SECOND CONCURRENT RESOLUTION ON THE BUDGET—FISCAL YEAR 1977

HEARING

BEFORE THE

COMMITTEE ON THE BUDGET
UNITED STATES SENATE

NINETY-FOURTH CONGRESS

SECOND SESSION

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THURSDAY, AUGUST 26, 1976

U.S. SENATE,
COMMITTEE ON THE BUDGET,
Washington, D.C.

The committee met at 10:05, pursuant to notice, in room 357, Russell Senate Office Building, Hon. Edmund S. Muskie (chairman of the committee) presiding.

Present: Senators Muskie, Moss, Hollings, Cranston, Bellmon, Buckley, McClure, and Domenici.

Also present: Douglas J. Bennet, staff director; John T. McEvoy, chief counsel; Robert S. Boyd, minority staff director; Sidney L. Brown, senior counsel; Arnold Packer, chief economist; Marc Lackritz, deputy chief counsel; and W. Thomas Foxwell, director of publications.

Chairman MUSKIE. The committee will be in order. We have limited time and I will proceed immediately if I may.

First, I have a very brief statement to set the context of this hearing this morning.

OPENING STATEMENT OF CHAIRMAN MUSKIE

Dr. Rivlin, we are very glad to have you with us.

Today's hearing will be the only one in connection with the second concurrent resolution for fiscal year 1977. The reason for this is that Congress made its major fiscal and budget policy choices at the time the first concurrent resolution was adopted. Judging by this week's Scorekeeping Report, we have managed to come out virtually on target as far as our overall spending plans are concerned. We are quite close to target in almost all of the functions.

Moreover, 10 out of 13 appropriation bills have already been passed by the Senate. There is the clear prospect that all of them will have been passed by the time this second resolution is adopted. This is the first time in a quarter century that Congress will pass all appropriations before the new fiscal year begins.

So it appears that the Congress has been generally faithful to the policy choices it made in the spring. We will have our budget work done on time. Action on the second resolution will probably not, therefore, be an occasion for fresh policy initiatives.

ECONOMIC POLICY

The one factor which could change this, of course, would be a significant change in the economic assumptions upon which the first concurrent resolution was based. I think I speak for the majority

of this committee when I say that we take some pride in having helped Congress devise an economic policy which brought an end to the recession and put the Nation on the road to recovery. But we want that recovery to continue. We want to see steady progress toward full employment, with the minimum possible amount of inflation. Today we need to have CBO's best estimates of the economic outlook for fiscal year 1977, and we also want to explore long-range policy options for maintaining steady recovery through 1890.

I will yield to my colleagues for statements.

Senator Bellmon has none.

Senator Moss has a statement he did not have an opportunity to give and without objection it will be included in the record.

Statement of Senator Moss

As the Chairman's statement suggested, today's hearing to review fiscal, economic and budgetary activities will provide background in preparation for the budget markup which begins next week on the Second Budget Resolution for fiscal year 1977. As my colleagues know, the second resolution is designed to either revise or reaffirm the spending and revenue targets established by Congress in the first budget resolution passed in May. As you know, under the new congressional budget process in the spring we review the President's budget, consider the economic situation and set targets for the allocation of Federal funds. The second budget resolution in the fall provides the opportunity to make necessary adjustments in these budget plans after Congress has generally completed work on individual line items and the economic picture for the coming fiscal year is better known. Accordingly, the second resolution does not require development of a new budget plan, but rather modification or affirmation of a plan already well along in the process of implementation.

SPENDING RESTRAINT

A review of the Senate Budget Scorekeeping Report shows that the spending side of the budget is pretty close to the plan laid out in the first resolution. Congress has been sticking close to its targets measured in both outlays and budget authority. Not all of the cost-saving objectives recommended by this committee in the first resolution have been achieved but where spending has risen above projected levels it has generally been offset by other savings. Such spending restraint, or budgetary discipline, is essential if the new congressional budget process is to be effective.

And the results of fiscal 1976—when Congress for the first time not only set a spending ceiling but stayed well below it—show that at long last Congress has an effective mechanism to control the budget and better manage the Nation's financial affairs.

PRESIDENT'S MIDYEAR REVIEW

In preparing for the budget markup next week the committee has the President's midyear review dated in July. Estimates on a number of items in the President's budget were increased in his midsession review in July over his original estimates in January. For example,

his total budget has gone up to $400 billion, he shows greater budget expenditures for defense, energy, health, veterans, and housing and community development programs. At the same time, the President's most recent forecast revises downward by $2 billion his earlier estimate for receipts on royalties from sale of leases on the Outer Continental Shelf. While these estimates appear to be moving toward those in the First Concurrent Resolution, I would be interested in your later comments on such changes. As I recall when this committee and CBO reviewed the President's budget submission earlier in the year, there was a feeling that many of the expenditure estimates and participation rates in social programs were unrealistic or understated ad certain receipts such as OCS were overstated, thus, giving the appearance of a smaller budget.

Among the other questions of interest to the committee are those relating to economic growth, inflation, unemployment and productivity.

Apart from the obvious impact on revenues and the deficit, what are the likely impacts to be expected if Congress fails to enact the $2 billion tax reform contemplated in the First Concurrent Resolution?

These are some of the questions on our minds as we prepare for the budget markup.

Chairman MUSKIE. Senator Hollings.

Senator HOLLINGS. None.

Chairman MUSKIE. Senator Cranston.

Senator CRANSTON. No.

Chairman MUSKIE. Alice, thank you very much for coming, please proceed.

STATEMENT OF DR. ALICE M. RIVLIN, DIRECTOR, CONGRESSIONAL BUDGET OFFICE

Dr. RIVLIN. Thank you very much, Mr. Chairman and members of the committee.

I appreciate this opportunity to discuss the economic outlook and the present status of the Federal budget as you prepare for the Second Concurrent Resolution for fiscal year 1977.

CBO ECONOMIC FORECAST

The Congressional Budget Office recently issued a detailed analysis of current economic conditions and a forecast for 1977 entitled "Sustaining a Balanced Expansion," which, with your permission, Mr. Chairman, I would place in the record.[1]

Chairman MUSKIE. Without objection.

RATE OF RECOVERY

The essential message of this report is that the present recovery is projected to continue through 1977, but at a slower pace than during the first five quarters of the upturn. As shown in the attached table, real GNP is expected to grow at an annual rate of between 5 and and 6.5 percent for the rest of 1976 and between 4.5 and 6.5 percent during 1977. In the first five quarters of recovery, output grew at a 6.7 percent annual rate.

[1] See p. 38.

ECONOMIC PROJECTIONS, 1976 AND 1977

	Actual (preliminary) 1976:II	Projected Range		Projected Growth (annual rate, percent)	
		1976:IV	1977:IV	1976:II to 1976:IV	1976:IV to 1977:IV
GNP, Billions of Current Dollars	1673	1755 to 1785	1965 to 2005	11.5 to 12.5	11.0 to 12.5
GNP, Billions of 1972 Dollars	1260	1290 to 1300	1350 to 1380	5.0 to 6.5	4.5 to 6.5
General Price Index (GNP deflator, 1972 = 100)	133	136 to 138	143 to 147	5.5 to 6.5	5.0 to 7.0
Consumer Price Index (1967 = 100)	169	172 to 175	181 to 186	5.0 to 6.0	4.7 to 6.7
Unemployment Rate (percent)	7.4	6.9 to 7.3	5.8 to 6.4	--	--

SOURCE: United States Congress, Congressional Budget Office, Sustaining A Balanced Expansion, 3 August 1976, p. 13.

This range of growth projections implies a continuation of the downward trend in the unemployment rate to the 6.9- to 7.3-percent range by the end of this year and to between 5.8 and 6.4 percent by the end of 1977.

The inflation rate is projected to remain in the 5- to 7-percent range during the next six quarters, and an upward movement in short-term interest rates is expected.

In sum, our present forecast is quite similar to the one we prepared last March for your use in framing the First Concurrent Resolution on the Budget.

DEVELOPMENTS WHICH BEAR CAREFUL WATCHING

Although these projects represent our best estimates of what is most likely to happen, some or all of them may not be realized. I would like to mention several types of developments which could invalidate the forecast and which, therefore, bear careful watching.

First, the projections are based on a number of assumptions; adherence to the First Concurrent Resolution on the Budget; monetary growth slightly above the Federal Reserve's target range; 5 to 6 percent annual growth in exports; a 4-percent average annual increase in farm prices; and an 8-percent average annual rise in fuel prices. Major deviations from these assumptions—for example, substantially higher food prices in 1977—would require a revised forecast.

Second, indications are that the recovery is in a lull. Although it seems likely that this lull is only temporary and that the recovery has sufficient upward momentum to sustain itself at least through 1977, it is particularly important now to monitor the indicators as they come out. The unemployment rate rose from 7.3 percent in May to 7.5 percent in June to 7.8 percent in July, although the July increase was caused by a sharp jump in the labor force, rather than a slowing in the growth of employment. Retail sales were down in July compared to June and April, and housing starts in July were 9 percent below starts in June. The growth in industrial production tapered off to a 0.2 percent increase in July from an 0.4 percent increase in June and a 0.9 percent increase in May.

We believe, however, that this slowing in the recovery is only temporary and that growth in the fourth quarter will pick up again. There are various indications that both investment and consumption will rebound later this year. For example, new orders for nondefense capital goods rose 14.1 percent in July. Housing permits—an indicator of future housing activity—increased 6 percent in July to the highest level in more than 2 years. Retail sales, though down in July, were up substantially in the first 2 weeks of August. The growth in industrial production has been recently slowed by the coal and rubber strikes which now appear to be settled. The July increase in personal income—the largest percentage increase in 6 months—should further stimulate retail sales and production.

Nonetheless, the current lull does mean that the third quarter growth in constant-dollar GNP is likely to be closer to the 4.3 percent experienced in the second quarter of 1976 than to the more rapid pace of the first quarter of 1976.

MONETARY POLICY

Other factors create uncertainty about the forecast. One such area is monetary policy and the future course of interest rates. Typically, interest rates rise during periods of rapid economic growth, but this time they did not. Rather, they stayed almost level during the past year of recovery, and short-term rates currently are slightly lower than they were at the trough of the recession. One explanation for the absence of an upward trend in interest rates during the early phase of the recovery is the slowing of inflation during that period and the consequent reduction of the inflation premium in the rate, as set by financial markets.

If monetary growth continues at a rate slightly above or at the upper end of the Federal Reserve's target range, we expect short-term interest rates to rise only gradually throughout the forecast period. Such a rise would be consistent with the tendency of interest rates to rise in previous recoveries and we do not foresee a further significant decline in the inflation rate to offset this tendency. Specifically, our forecast shows the 3-month Treasury bill rate rising from its current 5.1 percent to 7.1 percent by the end of 1977.

We do not expect interest rates to rise to a level high enough to cause a serious outflow of funds from savings institutions during the next year and a half. This means that housing is not likely to be hampered by a credit squeeze, although housing activity is not likely to increase as fast over the next year and a half as it did early in the recovery.

Although the Federal Reserve targets presently appear consistent with only gradually rising interest rates, given the economic projections in our report, the report simulates a number of alternative monetary scenarios and projects their impact on inflation, unemployment, and growth. A 1-percent increase or decrease in the rate of growth of the supply of money defined to include savings accounts, for instance, is projected to affect nominal GNP by $10 billion in either direction, the unemployment rate by 0.2 percentage points, and the rate of increase in the Consumer Price Index by 0.2 percentage points by 1980.

