that we had, it would also be helpful if the economy could be adjusting more quickly to it.

Senator JAVITS. Gentlemen, thank you very much.

May I say, Mr. McCracken, that these tables you have given us, one of which shows the patent applications and patents issued, deal, as you say, with orders of magnitude. That is extremely important to me. You call our attention to one of our very grave national failings.

Another thing which we haven't discussed—if any of you have a comment here—I would greatly appreciate hearing what is happening to corporate management. Corporate managers are no longer entrepreneurs; they're trustees. No wonder they want that shot in the arm. It's the next quarter's earnings that are so important, these men are at hazard every year. Even labor leaders generally get 3 years. These fellows in the corporate seats don't even get that. And that's a big problem for business, I might tell you, because it certainly deprives top management of a lot of that view down the road which, as you gentlemen say, is so very important. Does this call for very considerable reform?

Mr. JORGENSON. Let me respond to that, Senator. I think you have put your finger on the very fundamental consideration as far as productivity growth is concerned. Let me say, I viewed the stance of the Congress—not the administration, which I discussed earlier, but the stance of the Congress in this area—as forthcoming on this issue.

It seems to me there have been two very important, but little noticed steps that have taken place through congressional initiative. One is the development of the so-called small business investment corporations, which have access, as you know, to small business funds and are then in the position of lending out money as venture capitalists to entrepreneurs who are eager to promote new ideas that in fact can be very threatening to established business enterprises and therefore are going to be things that can lead to progress.

It seems to me that's been a very important initiative. And whatever steps can be taken to reinforce that initiative to be sure that it's adequately funded, making sure the tax structure is adjusted in such a way that the small business that benefits from the financing received through this get a chance to keep it and plow it back, as you indicated—and it's something that's in the works, as you know, along those lines in the treatment of subchapter S corporations, which many of these people are in, to make money. It seems to me that's been a very positive step.

Another very important positive is the fact that the Congress rolled back the provisions on capital gains which were adopted originally in the 1976 tax legislation. I believe it was rolled back in 1978. That has already had a prodigious impact on the growth of new ventures.

In fact, I was a participant in a discussion not too long ago in which one of the local sharpies, whose name happens to be Sharpy, in Boston, which as you know is a center of intellectual ferment in these areas—a lot of venture capital people there, and a lot of the customers, and it has transformed the State's economy recently. He said the environment was as favorable for innovation from the point of view of the supply of capital as it had been any time in his long experience, going back 20, 25 years as a venture capitalist. And it was the result of congressional action.

It seems to me that has been a very positive step. And small things like that, which don't get a lot of publicity and a lot of visibility, are extremely important. And it's very important for the Congress and especially for this committee, concerned as it is with these long-term issues, to be very sensitive to that kind of legislation and do what it can do to promote entrepreneurship.

I am not of the view—maybe because I'm in the higher education business, which is declining and somewhat more than industry—that American management is declining. I see a lot of managers, and I know I'm old enough so I've seen them come and go, so to speak. I must say, they're a pretty impressive lot, almost as impressive as American workers.

Mr. BLINDER. I have nothing to say on that.

Senator JAVITS. Mr. McCracken.

Mr. McCracken. I would wholly agree with the comment that you ended on there. Here I speak as a corporate director. I think as far as the quality of management is concerned, it probably is as good as I have seen it. And I have been observing this myself over a good many years.

I am a little less certain about this intangible thing that we call entrepreneurship. I think there is a kind of a Zeitgeist, as it were, of the time that is not conducive to entrepreneurship. As a matter of fact, I think I read in one of the Washington papers either last night or this morning the rhetorical question: Where are the guys who were inventing zippers and safety razors and that sort of thing, things that start out small and become major industries?

Now, I realize one probably, back there when the zipper was first invented, would not have been attaching any great significance to it or any of the other items. But it does seem to me that there is room for concern on the question of whether the vigor or the kind of creativity and entrepreneurship that, for example, Professor Schumpeter was talking about in his writings a generation ago, whether that is with us to the extent that it used to be or to the exent that we see it in some of the other countries.

Senator Javits. Thank you very much, gentlemen. You have been extremely helpful. We will profit from your observations.

If there is no further business, the committee will stand adjourned.

[Whereupon, at 12:05 p.m., the committee adjourned, subject to the call of the Chair.]

O