FISCAL STRATEGY

To summarize, although many uncertainties apply, the First Concurrent Resolution on the Fiscal Year 1977 Budget implies a fiscal strategy which, if coupled with only moderate increases in interest rates and smaller increases in food and fuel prices than were experienced in the 1973–75 period, will most likely result in a continued, but slower, recovery through 1977. This will leave both the measured unemployment and inflation rates in the 6-percent range at the end of that year. Industrial capacity will not, in general, be strained by such a recovery.

If implemented, the resolution will provide more fiscal stimulus than the proposed administration budget. However, it is slightly more restrictive than the 1976 budget. The high employment deficit, about $10 billion at an annual rate during the first half of calendar 1976, will move close to zero by the end of 1977. The actual Federal deficit will also be much smaller in fiscal year 1977 than in fiscal 1976.

FISCAL POLICY ALTERNATIVES

Although major changes in fiscal policy are not under active consideration at the present time, we have analyzed the possible effect of small departures from the First Concurrent Resolution for Fiscal Year 1977.

One such departure would be a sustained veto of much of the proposed public employment legislation. Specifically, elimination of $5.6 billion in outlays on public employment is estimated to reduce employment by 400,000 by the end of calendar year 1977. Unemployment would be about 0.3 percentage points higher than in the baseline forecast. Although the impact on prices is likely to be negligible in the short run, the inflation rate might be reduced by about 0.3 percentage points by 1980.

An expansionary alternative that would add an additional $10 billion in outlays to the First Concurrent Resolution was also analyzed. An added $10 billion in outlays would reduce the unemployment rate by about 0.2 percentage points by the end of 1977, and add about 0.2 percentage points to the inflation rate by 1980.

STATUS OF THE FEDERAL BUDGET

One of the key assumptions underlying our present economic forecast is adherence to the spending and revenue targets of the First Concurrent Resolution for Fiscal Year 1977. The latest budget scorekeeping figures are contained in this week's Senate budget scorekeeping report which was issued Monday, August 23. Based on this report, it appears that the assumption is valid, although both congressional action and economic developments can still influence the actual outlays and revenues for fiscal year 1977. Key points in the report are summarized in the Budget summary table.

FY 1977 BUDGET SUMMARY
(In billions of dollars)

	1st. Con. Res. target	Current Status[1]	Potential Status[2]
Revenues	362.5	360.2	360.6
Outlays	413.3	394.6	414.3
Deficit	-50.8	-34.4	-53.7
Budget authority	454.2	416.1	447.7

Source: Senate Budget Scorekeeping Report No. 77-5, August 23,1976

1 Current status consists of action that has been completed by the Congress or is underway in the Senate.

2 Potential status consists of action to date plus possible congressional action on revenue or spending legislation that is not yet reported in the Senate. This includes all formal budget requests by the President that have not yet been considered by the Senate, plus other items that in the judgment of the Senate Budget Committee staff may require funding later in the fiscal year.

OUTLAYS OF $414.3 BILLION

The First Concurrent Resolution set an outlay target of $413.9 billion for fiscal year 1977. As of August 23, CBO estimates that action completed by the Congress, or underway in the Senate, would produce outlays of $394.6 billion. In addition, the Senate budget scorekeeping report shows that another $19.7 billion in estimated outlays may result from appropriations and other spending actions that have not yet been considered by the Senate. Therefore, total potential outlays for fiscal year 1977 would be $414.3 billion, or $1 billion more than contemplated in the First Concurrent Resolution.

The potential outlay estimate of $414.3 billion includes the latest Congressional Budget Office estimates of spending that will result from current actions of the Congress as well as from programs such as social security benefits and interest on the public debt that do not require current action by the Congress. CBO updates each week the Senate scorekeeping figures to account for current legislative action, and periodically revises the figures to reflect nonlegislative actions, such as changes in economic assumptions or in program spending patterns. These periodic reviews of nonlegislative changes in spending estimates are timed to follow the Office of Management and Budget's quarterly review of budget estimates. Thus, the August 23 Senate scorekeeping figures incorporate CBO spending reestimates resulting from the OMB July 16 midsession budget review and also our own analyses of factors affecting budget cost estimates, including insofar as possible, analysis of the effects of actual fiscal year 1976 spending on the fiscal year 1977 estimates.

Details on these CBO reestimates have been provided to the committee staff and I understand they will be summarized in the staff markup documents for the Second Concurrent Resolution.

REVENUES OF $377.8 BILLION

On the revenue side, however, it appears likely that fiscal year 1977 revenue will be somewhat below the First Concurrent Resolution target level. The key assumptions in the First Concurrent Resolution target of $362.5 billion were: (1) that extension of the December 1975 temporary tax reductions would result in a $17.3 billion loss; and (2) that enactment of tax reform legislation would produce a $2 billion net increase in revenues. The second of these assumptions is unlikely to be fulfilled. Estimated overall revenue collections for fiscal year 1977 under current law do remain unchanged at $377.8 billion, and the Senate-passed tax bill does extend the December 1975 temporary tax reduction through the end of calendar year 1977. However, other provisions would reduce revenues in fiscal year 1977 by $300 million instead of providing an increase of $2 billion. As a result, if the Senate-passed bill were to prevail in conference, and the unemployment insurance tax rate is increased (as passed by the House in H.R. 10210), fiscal year 1977 revenue would total $360.6 billion, or $1.9 billion less than the First Concurrent Resolution target.

DEFICIT OF $53.7 BILLION

Thus, the current Senate budget scorekeeping report shows the potential deficit for fiscal year 1977 as $53.7 billion compared to $50.8 billion contained in the First Concurrent Resolution. This appears to be a realistic estimate and we do not believe there grounds for predicting a deficit substantially above the First Concurrent Resolution target, either on the basis of the economic outlook or anticipated legislative action.

Chairman MUSKIE. Thank you very much, Dr. Rivlin.

Just as a matter of interest, the revenue estimates for fiscal year 1977 are $377.8 less the $17.3 in the tax reduction?

Dr. RIVLIN. Right.

REVENUE GROWTH

Chairman MUSKIE. How does that compare with the actual revenues realized in fiscal 1976, now that fiscal 1976 is over?

Dr. RIVLIN. I don't have the numbers for fiscal year 1976 revenue right in front of me, but they came in slightly lower than were projected.

Chairman MUSKIE. About 298?

Dr. RIVLIN. $300 billion.

Chairman MUSKIE. That is an increase in fiscal 1977 of about $60 billion?

Dr. RIVLIN. Right.

Chairman MUSKIE. What is responsible for that?

Dr. RIVLIN. Growth in the economy. It is growth in personal income and the other items, such as profits, that are the basis of the tax increases.

Senator MCCLURE. Growth in the economy above the estimates?

Chairman MUSKIE. I don't know if that follows.

Dr. RIVLIN. No. I think the chairman was referring to simply the increase between 1976 and 1977.

Senator MCCLURE. I thought you said compared to the projections.

Chairman MUSKIE. Oh, no. I simply wanted to focus on the growth of revenues.

Senator MCCLURE. Thank you.

Senator BELLMON. Mr. Chairman, on that, how much additional growth is projected for fiscal 1977? We had $60 billion in fiscal 1976; how much in 1977?

Chairman MUSKIE. That is the projected, $60 billion is the projected.

Dr. RIVLIN. Right.

Chairman MUSKIE. I invite my colleagues to interject with questions anytime. I have a whole list of questions here but I am sure you would not have the patience to let me go through my list before you get to some of yours, so I want to make that clear.

LULL IN RECOVERY

I am concerned, frankly, as to what is implied by your statement that the recovery is in a lull. Now historically lulls of that kind following a recovery lead quite often, I think, to declines in the economy. Am I correct in that?

Dr. RIVLIN. Sometimes they do and sometimes they don't. It is not surprising, looking at past recoveries, that we have had since World War II, to find quarters when the recovery was in a lull and went back up again. It is certainly true that the second quarter of 1976 was much less robust than the first quarter or, indeed, than the five quarters of recovery taken as a whole. It is a situation which clearly bears watching.

UNEMPLOYMENT RATE

At the moment, I think it can be said the economy is giving very mixed signals. The unemployment rate went up rather unexpectedly sharply in July, and that can be taken certainly as a bad sign. However, not all of the increase in the unemployment rate is necessarily a bad sign.

In fact, all of the July increase was an increase in the labor force not in the number of people unemployed. That is something that normally happens in a recovery—people who were discouraged come back into the labor force and that makes it harder to cut the unemployment rate.

RETAIL SALES

The retail sales were sluggish in the second quarter. There are some signs that they may be recovering now. Some more recent figures on investment are favorable, but there is good news and bad news.

I think really, the only lesson is that the recovery has to be watched very carefully to see whether this is a temporary lull or indeed a slackening of the recovery that would be a danger sign.

Chairman MUSKIE. So the fact of the lull does not, by itself, constitute a danger sign?

Dr. RIVLIN. It constitutes a danger sign, but it is not conclusive evidence that the recovery is over.

PUBLIC WORKS

Chairman MUSKIE. Now, as part of the first concurrent resolution, we assumed several stimulative policies in public works, in the revenue sharing and public employment which has now been enacted into law.

How long would it take those to effect the economy and do they constitute part of the stimulus which may end the lull to which you referred?

Dr. RIVLIN. The first concurrent resolution on the budget, which is what we are assuming in these projections, contains all of those things. It does contain public employment, and it assumes a continuation of the tax cut. Clearly, the tax cut last year was a major factor in stimulatng the economy, but I think it can only be said that the action of the Federal Government now is more or less neutral as we look forward, assuming the continuation of present fiscal policy.

The fiscal year 1977 budget, is slightly more restrictive than the fiscal year 1976 budget, and would produce an approximate balance on the high unemployment basis by the end of 1977.

TAX EXPENDITURE REDUCTION

Chairman MUSKIE. What if anything would be the economic implications of Congress failure to achieve $2 billion reduction in tax expenditures?

Dr. RIVLIN. Clearly if less revenue is raised on balance, the budget is slightly more stimulative than it would have otherwise have been in the short run.

Chairman MUSKIE. In the long run?

Dr. RIVLIN. In the long run, there are the problems of the equity of the tax system and whether sufficient revenues will be coming in to finance initiatives that the Congress might want to undertake along the way.

Chairman MUSKIE. I would like to ask two questions about the long term and then I will yield to my colleagues.

FULL EMPLOYMENT

First, one of the assumptions underlying the first concurrent resolution was that it would be possible to reach relatively full employment without excessive inflation by 1980, and achieve a budget balance. Now, in your estimation, what would the relatively full-employment rate be in 1980? What inflation rate would go with that unemployment rate? What percent of the GNP would Federal spending constitute at that time?

Dr. RIVLIN. The CBO has not attempted to make a projection of the economy beyond the end of 1977. We have, however, run out the numbers assuming that growth continues.

If one assumes that GNP growth does continue at close to 6 percent, which would be a very favorable outcome on a sustained basis, then the unemployment rate could be reduced to 5 percent or under 5 percent by 1980. This would perhaps not conform with everybody's definition of full employment, but it would be a lot better than where we are now.

INFLATION RATE

We do not foresee that this would be incompatible with a gradual decline in the inflation rate, although, as I said, we see for the next 18 months or so a continuation of inflation at possibly the current rate—maybe the 5 to 7 percent range.

PERCENT OF GNP

Chairman MUSKIE. What percent of GNP would Federal spending constitute under those circumstances by 1980?

Dr. RIVLIN. Roughly 20, I think, if you are assuming the current policy measures.

Chairman MUSKIE. Would there be a dividend of any kind in 1980 under those circumstances?

Dr. RIVLIN. Yes; by 1980 there would be some, I think in the range of $45–$60 billion of additional revenues available for spending.

GROWTH RECESSION

Chairman MUSKIE. Do you believe we can get from here to 1980 without experiencing a growth recession or a large jump in inflation?

Dr. RIVLIN. Well, if we are very lucky and very clever as a nation, I think it is certainly not out of the realm of possibility to do that. To sustain growth at a reasonably high level such as 6 percent for that long would be, I think, without historical precedent.

Normally, recoveries end before that, but that doesn't mean it couldn't be done if nothing staggeringly unfavorable happens from outside of the economy, such as a rapid resurgence of the oil crisis, and if everything worked.

Chairman MUSKIE. Senator Bellmon.

Senator BELLMON. Thank you, Mr. Chairman.

Dr. Rivlin, I can't help but notice the similarity in the conclusions you have reached and the conclusions in the statement Arthur Burns sent to the Budget Committee. You are not by any chance using the same speechwriter, are you?

Dr. RIVLIN. No; we are not, but there does seem to be a remarkable lack of controversy about the short-run forecast at the moment. That might almost make one suspicious.

Chairman MUSKIE. Incidentally, without objection, Chairman Burns' statement will be included in the record.[1]

MONETARY SUPPLY EXPANSION

Senator BELLMON. You seem to prefer an expansion in the money supply at the higher level of the Federal Reserve's range and Arthur Burns' opts for the lower level. Can you tell us what the likely effect on the Nation to come would be if Arthur Burns course is followed?

Dr. RIVLIN. Well, we were assuming, in making our forecast, that the Federal Reserve would stay at the high end of their target level for M–2, the slightly more liberally defined money supply. Indeed, when we made this forecast early in August, we were assuming the top end of their range and then they lowered the range by 0.5 percent so our assumption is just slightly over the high end of the Federal Reserve's target.

The reason for focusing on M–2 and for making this assumption is that the behavior of M–1, the more narrowly defined money supply, has been rather peculiar for this recovery period. M–1 has not expanded as one might have expected it to, and the fact that it has not expanded has not led, as again one might have expected, to increases in the interest rate. The behavior of M–2 is more consistent with what one can explain.

We have not attempted to predict what the Federal Reserve will, in fact, do, but we did make an estimate of what a slightly slower growth in the money supply would do, We estimated that it would increase the unemployment rate slightly and perhaps have some favorable impact on inflation.

We have not projected a much more severe contraction of the money supply, but that would have more exaggerated effects in the same direction.

[1] See p. 33.

FEDERAL RESERVE POLICY

Senator BELLMON. One thing I think we have gained in the budget process is sort of a gentleman's agreement with Dr. Burns that Congress should set the policy and the Fed will accommodate their monetary policies to reach the objectives the Congress has set. Do you feel they are doing that by the policies outlined in his statement?

Dr. RIVLIN. So far, I think one has to say that the net result of Federal Reserve policy, judging by the behavior of interest rates, has been to accommodate the recovery.

Normally, one expects at this stage of the recovery that interest rates would have risen somewhat, and, in fact, they haven't. Whether that was intentional Federal Reserve policy or accidental Federal Reserve policy is not clear, but the net result has been to accommodate the recovery in terms of not having interest rates rise sharply. What will happen in the future is another question.

GROWTH RECESSION

Senator BELLMON. In your comments, you use the term growth recession. Can you define what you mean?

Dr. RIVLIN. By growth recession, we just mean a slackening in the rate of growth from the levels of around 6 percent that it would take to keep the unemployment rate declining at a substantial rate.

Senator BELLMON. Is it realistic to expect the economy to sustain a 6 percent growth rate for an extended period of time?

Dr. RIVLIN. It is optimistic, but I think not unrealistic. If you look at past recoveries, the growth rate has not been sustained at a level like 6 percent for a long time.

On the other hand, we haven't had a recession as deep and as bad as this one since World War II, and one might expect that recovery from this deep a recession could be sustained longer.

HOUSING RECOVERY

Senator BELLMON. I notice in both your statements that there is some attention given to that sluggishness and to the recovery in housing. In Burns' statement, he mentions the adequacy of mortgage credit. He says mortgage credit is in ample supply in practically all parts of the country. If the money is available and if people are beginning to have renewed confidence in recovery, I wonder why housing starts haven't picked up and I wonder if there is anything Congress ought to be doing? Has the CBO looked into this question?

Dr. RIVLIN. Not in great detail. I think it is correct to say that, although there has been recovery in housing, it is by no means a housing boom, and the recovery has been concentrated in single family housing.

The multifamily housing sector is depressed and it seems rather likely to remain so for awhile. The forecasters remain somewhat optimistic, I think just for the reasons you just gave—there is plenty of mortgage credit. With income growing it seems reasonable that the housing market will pick up and will be one of the forces—perhaps not the strongest one—for continuation of the recovery.

Senator BELLMON. You don't anticipate any need for congressional stimulation in housing?

Dr. RIVLIN. At the moment it is not obvious to me what it would be. Certainly the interest rate developments are favorable to housing at the moment.

Senator BELLMON. That is all I have.

Chairman MUSKIE. Senator Moss?

UNEMPLOYMENT RATE

Senator Moss. Dr. Rivlin, you point out the growth in this last quarter is closer to the second quarter, 4.3 percent, and less than the previous quarters in the recovery. Growth of 4.3 percent is not likely to reduce unemployment very quickly. We hope to get unemployment down to 6 percent at the end of 1977. What do you estimate the unemployment figure will be if the economy grows at only a 4.3 percent rate between now and then?

Dr. RIVLIN. If it were to continue at the second quarter rate of 4.3 percent, there would be very little downward movement in the unemployment rate. It would probably not drop below 7 percent for a long time. Our projection that it will move down to the low 6 percent range by the end of 1977 is based on our belief that this growth lull is a lull, that it is temporary, and that the economy will resume growth at around 5.5 percent through the end of 1977.

Senator Moss. At a rate of 5.5 percent, how long would it take us to get unemployment down to a 6 percent rate?

Dr. RIVLIN. If our forecasts are realized, we could be in the range of 6 percent or at least the low 6's by the end of 1977.

PROJECTIONS BASED ON ASSUMPTIONS

Senator Moss. Your projections are based on several assumptions that appear significant. For example, you assume monetary growth slightly above its target range, a 5- to 6-percent growth in exports, a 4-percent yearly average increase in farm prices and 8-percent increase in fuel prices. How realistic are these assumptions and how do they compare with past experience?

Dr. RIVLIN. We hope they are realistic. That is why we chose them. All of these elements are very difficult to predict. The food price assumption of 4 percent annual increase seemed to us reasonable. Early in the year, food prices were actually declining, but their upward movement has resumed, although not at the very rapid rate that they were experiencing a couple of years ago. Thus our prediction seems reasonable, although anything can happen in food prices. Weather elements could be very adverse. The fuel price assumption is based on projections about domestic oil price increases and the effect of decontrol. But here again, the world price of oil is something that nobody here controls and almost anything can happen to it. Another jump in the OPEC price could be a very unfavorable development for the economy.

Senator Moss. The FPC recently raised the wellhead price for interstate gas to a level about triple what it has been. Of course, there is some litigation holding up the actual increase. Was this fact plowed into your projection of the 8-percent fuel price increase?

Dr. RIVLIN. Yes; I believe it was.

Senator Moss. It would appear to me that fuel prices are likely to go up much more rapidly than that. The validity of the forecast is closely tied to the assumptions and that's why I think it's important to question them. Thank you, Mr. Chairman.

Chairman MUSKIE. Senator Buckley.

Senator BUCKLEY. Thank you, Mr. Chairman.

FISCAL STIMULATION

Dr. Rivlin, various places in your testimony you talked about stimulation, specifically you say the resolution will provide more fiscal stimulation in the proposed administration budget. Where does the money come from for that stimulation?

Dr. RIVLIN. Perhaps more stimulation isn't the phrase—it's less restrictiveness. But the first concurrent resolution does assume a slightly larger deficit than is assumed in the administration budget.

GOVERNMENT SPENDING

Senator BUCKLEY. Talking about fiscal stimulation, it is suggested that the Federal Government is spending money. Where does that money come from?

Dr. RIVLIN. From taxes or borrowing.

Senator BUCKLEY. Therefore, it is siphoned out from the private sector, therefore, it is shifting the spending from the private sector to the public sector?

Dr. RIVLIN. Yes; Government spending is money that otherwise might have been spent in the private sector. However, it might well increase the total amount of spending.

Senator BUCKLEY. Is there any reason to believe it might be spent more intelligently in the public sector?

Dr. RIVLIN. It depends on what you are doing.

One would not want to turn all the spending over to the private sector.

Senator BUCKLEY. Is there any reason to believe that the public is going to be able to create more jobs than the private spending?

Dr. RIVLIN. No; I don't think so. But when the Government is spending more than it is taking in, and borrowing to do so, it has a net job creation effect on the economy.

Senator BUCKLEY. Does it also have a net inflationary rate on the economy?

Dr. RIVLIN. To some extent, yes.

Senator BUCKLEY. Does that in turn discourage private investments?

Dr. RIVLIN. It might. But private investments might be discouraged by high unemployment rates as well.

Senator BUCKLEY. Is it not true, of course, that we have more people employed today than we have ever had?

Dr. RIVLIN. Yes; that is true, and a larger labor force than we have ever had.

Senator BUCKLEY. But a higher percentage of available people employed than ever before?

Dr. RIVLIN. Labor force participation and employment have been rising gradually over time, yes.

MONETARY POLICY

Senator BUCKLEY. In terms of monetary policy, is it possible that Dr. Burns' announcements that he intends a moderate and to moderate the rate of monetary growth might result in lowering interest rates by lowering inflationary anticipation.

Dr. RIVLIN. It seems unlikely that lowering the rate of growth in the money supply is going to lower interest rates. As the inflation rate comes down, as it has over the last few months, that does, by itself, probably have some moderating effect on interest rates. In fact, our testimony suggests an explanation of the mystery of why the interest rate hasn't risen as one might have expected in this period; that is, the inflation premium may be less than it was a year ago.

Senator BUCKLEY. And people are beginning to draw a sort of cause and effect conclusion about the expansion of money supply and about long-term inflation and perhaps unlike the conventional wisdom a more cautious monetary policy results in more happiness about the long-term inflation possibilities therefore moderating that inflation?

Dr. RIVLIN. There are a lot of reasons why the inflation rate has come down. It hasn't come down far enough, clearly, for everybody's preferences. The main factor probably keeping the inflation rate as high as it is is the legacy of past inflation and the impact on wage settlements of the fact that people have expected the inflation rate to continue. We think those inflationary factors are moderating, the amount of wage inflation has drifted down, which is not what one expects in a recovery. It looks as though one could sustain a recovery now for a while without making inflation any worse, which is about as good as one can say.

EXPANSION OF MONEY SUPPLY

Senator BUCKLEY. And we are having these happy results in monetary policy because of Dr. Burns' paying attention to House Resolution 133 that dictated that expansion of money supply should be correlated with the expansion in the productive capacity of the economy?

Dr. RIVLIN. It depends on which money supply you are talking about. The narrowly defined money supply, M–1, has increased at surprisingly low rates. I think it probably surprises Dr. Burns as much as it surprises anyone, but despite that fact, interest rates have not been rising in recent months. That would seem to indicate that the more broadly defined monetary aggregates are more important.

Senator BUCKLEY. Your charge on the monetary supply states that we are below revenue targets. Does this suggest that we should compensate for that by lowering our expenditures?

Dr. RIVLIN. It might suggest that.

Chairman MUSKIE. Which kind of expenditures?

Senator BUCLKEY. That is where we have to argue it out.

Dr. RIVLIN. The CBO doesn't make recommendations, as you know, Senator, but I think what one has to look at is the size of the deficit in relation to what might be happening to the economy.

SENATOR BUCKLEY. Thank you very much. Thank you, Mr. Chairman.

Chairman MUSKIE. Senator Cranston?

UNEMPLOYMENT COMPARISONS

Senator CRANSTON. In regards to the unemployment situation comparisons with other times, don't we have a higher percentage of the work force unemployed now as to compared, for example, 1968 when unemployment was only 3 percent?

Dr. RIVLIN. Absolutely. We have experienced the worst unemployment in the last 2 years that we have known since the great depression of the 1930's. While the unemployment rate now looks better than it did 19 months ago, it is hardly anything to crow over. It is still very high by historical standards.

Senator CRANSTON. You said that a sustained veto of much of the proposed public employment legislation would increase unemployment by .3 percent and might reduce inflation to 5.3 percent by 1980. What would the effects of that increase of unemployment be on revenues and hence on the budget deficit?

Dr. RIVLIN. The increase in unemployment would clearly decrease revenues so the net effect on the deficit would not be——

Senator CRANSTON. This would be an increase in unemployment if there was a sustained veto?

Dr. RIVLIN. Yes, and that would deepen it.

Senator CRANSTON. How substantially?

Dr. RIVLIN. I don't know exactly. We would have to calculate that. It is not negligible.

CURRENT BUDGET DEFICIT

Senator CRANSTON. In regard to Senator Bellmon's question about Chairman Burns' testimony, one thing he said—I would like your reaction to this particular statement—he stated in a statement we received today that the current budget deficit when coupled with huge and persistent deficits over the past 10 years has been directly responsible for a substantial part of the inflation problem. Do you generally agree or disagree in any way with that statement?

Dr. RIVLIN. I would certainly disagree with the part of it that refers to the current deficit. At the moment, inflation does not seem to us to be a product of excess spending by anybody, by the Government or by anybody else, because unemployment is high and because there is excess capacity in the economy. It is not evident that this is an inflation produced by high spending or by Government deficits. If one goes back 10 years, however, there certainly were times in the late 1960's when the Government was running a deficit to finance the Vietnam war at times when unemployment, as you pointed out a minute ago, was quite low. Now, that is an inflationary thing to do. The legacy of that inflation, has certainly contributed somewhat to the inflationary expectations that we are now dealing with. So, I think I would agree with only a small part of that statement, but certainly not that the Government deficit on balance at the moment is having an inflationary effect.

UNEMPLOYMENT AND INFLATION RELATIONSHIP

Senator CRANSTON. Why do you think there would be some reduction in inflation if the public service employment legislation were cleared?

Dr. RIVLIN. It is hard to estimate what the relationship between unemployment and inflation is now because the economy is giving confusing signals. But we do believe that on balance raising the unemployment rate by whatever means does have a slightly beneficial effect on the inflation rate in the long run and vice versa.

Senator CRANSTON. Thank you.

Chairman MUSKIE. Senator McClure?

RATES DECLINE

Senator MCCLURE. Your last answer and some of the statements you made this morning show a symmetry between unemployment and inflation, the figures, particularly on pages 6 and 7 of your statement, indicate for every percentage point increase in unemployment there is a percentage decrease in inflation and vice versa. In spite of that fact, recent history has shown a decline in both unemployment rates and inflation rates. Why do you assume that the future evolution of events will be so radically different than the current experience?

Dr. RIVLIN. Because we think the current experience is explained by rather special factors, by the fact that we had, for rather accidental reasons, a very high inflation rate at the same time that we had a high unemployment rate. Over the last year or so the inflation rate has been coming down in response to a lot of things, but particularly in lagged response to the recession. I mean it is not surprising that the inflation rate has come down, albeit slowly, in the face of high unemployment, although by the time it was drifting down the unemployment rate had turned around. But I don't think that invalidates the relationship. It was a very special circumstance.

HISTORICAL SET OF CIRCUMSTANCES

Senator MCCLURE. You think that is an accidental set of circumstances?

Dr. RIVLIN. I think it is a historical set of circumstances that is unlikely to recur.

Senator MCCLURE. Just as in the economic theory which you follow, the rise of unemployment rates following the rise of inflation rates was also accidental and is also a special set of circumstances?

RAPID INCREASE IN INFLATION

Dr. RIVLIN. I think that the fact that inflation rose to such very high levels was largely an effect of factors like the rapid oil increase and food increase, but——

Senator MCCLURE. Had nothing to do with the large Federal budget deficits year after year in the 1960's and early 1970's.

Dr. RIVLIN. I think it had very little to do with that, although certainly those deficits and the inflation that went with them at that time increased people's feeling that inflation was something they had to worry about and guard against. But I am not denying, and I don't think anybody would, that the rapid increase in inflation, particularly the part that siphoned off consumer spending power into fuel increases, was one of the factors causing the recession.

Senator BUCKLEY. Just for the record, I would point out that we had hit an annual rate of inflation of 9 percent before the oil price rose.

Senator McCLURE. That high rate of inflation prior to the fuel inflation was a matter of fact, and occurred prior to the date of the fuel increases, and was caused by factors that were at that time unrelated to the increase in fuel prices.

FACTORS CONTRIBUTING TO INCREASED INFLATION

Dr. RIVLIN. We have a lot of things that increased inflation at the same time—increased worldwide demand for raw materials, devaluation, high food prices, altogether a bad set of circumstances for inflation.

Senator BUCKLEY. Wage price controls.

Dr. RIVLIN. And wage price controls, right.

Senator BELLMON. Food prices, that always troubles me. People say that food prices went up and that causes inflation. After all, the producers of foods are the victims of inflation. If they can't get a higher price for their grain they can't pay for the grain.

Senator McCLURE. It is more convenient to find a bogeyman in somebody else's backyard than your own.

Senator BELLMON. Food happens to be in my backyard.

Senator McCLURE. Farmers are a convenient scapegoat, oil producers are a convenient scapegoat.

Chairman MUSKIE. I don't think the spirit of this discussion has been a search for scapegoats.

Senator McCLURE. But we have been finding them whether we have been searching for them or not.

Chairman MUSKIE. I think as a matter of fact the high inflation experience in 1972–73 was attributable to a number of factors, some of which some of us favor more than others. But I don't think any of those factors escape some responsibility—I won't use the word "blame"—for the high inflation that took place.

OVERSTIMULATIVE FEDERAL FISCAL POLICY

Senator McCLURE. And high inflation had some effect upon the depth of the recession, and I think that at least in my view, which is not unexpected, I am sure——

Chairman MUSKIE. You pull off a few surprises.

Senator McCLURE [continuing]. Was a result of an overstimulative Federal fiscal policy for a long period of time, particularly in the spending levels mandated by Congress, and unlike the implication of one answer given earlier not all the deficits in 1968 were caused by the Vietnam war. Certainly, the Vietnam war cannot be separated from that cause and effect, but there was also a tremendous upsurge in social program spending by the Federal Government at the same time.

Dr. RIVLIN. I didn't want to attribute the deficit to any particular kind of spending. A deficit is a deficit.

Senator McCLURE. I am sure you didn't and that is why I wanted to correct the record so it didn't appear that you did.

GNP GROWTH RANGE

In your statement, you indicated a range for real GNP growth in 1977 in the 4½- to 6½-percent range. Why is the range so large?

Dr. RIVLIN. The range is large, I think, for reasons reflected in this discussion—the great uncertainty of economic forecasting. It it a difficult art and we don't want to pin ourselves to a point forecast or indeed to a narrow range.

Senator MCCLURE. We wouldn't either, but we have to come a little closer than that in determining what our policies are because they are going to come within a narrower range than that. Do you feel that actual growth will be toward the upper or lower end of that range?

Dr. RIVLIN. When one gives a range, one is generally implicitly saying that our best guess is near the middle. I think that is what we are saying, that our best guess is around 5.5, but it might be a point higher or a point lower.

Senator MCCLURE. I assume the same answers, same results with respect to the range of inflation rates which you show at 5 to 7 percent, the same reason the range is that large, the same midpoint assumption?

Dr. RIVLIN. Right.

FEDERAL RESERVE GROWTH RATES

Senator MCCLURE. Do you feel the Federal Reserve will seek growth rates for M–1 or M–2 in excess of its established policy?

Dr. RIVLIN. I would not want to predict what the Federal Reserve will do. We were, for the purpose of forecasting, assuming that they would stay at the high end of their target range which is what they have been doing with respect to M–2 for the last year.

Senator MCCLURE. We have to try to guess what they are going to do, and I would like to induce you to try to guess what they are going to do.

Dr. RIVLIN. Really, we made that assumption, as I said earlier, because we thought it was the most realistic assumption.

Senator MCCLURE. So you think they will stay at the high end of the range in spite of the statements that Chairman Burns has made that it would be his intention to gradually lower expansion?

Dr. RIVLIN. Yes; we think they will likely stay at the high end if they cone down——

Senator MCCLURE. His statements are not likely to be followed in policy?

Dr. RIVLIN. We made this forecast before the statements. Certainly, the Federal Reserve has been making some cautious noises and that is consistent with our forecast that the short-term rate will rise. But it would be surprising if the Federal Reserve permitted an extremely sharp increase in the short-term rate.

GNP GROWTH RATE FOR FINAL TWO QUARTERS

Senator MCCLURE. As you mentioned before, we had a high rate of growth in the first quarter and a much lower in the second and third quarter, yet you indicate, as I recall, a 6½-percent rate of growth of GNP for the final two quarters of the year. That will demand a pretty strong fourth quarter, will it not?

Dr. RIVLIN. Yes; it will, and there rather than sticking with the midpoint, we would now be likely to think it would be nearer the lower end of our range for 1976.

Senator MCCLURE. We would end up with a growth of what rate?

Dr. RIVLIN. Maybe 5, something like that.

Senator MCCLURE. That would yield substantially less than the 6½ percent for the final half of the year, wouldn't it?

Dr. RIVLIN. It might.

TREASURY BILL RATE

Senator MCCLURE. If the Treasury bill rate rises to 7.5 percent in 1977, as you predict, what is the likely level at that time of other interest rates like the prime rate, the triple "A" corporate rate, mortgage rate, and BAA corporate.

Dr. RIVLIN. I don't think we are anticipating a marked shift in the relationship of the various rates. We feel that the structure will stay substantially the same.

Senator MCCLURE. If the Treasury bill rates rises to 7.1, the other interest rates will rise proportionately?

Dr. RIVLIN. I would like to consult my staff and submit an answer to that for the record if it is all right with you, Senator.

Senator MCCLURE. Certainly.

[The following information was subsequently submitted for the record:]

CONGRESS OF THE UNITED STATES,
CONGRESSIONAL BUDGET OFFICE,
Washington, D.C., August 31, 1976.

Hon. JAMES A. MCCLURE,
U.S. Senate, Senate Committee on the Budget,
Washington, D.C.

DEAR JIM: In response to your question at the hearing of the Senate Committee on the Budget last Thurday regarding the CBO long-term interest rate forecast, I am pleased to provide the following information. Our baseline forecast calls for Treasury bill and Moody's AAA corporate bond rates of:

	3-mo bills	AAA corporate bonds
1976: I [1]	4.92	8.56
1976: II [1]	5.16	8.53
1976: III	5.42	8.52
1976: IV	5.66	8.60
1977: I	5.96	8.67
1977: II	6.43	8.74
1977: III	6.84	8.81
1977: IV	7.13	8.88

[1] Actual.

The rise in long-term rates is very modest in comparison to the increase in short-term rates. Bond market rates are less affected by fluctuations in the level of economic activity and more affected by the rate of inflation than are money market or short-term rates. The projected continuation of recovery without a change in the inflation rate, therefore implies a greater increase for short-term rates than for long-term rates.

If we can supply any further information, please let us know.

Sincerely,

ALICE M. RIVLIN, *Director.*

MODERATE WAGE PRESSURES

Senator McCLURE. You have indicated that you expect that inflationary pressures will remain relatively moderate, yet I look at things like the rubber labor contract which calls, as I remember, for a 36-percent labor cost increase spread over a 3-year period, that is an average of 12 percent a year, if you just for simplistics sake divide it in three equal parts. There are several other large labor contracts due for settlement in the next several months. If they follow the same pattern, that would yield a labor cost push substantially greater than your assumptions, would it not?

Dr. RIVLIN. One could, of course, get high labor settlements that would tend to push inflation up somewhat. The record of the last few months has been a gradual moderation in the rate of wage inflation from a very high level, and we do not see any reason why there should be a turnaround.

Senator McCLURE. The settlement in the rubber industry did not cause you to reevaluate that position?

Dr. RIVLIN. It only happened yesterday, Senator, but, no, I do not think the rubber settlement is substantially enough nor is it far enough out of line with what we were saying to cause any reevaluation.

FARM PRICE INCREASES

Senator McCLURE. Getting back into Senator Bellmon's particular area of interest, his backyard, so to speak, he has indicated that he thinks the farmers ought to get an increase in price for their products. I share that feeling since I sell some myself. You indicate farm price increases in the range of 4 percent. At the same time, you predict ranges of inflation substantially higher than that, some 50 percent higher than that. Does this not imply that you believe in your forecasts that the farmer is going to be continuously and increasingly squeezed in the cost/price spiral?

Dr. RIVLIN. We anticipate food price increases of somewhat less than the average rates, right.

COST/PRICE SQUEEZE

Senator McCLURE. It was not food price, it was farm price increases I referred to, and you indicate a 4-percent rise there whereas other things would rise an average of 50 percent more than that. As a matter of fact, most of the things the farmer buys are more related to the wholesale price index than they are to the retail price index and does that not imply that the cost/price squeeze for the farm sector is going to be much more severe?

Dr. RIVLIN. It may be somewhat more severe, but what happens to real farm income depends on a lot of other factors, including the volume of crops.

Senator McCLURE. But a large part of these farmers' costs are fuel. You have indicated an average range of 8-percent increase in fuel cost. That is double the rise of farm price increases. We have a virtual moratorium on the production of phosphate in Florida and that is 80 percent of the phosphate production in the United States. That is ultimately and necessarily going to drive the price of fertilizers higher.

They either come from phosphates or from natural gas, most of them, and most of them will be drastically higher, increasing pressure upon fertilizer prices, again catching the farmer in the cost/price squeeze. You do not see any alleviation of that problem?

Dr. RIVLIN. We have not in this context made any detailed estimates of what the effect on the farm sector might be.

FARM SECTOR IMPORTANT TO ECONOMY

Senator MCCLURE. If the farm sector is indeed caught in that kind of a problem, does that have implications for the national economy? Those of us who live in farm areas are inclined to believe if the farmer is poor, the rest of the Nation is apt to suffer; if the farmer is doing well, then the tractor factory worker in Peoria is going to have more jobs. That there is a basic undergirding of the economy from the farm sector, and if it is missing, it affects everything else.

Do you believe that the farm sector has that importance to the economy?

Dr. RIVLIN. I think one can make that kind of argument about a lot of different industries. It is often made about the automobile industry.

Senator MCCLURE. There are more truck drivers in the United States than there are farmers and the truck drivers would argue to raise the rates of truck drivers and you will stimulate the economy more.

Dr. RIVLIN. The farm sector is not nearly as large in terms of its total impact on the economy as it used to be.

BALANCE OF PAYMENTS

Senator MCCLURE. Right now, one of our major problems has to be balance of payments. I note that you show an average increase in exports of 6 to 8 percent a year. That is a rather large increase, particularly if you see monetary or fiscal difficulties in the consuming areas of the world. Those areas have been much more affected by the fuel cost increases than we have.

Their economies in many instances are much weaker than our own and yet that is where we must sell. If we have inflation rates in those countries that are higher than our own, there will then be monetary adjustments which make it more difficult for us to sell, easier for them to sell in our markets, Now, what gives you the basis for the optimistic feelings about the rise of average exports?

Dr. RIVLIN. Basically, the prospect of recovery from what has been a recession in the major industrial countries, Japan, Germany.

Senator MCCLURE. Do you think their recovery will be better than our own?

Dr. RIVLIN. Their recovery has come in behind ours. It was slower but it now seems to be picking up.

Senator MCCLURE. Are you speaking of recovery in terms of gross economic activity or in terms of inflation rates of would you care to relate those two?

Dr. RIVLIN. We were not making forecasts of their economies, as such, but simply taking a moderately optimistic view about U.S. exports based on recovery in other countries as a stimulus.

MAJOR PART OF EXPORTS

Senator McCLURE. A large part of that balance of payments and the growth in exports will have to come in the agricultural sector.

Dr. RIVLIN. That is a major part of our exports, right.

Senator McCLURE. It was $25 billion last year and we hope it will rise, maybe keeping farm prices down here will stimulate that. I am not suggesting that is my farm policy or economic policy, because I do not believe it would help that much.

Thank you, Mr. Chairman, I have no further questions.

Chairman MUSKIE. I have one question and then I will yield. These numbers that you and Senator McClure have been dicussing are not numbers you have mandated, they are simply your best guesses as to what is likely to happen?

Dr. RIVLIN. That is right. We do not mandate anything.

Chairman MUSKIE. Senator Domenici?

Senator DOMENICI. Thank you, Mr. Chairman.

Let me first talk a little bit about Arthur Burns and the difference in his statement and yours. First, it does seem to me that, while your testimony on most things today and your oversight have been rather objective, I do think that—at least I would like to say that your inference that Mr. Burns has been right but it is rather mysterious and perhaps for the wrong reasons he has been right, I do not think that is a fair assessment. From my standpoint, I recall that no one around here was saying that Mr. Burns' contention that we were not properly figuring velocity into this money situation—and I think he was right and everyone else was wrong and that probably accounts for the mystery, because we wanted a much larger monetary growth. In fact, our report has 10 percent in it and we did not need that, yet we got what we expected, at least practically. So I do not think it is mysterious, although I do agree generally with you that it is no longer so easy to predict the American economy because of both inflation and recession and the cycles that have occurred.

UNEMPLOYED WORK FORCE

With that, let me ask you a couple of specifics. With reference to the unemployed work force in the United States, when we had our early hearings we zeroed in on the fact that there were some peculiar unemployment patterns, that there were very high percentages of the young work force in our country that were unemployed, and some specific pockets, like construction workers.

Now, from our first hearings and through whatever happened with our 1976 program, is there still a selective problem with unemployment? Is youth unemployment still very high proportionately and are there pockets of selective unemployment that exist and if so, would you discuss them with us just briefly?

PROBLEMS WITH YOUNG PEOPLE

Dr. RIVLIN. Yes. The unemployment rates of various groups do tend to move up and down together and the improvement in the overall unemployment rate is improving most of the categories of unemployment with the exception of black teenagers. That has been

a persistent problem, very high rates of unemployment which do not seem to respond well to the recovery in the economy. But it certainly is clear that, while we still have higher than normal unemployment rates for almost all groups, there are, particularly intransigent problems with young people.

Women's rates are higher than men's, always have been, and blacks experience much higher unemployment rates on the average than whites do and that has been persistent.

Senator DOMENICI. Would it be fair, Alice, to say that a general fiscal or monetary policy probably would not address that issue in any substantial degree? If we said, "let us add 10 more billion," we are apt not to have a significant impact on that chronic problem you are discussing; is that a fair statement?

Dr. RIVLIN. I do not know what a significant impact would be but certainly, even if one brought the overall unemployment rate down to a range of 4 to 5 percent, there would still be much higher unemployment rates among teenagers, blacks, and disadvantaged youth.

Senator DOMENICI. To put it another way, we would not get the proportionate response there that we would across the board on unemployment?

Dr. RIVLIN. Even if you got a proportionate response, you would still be left with much higher absolute rates.

SPRING FORECASTS

Senator DOMENICI. From my standpoint, a very general question: You are here today giving us a summary evaluation and do I understand that really nothing significant has occurred that we didn't expect or contemplate that should cause us to change the direction between the first concurrent resolution and the second concurrent in any significant way?

Dr. RIVLIN. The forecasts that were made in the spring as a basis for the first concurrent resolution still look pretty accurate to us. We are not substantially revising the outlook, although we are pointing out that there does seem to be a lull in the recovery and that this bears watching.

HOLD EXPENDITURES

Senator DOMENICI. There is one major difference between Arthur Burns' prepared testimony and yours. If I read him correctly, he is suggesting that we hold expenditures for fiscal 1977 below those specified in the first concurrent, and I assume he is talking about the accelerated public works and the add-on for public service jobs, the 5.6 that you have referred to in your statement.

Is that what you understand Arthur Burns' difference is there?

Dr. RIVLIN. I think Arthur Burns is generally speaking in favor of low Government spending and fiscally conservative measures. We are not making a policy prescription on the size of the deficit or the level of Federal spending. We are simply saying, If you thought you were doing the right thing when you voted the first concurrent resolution, we don't see any real reason for you to change your mind.

TAX EXPENDITURES

Senator DOMENICI. One last question that has to do with tax expenditures, and I am finished. I am somewhat bothered by the process now and I would just share my concern with you for a moment. In our first concurrent and our second, we take great care to come up with an outlay figure and a figure called budget authority. One is very current; it is for the year involved, and budget authority has some very long-term implications.

TAX REFORM

On the other hand, for 4 weeks on the floor of the Senate we considered so-called tax reform, and it appears to me that something is somewhat out of focus in terms of an understanding of the impact of outlays, budget authority, and tax revenues and tax expenditures, in that we saw a very dramatic impact on revenues next year, the year after, the year after that, and certainly by 1981.

The committee that recommended that, I think in good faith, assumes they have a role and their role is not only tax reform; but we heard repeatedly that they were concerned about the economy, they were concerned about their role in stimulating. Many of their so-called tax expenditures are directed at focusing in on areas of the economy that they think need stimulating.

Do you have any observations at this point on how we can better work out this kind of problem, which I think is going to go right to the root of whether we have a successful budget policy, because we seem to rock along with what we call a policy; it has economic factors in it, and yet we have a $5 billion impact 2 years hence or 3 years hence coming within the purview of the Budget Act because it comes in the out-years and it is from a committee that has similar kinds of motives.

Do you have any concern about this? I am not asking you to choose sides, but rather to share your thoughts with us on it.

FUTURE IMPLICATIONS ON REVENUES AND EXPENDITURES

Dr. RIVLIN. I have deep concern about it, Senator, I think one of the weaknesses of the new budget process is that it does not clearly take care of the problem that the Congress must consider the future implications of what it does, both on the spending and on the revenue sides. There were lots of problems to be corrected at once in the Budget Act. For example, the fact that the Congress didn't look at revenues and expenditures at the same time was a problem, and now you do. But the problem of future implications was one that, I think, everybody understood, but was not clearly dealt with in the Budget Act.

THREE-YEAR ROLLING BUDGET

I am on record as a private citizen before I was in this job of having testified in favor of a budget reform act which would involve a 3-year rolling budget where the Congress voted at one time what it wanted to see happen for the next 3 years, subject to revisions, of course, as the economy changed.

I still think something like that is necessary. In the meantime, in operating within the framework of the law that you actually have, it seems to me that the only thing you can do is what you have been doing, which is to stand up on the floor of the Senate and remind your colleagues of the future implications of everything they do, revenue and expenditure. But you have no way of forcing them to vote on that.

Senator McCLURE. Would you yield on that?

Senator DOMENICI. I will be glad to.

TAX EXPENDITURES BY FUNCTIONS

Senator McCLURE. One of the concerns that I share, and I certainly agree with everything you just said, is that the tax expenditure review which is required by the budget resolution, the tax expenditure figures that are a mandate of the Budget Act, are not spread through the functions as are the direct expenditures.

I just wonder if we will ever get control of tax expenditure until we spread them by function so we get a look at them in terms of the functions of Government rather than simply as a total.

Chairman MUSKIE. I think in the staff documents this year there was an attempt to do that.

Mr. BENNET. There was an early attempt, Senator, if I could speak to that briefly. The hope was we could divide all the tax expenditures among functions. It turns out there are some which don't handily fall into functions. It also turned out because tax expenditures have not been addressed as expenditures before this, there is a technology required that simply wasn't available to treat tax expenditures with the same degree of certainty.

What we tried to do this year was try to flag seven or eight big ones by function, but we definitely are working in that direction. My hope is that by next year we will be able to put the tax expenditures together with the spending expenditures.

TAX EXPENDITURES VERSUS REVENUE EXPENDITURES

Senator McCLURE. I might ask Dr. Rivlin to comment if she sees that as being a problem.

Dr. RIVLIN. I see it as being a technical problem, as Mr. Bennet said. It is difficult to make those estimates, but it is highly desirable, it seems to me, for the Congress to see at the same time what the impact on the revenues as well as expenditures is by functions.

Senator McCLURE. I would assume CBO is also working in the same direction?

Dr. RIVLIN. Right, we are all working together on this one.

Chairman MUSKIE. If the Senator will yield, I think to make explicit what is in the Senator's mind, I think we have to look at the alternative ways of accomplishing the same social purpose. Education, tax expenditure versus revenue expenditures. I think that is very much part of our responsibility, wholly apart from the revenue positions.

I hope this discussion is simply another one in the evolutionary development that will lead us to that kind of analyses at least.

Dr. RIVLIN. We did try in our annual report to this committee to put the tax expenditures and the other expenditures together by func-

tion to the extent possible, although as Mr. Bennet said not all of them were at that time allocable. We will continue to do that as much as we can.

TAX BILL DEBATE

Chairman MUSKIE. May I say something at this point that the record of this hearing bears upon the debate, often controversial debate, that we had in connection with the tax bill? It is not my view of the budget process that we exclude other committees from areas within which they have legitimate jurisdiction.

My view is that as to areas in which both the Budget Committee and some other committee have a legitimate interest the Budget Act directs us to coordinate our efforts and policies. I don't see how the Tax committee could conceivably write legislation without taking the budget factors into account.

It seems to me there has to be a way in which the Finance Committee's judgment on those matters is taken into account in the budget process so we come out at the same point. They have managed to do it, I think, very well on the direct spending side. We don't exercise exclusionary jurisdiction over spending. We take into account what the committees tell us, and try to come out at the same point.

We have to do the same thing with the Finance Committee. Often the debate on the floor suggested that Senator Long and I were trying to drive the other one off the range. That is not my intention nor my view of the responsibilities of the Budget Committee.

I think we both have a place on the range and we have to find a way of traveling the same direction. I hope that point comes through eventually. I guess this year acrimony was unavoidable as we struggled with the problems. I just want to put that in the record at this point.

BUDGET AUTHORITY

Senator DOMENICI. It seems to me, Mr. Chairman, that we go to a lot of trouble with the authorizing committees to come up with budget authority, which is a strange kind of concept, but it does have some out-year implications for those authorizing committees.

You know they obviously have to be looking down the line 3 or 4 years on bills for us to come up with a budget authority figure and we have at least mildly set a pattern of where that kind of legislation is going. I think what we have found out is that the Finance Committee in its wisdom, and they may very well be right, can come to the floor like they did in those 3 weeks and pass a reform bill that has very little implication this year and they can say it hasn't affected your budget, but it has $5 billion worth of implication 2 years hence or 3 years hence.

Chairman MUSKIE. The same thing is true with respect to the bill now pending on the floor.

Senator DOMENICI. That's right. As I understand it, it is far more than five. When you mix the two, it could be as high as 10 or 12 through 1981. What I am saying, and I think our chairman agrees, we are not trying to say they shouldn't have that jurisdiction, but it seems to me that it is an untoward surprise imposed upon a very meticulous process that we have gone through that just defies us

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being very authentic with our predictions about how valid all our work is.

If you are going to have a $5, $6, or $8 billion differentiation, that somebody can impose, and we have no way of taking it into consideration in advance, setting some parameters in advance, one could destroy our process and say you are playing games because you worry about $1 billion here in markup for an hour on end to try to keep a deficit in line and here is a bill pending that 3 years hence makes that look like peanuts because when you don't collect the taxes regardless of the motive, it affects the columns we are working on and must affect the economy, and we are playing with nothing or about nothing when we are worried about the other figures.

I don't think we have expenditures and appropriations and outlays understood in any way with the same dimension and the same degree by the Members of our institution. I think that is our job. Somebody has to understand a $2 billion tax expenditure may be different in who it impacts and how, but from our standpoint it has some very, very similar qualities to expenditures, not tax expenditures but expenditures.

I am not sure that anyone is really worried about that at this point, Maybe we have started it and I think we have a tough job ahead of us on that score. I thank the Senator for giving me the time.

Chairman MUSKIE. I think the Senator put it very well.

FIVE-YEAR COST ESTIMATE

Dr. RIVLIN. Let me just add in that regard one of the features of the Budget Act which is designed to keep reminding the Congress of the future implications of its action. That is the requirement that committees provide when they report a bill, a 5-year cost estimate provided by the CBO, both budget authority and outlays.

We have been providing that service to the committees of Congress, although not all of them have availed themselves of it. I think with your cooperation perhaps we can get a 100-percent inclusion of those 5-year cost estimates in all the bills reported.

Senator MCCLURE. I just want to make one comment and ask one question.

First, I share with Senator Domenici both the concerns about what is done in these other areas and also, perhaps more importantly for the present, I want to publicly say what I said privately. I appreciate your efforts not only on the tax bill, but throughout the year in trying to maintain the Budget Committee's position on the floor.

I think it has been valuable and I think it is one of the tools this committee had to have, and I think you have provided it.

DEFICIT SPENDING CEILING

I have one question about the fourth quarter of this year, because you anticipate now slightly less vibrant growth in the fourth quarter than you might have anticipated earlier. There may be something occurring right now that we are not focusing on.

We had in the congressional resolutions dealing with the 1976 fiscal year the deficit spending ceiling set in the $75 to $78 billion range. Actual spending for that period of time was $65 billion.

Despite that shortfall in spending as compared to the targets that were set, the economic progress, economic recovery was as good as we had anticipated. We don't know how much of that money that was unspent during that fiscal year is going to spill over into the Transition Quarter, if as a matter of fact that money does spill over into the Transition Quarter, we could very well have spending rates in the Transition Quarter that make this the most stimulative period we have had.

I am not sure that it is true, but it is possible. I wonder if you in your office have focused on that phenomenon.

LOWER OUTLAY ESTIMATES

Dr. RIVLIN. We have been trying to understand what did happen, as the OMB has, as to why the outlay estimates for 1976 came in lower than everybody anticipated, including the Office of Management and Budget. Some of that may show up in the Transition Quarter or later, although we don't think that is likely to be very substantial.

We have reexamined the 1977 estimates of outlays and don't believe there will be a very substantial difference from what we originally estimated.

BETTER RECOVERY PERFORMANCE

Senator MCCLURE. If that is true, and I don't have any reason to believe it is not, then we have got a substantially better recovery performance than would have been anticipated at a level of $65 billion in Federal deficits.

Dr. RIVLIN. We got a good first quarter of calendar 1976 and not a very good second quarter. I am not really sure how I would tie those things together.

SENATE BUDGET SCOREKEEPING REPORT

Senator BELLMON. Mr. Chairman, I would like to add a word of congratulations to whoever is responsible for the new scorekeeping report. This is much more readable and much more understandable than our first effort, and it is very valuable for all the Members of the Senate.

Thank you. I think it marks a major step in the right direction.

Dr. RIVLIN. I am very glad to hear that. It was a very cooperative effort between our staff and this committee's staff. I am sorry Senator Hollings has left, because he was one of those most dissatisfied with the previous format, but I think he is more pleased with it, too.

Chairman MUSKIE. He has expressed his pleasure with the new format.

ANALYSIS OF UNEMPLOYMENT FIGURES

Senator BELLMON. I have an analysis of the unemployment figures done by a member of the minority staff I would like to have put in the record.

Chairman MUSKIE. Without objection.

[The analysis referred to follows:]

MEMORANDUM

U.S. SENATE,
COMMITTEE ON THE BUDGET,
August 23, 1976.

UNEMPLOYMENT RATE IN 1976

1. The following discussion concentrates on explaining the behavior of the unemployment rate in 1976 rather than on examining reasons for the 0.3 percentage point increase in the July rate of 7.8 percent.

Underlying the behavior of the unemployment rate, there are two special factors operating in addition to traditional ones. These special factors are the unprecedented growth of the labor force in 1976 and the seasonal adjustment procedure used by the Department of Labor.

2. The principal factor underlying the behavior of the unemployment rate was the unprecedented growth of the labor force in the first seven months of 1976. The labor force has grown by 2.2 million persons, which is a 4.1 percent annual rate. On the basis of demographic considerations, the normal labor force growth is around 1.8 percent per year. Thus, the current expansion of the labor force is *128 percent greater* than normal, or more than double the normal rate.

In the postwar era, the greatest absolute and percentage increase in the labor force occurred in 1972; 2.4 million persons entered, giving a growth rate of 2.9 percent. Through the first seven months of 1976, 2.2 million persons having entered the labor force, giving an annual rate of growth of 4.1 percent.

In terms of employment, 2.6 million persons found jobs through July 1976. This is job creation at an annual employment rate of 5.1 percent. The highest previous rate of job creation was in 1973, when the rate of job creation was 3.3 percent and 2.7 million jobs were created.

These data are shown in the accompanying table.

Thus, although jobs are being created at a record pace, the high rate of entry into the labor force results in the unemployment rate not falling dramatically.

At present, there are no substantiated, satisfactory reasons for the dramatic increase in the labor force; there however is no shortage of hypotheses. But these hypotheses remain just that—namely hypotheses for which there is no satisfactory documentation.

The principal group accounting for the unprecedented increase in both employment and the labor force is women, age 20 and over. Since December 1976, 1.2 million women, age 20 and over, entered the labor force and 1.2 million became employed. This translates into an annual rate of increase in the labor force of that group of 6.2 percent. The annual rate of job creation for that group is 6.8 percent.

3. The second factor influencing the behavior of the unemployment rate in 1976 is the seasonal adjustment procedure (Census X–11). New seasonal factors are estimated each January.

This procedure, which is applied to the raw employment and unemployment data in 1976, is influenced by the 1975 behavior of employment and unemployment. The very rapid increase in unemployment in the first five months of 1975 results in "overstating" the seasonal component for the early part of 1976, and correspondingly "understating" the seasonal component during the rest of the year. Thus, the unemployment rate tends to be understated in early 1976; by the same token, the unemployment rate will be overstated the remainder of the year.

If the seasonal factors that were used for the 1975 data are applied to the 1976 data, unemployment would have averaged 7.7 percent through July, instead of the 7.6 percent it averaged using the new seasonal factors.

GROWTH IN LABOR FORCE AND EMPLOYMENT

	Labor force		Employment	
	Number of persons	Annual rate (percent)	Number of persons	Annual rate (percent)
1972: Greatest postwar increase	2,400,000	2.9	2,700,000	3.3
7 mo of 1976	2,200,000	4.1	2,600,000	5.1

BALANCED BUDGET

Senator BELLMON. On the basis of our policy as it is laid out in the first concurrent resolution for 1977, when do you see us getting the budget balanced?

Dr. RIVLIN. We have not projected beyond the end of 1977, but if one were lucky and had continued healthy growth rates in the 5.5- to 6-percent range, I think the budget would balance by—I am not sure whether it is 1978 or 1979—well, 1979. Arnie Packer is shaking his head. Not until 1980?

All right, strike that, 1980.

Senator MCCLURE. Shouldn't it also be stated on the record that we have not sustained 6-percent growth rates for a long period of time except in the Vietnam war period, which also set the stage for a relatively rapid inflation rate later?

Dr. RIVLIN. That's right. You never had a Budget Committee managing fiscal policy before.

Chairman MUSKIE. May I express my appreciation for your testimony this morning. It has been very helpful, and also for the service that the CBO has given the committee and the staff.

Dr. RIVLIN. Thank you, Mr. Chairman.

[Whereupon, at 11:35 a.m. the committee adjourned to reconvene at the call of the Chair.]

STATEMENT OF HON. ARTHUR F. BURNS, CHAIRMAN, BOARD OF GOVERNORS OF THE FEDERAL RESERVE SYSTEM

I am pleased to report to the Senate Budget Committee on the condition of the national economy and the course of monetary and fiscal policy.

SUBSTANTIAL ECONOMIC RECOVERY

The economic expansion now under way is well into its second year. By any reasonable yardstick, the Nation's economy has experienced a substantial recovery. In the second quarter of this year, the physical volume of total production was 8½ percent above its trough in the first quarter of 1975. Moreover, the combined output of our factories, mines, and powerplants has risen about 17 percent since March of last year.

EMPLOYMENT UP

Widespread expansion of economic activities has led to material strengthening in the demand for labor. Total employment across the Nation has risen almost 4 million from its low in March 1975, and is now 1½ million above the previous peak. The average length of the factory workweek has also risen, and the unemployment rate—though still deplorably high—is appreciably lower than in the spring of last year.

The gains in production and employment have been accompanied by larger personal incomes and rising consumer purchasing power. The average level of disposable income per capita has risen in real terms by 6½ percent since early 1975, and last quarter it was 1½ percent above its previous peak. Business profits, too, have rebounded as the workshops of the economy returned to more efficient levels of operation.

INVENTORY INVESTMENT

During the course of the recovery, the rate of economic expansion has been influenced by the pace of inventory investment. Between the second quarter of last year and the first quarter of this year, the shift from extensive liquidation of inventories to moderate accumulation accounted for about 45 percent of the increase in the physical volume of production. But in the second quarter of this year, inventory investment no longer added significantly to the growth of physical output.

This is the main reason for the recent slowdown in the rate of economic expansion. In real terms, the gross national product rose at an annual rate of 4¼ percent in the second quarter, compared with 8 percent over the preceding three quarters. The lower rate in the second quarter reflects, besides inventory adjustments, the recent pause in consumer spending. After a rapid advance from last December through this March, the trend of retail sales flattened out. Temporary pauses of this kind are not uncommon during periods of cyclical expansion.

GAINS IN RETAIL TRADE

We may reasonably expect significant gains in retail trade to resume relatively soon. The basic determinants of consumer spending are clearly favorable: the number of persons at work is continuing to rise, real incomes of families are increasing, and the liquidity position of consumers is improving. Furthermore, as optimism continues to spread, consumer expenditures should tend to grow more rapidly than the disposable income of consumers. In all likelihood, as the recovery proceeds, consumer buying will remain a major source of strength in the economy.

BUSINESS OUTLAYS

Another and more basic source of stimulus to economic activity over the next year or two can be expected from business outlays for new plants, machinery, and other equipment. Business capital spending typically joins the recovery process later than other sectors of the economy. But as utilization of capacity increases and profits improve, business firms typically move ahead more boldly with their capital expenditure programs. Although such a development has been somewhat delayed in the present instance, the traditional pattern is again emerging.

BUSINESS CAPITAL SPENDING

Thus, major indicators of business capital spending are pointing upward. Production of business equipment has increased steadily since late last year. New orders for nondefense capital goods rose strongly in July, the seventh consecutive monthly increase. Contract awards for commercial and industrial construction are now moving up again. Also, recent surveys indicate some further strengthening of business plans for capital expenditures.

A rising level of outlays for plant and equipment creates a need for larger inventories of materials, component parts, and other supplies in the durable goods trades. Thus, while inventories in some nondurable goods industries have been restored to levels that are adequate to meet current rates of sales, renewed accumulation of inventories in the durable goods sector is just beginning. Total new orders received by producers of durable goods have been rising strongly, and rebuilding of their stocks should be a stimulus to production for some time.

HOMEBUILDING CONTRIBUTING TO EXPANSION

A revival of homebuilding activity has been contributing to general economic expansion since the spring of 1975. New housing starts declined somewhat last month, but permits issued for new residential buildings—a less volatile indicator—advanced to the highest level in more than two years.

With mortgage credit in ample supply in practically all parts of the country, and with sales of new and existing houses once again rising, a gradual further advance in homebuilding activity appears to be in prospect. To be sure, weakness, in the multifamily sector has been limiting the overall improvement of residential building activity. Construction of apartment houses has been held down by previous overbuilding, lagging rents, and high construction costs. However, the problems of the multifamily sector are gradually being resolved—in particular, vacancy rates for rental units are appreciably lower now than they were a year ago.

WORLD TRADE BALANCE

Our trade balance with other countries may also show some improvement as the recovery proceeds. Imports of industrial supplies and consumer goods will move up further as the expansion of our economy continues to cumulate. But the outlook for our export trade is also brightening. Although economic recovery in other industrial countries began later than in our own, the pace of expansion in Western Europe and Japan has been gathering momentum. Material strengthening of demands for American machinery and other products is therefore to be expected.

ADVANCES IN PRIVATE ECONOMY

Activity in all major sectors of the private economy thus seems poised for further advances. The recovery process has thus far been well balanced, and the state of confidence has been steadily gaining. There have been few signs of the speculative excesses that often develop in the course of a business-cycle expansion. Conditions in the nonfinancial sector of the economy thus remain favorable for continued growth well into the future.

FINANCIAL MARKETS

Conditions in the financial markets are also conducive to continuance of economic expansion. Interest rates usually begin to rise at about the time when general business activity turns up. In the present instance, however, most interest rates are at or below their levels in the spring of 1975, when the economic recovery began. For example, the yield on 3-month Treasury bills reached a low for the year of around 5¼ percent in May 1975, and is now about 10 basis points lower. The rate on new issues of high grade corporate bonds in May 1975 was 9½ percent; now, that rate is down to around 8½ percent.

INTEREST RATES

The main cause of the unsual behavior of interest rates during this recovery has undoubtedly been the lessening of inflationary fears, and the consequent reduction in the inflation premium that got built into interest rates—particularly, the long-term rates.

The financial climate that has prevailed during the recovery has permitted lenders and borrowers alike to strengthen their financial condition. The liquidity position of savings banks and savings and loan associations, for example, has improved markedly. Moreover, the flow of savings to these institutions has remained abundant, and they have continued to increase their mortgage lending. The outstanding mortgage loan commitments of savings and loan associations—the leading suppliers of home mortgage credit—are now close to the highest dollar figure on record.

Commercial banks have also rebuilt their liquidity, and the condition of the banking system has been further strengthened through widespread additions to retained earnings and some new issues of common stock.

Our Nation's business enterprises have likewise taken advantage of the prevailing financial climate to improve their financial condition. Corporations issued a huge volume of long-term bonds during 1975, and they used much of the proceeds to repay short-term debt and to acquire liquid assets. This year, they are still finding long-term funds readily available. During recent months, many lower-rated firms have found a more receptive public market for their debt issues, and others have met their need for long-term funds through private placements with life insurance companies and other institutional lenders. Besides this, an improved stock market has made it much easier for corporations to raise equity funds for financing new investment programs or for restoring capital cushions.

These accomplishments in financial markets indicate, I believe, that the course of moderation in monetary policy pursued over the past year has aided the process of recovery in economic activity.

UNEMPLOYMENT

We at the Federal Reserve remain deeply concerned about the high level of unemployment that still exists in our country. We recognize the pressing need for the Nation to regain more prosperous economic conditions. We also recognize, as thoughtful Americans generally do, that lasting prosperity will not be achieved until our country solves its chronic problem of inflation.

INFLATION

The inflation that is still damaging our economy and troubling our people began over a decade ago—largely as a consequence of loose fiscal policies. Over the past ten years, the Federal budget has been in deficit in every fiscal year but one. Over that ten-year span, the total deficit in the Federal budget—including off-budget agencies and Government-sponsored enterprises—has cumulated to over $280 billion. These huge and persistent deficits have been directly responsible for a substantial part of the inflation problem.

In the early 1970's, the underlying inflationary trend caused by lax financial policies was greatly aggravated by a variety of special factors—poor crop harvests here and abroad in 1972 and 1973, a world-wide boom in economic activity, devaluation of the dollar in international exchange markets, and an enormous run-up in prices of gasoline, fuel oil, and other energy items. By 1974, these special factors combined with the underlying inflationary trend to set off an explosion of the general price level.

Our Nation has made notable progress since then in reducing the rate of inflation. The increase of consumer prices came down from 12 percent in 1974 to 7 percent in 1975. Over the first four months of this year, the rise in consumer prices moderated further, to a 3½ percent annual rate, reflecting a temporary decline in the prices of food and fuel. In the past three months, however, retail prices of food and fuel have again been increasing, and the annual rate of advance in consumer prices has stepped up to 6½ percent. Thus, it appears that the underlying rate of inflation has not diminished since mid-1975, and that it may still be about 6 or 7 percent.

Any such rate of inflation constitutes a serious threat to the economy, and elimination of our disease of inflation must therefore remain a major objective of public policy.

MONETARY POLICY

As I indicated in recent testimony before the House Banking and Currency Committee, the objective of monetary policy now is to support further growth of output and employment, while avoiding excesses that would aggravate our underlying problem of inflation and create trouble for the future.

At its meeting in July, the Federal Open Market Committee projected growth ranges of the monetary aggregates for the year ending in the second quarter of 1977. The ranges differ only a little from those announced last May. For M_1, the narrowly defined money stock, which includes only currency and demand deposits, the range of 4½ to 7 percent was retained. For M_2, which includes also savings and consumer-type time deposits at commercial banks, the upper boundary of the range was reduced by a half percentage point. For M_3, a still broader measure of money balances that includes also the deposits of thrift institutions, the upper boundary was brought down by a full percentage point. Consequently, the new range is 7½ to 9½ percent for M_2, and 9 to 11 percent for M_3. These small downward adjustments in the projected growth ranges for M_2 and M_3 were needed to achieve consistency with the projected ranges for M_1.

CONGRESS ADVISED

I have advised the Congress repeatedly that the rate of monetary expansion in our country will have to be lowered gradually in order to be consistent with restoration of general price stability. The Federal Reserve has taken some small, but prudent, steps in that direction over the course of this past year. Thus, our present longer-run projected ranges for the principal monetary aggregates are all somewhat lower than a year ago. Further steps to moderate the pace of monetary and credit expansion will be required as the economy returns to higher levels of resource utilization.

GENERAL PRICE STABILITY

Let me assure this Committee that the Federal Reserve is firmly committed to a course of monetary policy that will accommodate an eventual return to general price stability. That is, I believe, the principal contribution that we at the Federal Reserve can make to the restoration of a lasting prosperity.

MODERATION NEEDED

Monetary policy—no matter how well designed and implemented—cannot alone restore price stability and prosperous economic conditions in our country. Moderation in the course of fiscal policy is also needed. The deficit in the Federal budget is much too high—especially when the operations of off-budget agencies and Government-sponsored enterprises are taken into account, as they should be. It is of the utmost importance that the Congress and the Administration cooperate to maintain tight control over Federal expenditures. At the present stage of the business cycle, a substantial decline of the Federal deficit is desirable, so that savings may become sufficiently available for much-needed private investment and renewed inflationary pressures be avoided.

CONTROL OVER FEDERAL EXPENDITURES

This Committee has played a highly constructive role over the past year in alerting Members of the Congress, and also the general public, to the urgent need for better control over Federal expenditures. The essential task of this Committee now, I believe, is to persuade the Congress to proceed very prudently with tax reductions and to hold expenditures for fiscal 1977 below the levels specified in the First Concurrent Resolution. Moreover, this Committee and the Congress should be actively seeking ways to restore a balanced budget in the near future.

Prudent monetary and fiscal policies are essential at this time in order to avoid a rekindling of inflationary fires as our economy returns to higher levels of production and employment. Our Nation would benefit, however, if the traditional tools of economic management were supplemented by structural policies designed to enhance the prospects for returning to full employment without releasing a new wave of inflation.

LARGER BUSINESS CAPITAL INVESTMENT

There is a clear need in our country for a larger volume of business capital investment. An overhaul of the structure of Federal taxation could promote this objective, and thereby hasten improvements in productivity.

UNEMPLOYMENT

Governmental practices and programs affecting labor markets have to be reviewed in any serious search for lasting measures to reduce unemployment. For example, the Federal minimum wage law is still pricing many teenagers out of the job market, and our present program for unemployment compensation may be providing benefits on such a generous scale as to blunt incentives to work. We would also benefit from more effective job banks and more realistic training programs.

Structural changes in other areas are also needed to enhance the prospects for expanded employment, while at the same time reducing the pressures on costs and prices. We need to gather the courage to reassess the nature and enforcement of our laws directed against restraint of trade by business firms; also the various restrictions on entry into the professions, the wage and employment standards in the Davis-Bacon Act, the proper role of trade unions in the public sector, the monopoly of first-class mail by the Postal Service, and the mass of governmental regulations that impede the competitive process and run up costs for business enterprises.

There are numerous structural measures besides those I have mentioned that might aid in the restoration of general prosperity. Progress in this field is, I believe, a matter of urgency. Our Nation has tolerated high rates of unemployment and of inflation much too long. But our Nation cannot reach the goal of full employment by pursuing fiscal and monetary policies that rekindle inflation. We therefore need to move ahead promptly on structural policies that promise to strengthen competitive forces in our markets and to open new opportunities for expansion of production and employment.

SUSTAINING A BALANCED EXPANSION

August 3, 1976

CONGRESS OF THE UNITED STATES
Congressional Budget Office
Washington, D.C.

PREFACE

Sustaining a Balanced Expansion is one of a series of reports on the state of the economy issued periodically by the Congressional Budget Office. In keeping with CBO's mandate to provide nonpartisan analysis of policy options, the report contains no recommendations. It was prepared by Cornelia Motheral, Peter Clark, Ronald Teigen, Marvin Phaup, Stephen Brooks and other members of the Fiscal Analysis staff, under the direction of Frank de Leeuw. Editorial assistance was provided by Patricia H. Johnston.

Alice M. Rivlin
Director

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SUMMARY

A year of recovery has greatly strengthened confidence in the U.S. economy. In the spring of 1975, when unemployment was at record high levels and double-digit inflation was a very recent memory, doubts about the vigor and stability of the economy were widespread. In the ensuing year and a quarter, private demands have rebounded. The unemployment rate has fallen from nearly 9 percent to 7.5 percent (June 1976). The annual rate of inflation slowed to the 5 to 7 percent range during 1975 and--apart from one- or two-month irregularities--has remained there since. Attention is shifting to whether recovery can be sustained over several years without periodic slowdowns and without rekindling inflation.

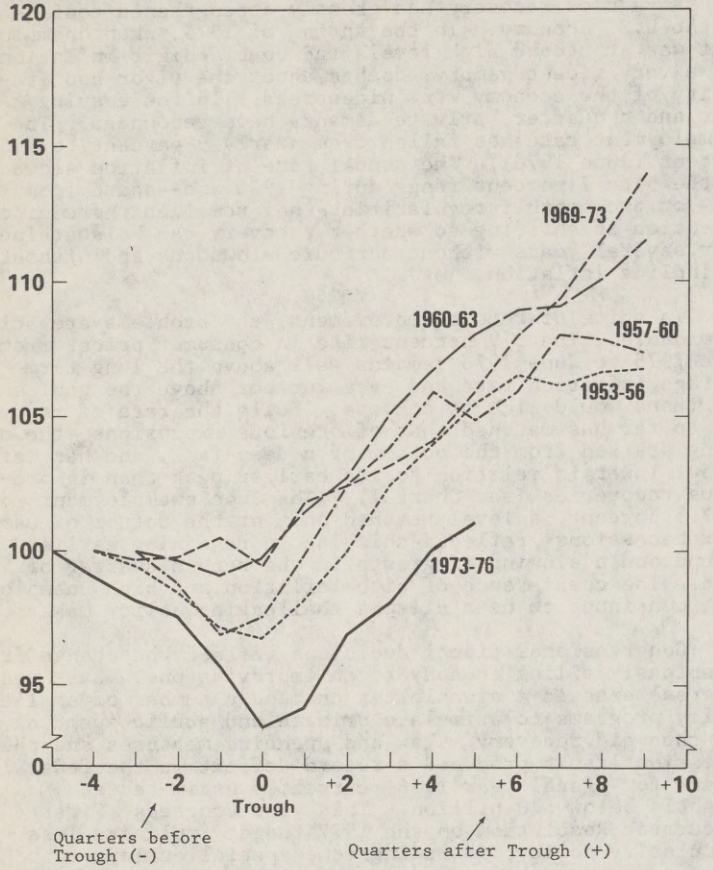
In spite of recent improvement, the problems are still formidable. The 5.9 percent rise in consumer prices from June 1975 to June 1976 remains well above the long-term average inflation rate and even further above the goal most Americans would like to achieve. While the rate of recovery so far has matched that of previous expansions, the upswing started from the bottom of a deep fall, and has left output lower in relation to its earlier peak than in previous recoveries (see Chart 1). The June unemployment rate of 7.5 percent, a level reached only at the bottom of earlier recessions, reflects this lag in regaining earlier ground and a slowing of growth in the second quarter of 1976. The coexistence of high inflation and high unemployment continues to be a dilemma challenging policy makers.

Congressional fiscal decisions reflect the change from a seriously ailing economy to an improving one. Last year Congress enacted a sizable tax cut and a number of smaller outlay programs to stimulate private and public spending and thus aid recovery. Tax and spending measures and the recession itself produced a record deficit in the federal budget for fiscal year 1976, currently estimated at slightly below $70 billion. This year Congress' First Concurrent Resolution on the 1977 Budget implies a less stimulative policy, including some special outlays to boost

CHART 1

REAL GNP IN FIVE RECESSION-RECOVERY PERIODS

(Indexes of GNP in 1972 dollars, previous peak = 100)



SOURCE: U.S. Department of Commerce.

NOTE: The 1973-76 data are based on GNP data before the July 1976 revision; second quarter 1976 based on the percentage change in revised GNP. Peak and trough dates are the business cycle (reference) peaks and troughs designated by the National Bureau of Economic Research. The first quarter of 1975 is a tentative date for the latest trough; it has not been officially designated by NBER.

employment but no substantial change in current tax rates. Outlays voted in the resolution amount to $413.3 billion, revenues to $362.5 billion, and the deficit to $50.8 billion. The resolution is not as restrictive as the Administration budget, which calls for outlays of $400 billion and a deficit of $47.5 billion.

Based on the first concurrent resolution, CBO's economic projections through 1977, explained in detail in Chapter I, show:

- continued growth in output, but at an annual rate lower than the 6.7 percent of the first five quarters of recovery;
- an underlying downward trend in the unemployment rate, with the rate in the 5.8 to 6.4 percent range by the end of 1977; and
- inflation at an average annual rate of 5 to 7 percent (as measured by the GNP deflator).

Thus, through 1977 the projections envision continued expansion without accelerating inflation. This forecast is summarized in Table 1.

TABLE 1

OUTPUT, PRICES, AND UNEMPLOYMENT,
1976 AND 1977

	GNP (billions of 1972 dollars)	General Price Index (GNP deflator, 1972 = 100)	Unemployment Rate (percent)
Actual, 1976:II (preliminary)	1260	133	7.4
Projected Range			
1976:IV	1290 to 1300	136 to 138	6.9 to 7.3
1977:IV	1350 to 1380	143 to 147	5.8 to 6.4
Projected Growth (annual rate, percent)			
1976:II to 1976:IV	5.0 to 6.5	5.5 to 6.5	--
1976:IV to 1977:IV	4.5 to 6.5	5.0 to 7.0	--

Besides adherence to the first concurrent resolution, the forecast assumes rates of monetary growth near the high end of the Federal Reserve's announced targets, leading to gradually rising short-term interest rates during the forecast period; steady growth in exports; moderate increases in food prices; and continuing rises in oil prices. The forecast is quite similar to the forecast CBO published last March and to the economic assumptions underlying the Congressional budget resolution.

Departures from these assumptions would change the projections. Sustained vetoes of $5.6 billion worth of public employment measures, for example, are estimated to reduce the number of jobs by 400,000 below the baseline forecast by the end of 1977 and to raise the unemployment rate by 0.3 percentage points. The impact of such vetoes in reducing the inflation rate would be nearly zero in 1977, but would grow to a 0.3 percentage point reduction in the inflation rate by 1980. Chapter II explains how this change and other policy alternatives, such as departures from the monetary policy assumptions, would affect the outlook.

Policies outside the realm of traditional fiscal and monetary instruments, such as steps to strengthen competition or tax changes linked to wage and price restraint, would also change the outlook, but it is nearly impossible to predict how much. The longer the twin problems of high unemployment and high inflation persist, however, the more likely it is that these alternative approaches will receive serious consideration.

Another topic which is receiving growing attention as the economy recovers is the fraction of output devoted to investment in the private capital stock rather than to consumption or to government purchases. In the short run, maintaining growth in the capital stock is important in order to avoid bottlenecks in key industries as the economy approaches its potential output. An analysis of output and capacity trends for a number of key materials in Chapter III suggests that unless output significantly exceeds projected growth rates, serious bottlenecks will not develop over the next two years.

In the long run, investment in private capital is a vital ingredient in introducing new technology and maintaining growth in productivity and living standards. In recent years capital per worker has grown more slowly than in the

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past, and this slow growth is one factor contributing to a reduced rate of productivity growth. Other factors include rising investment requirements for pollution control and occupational health and safety, shifts in demands from capital-intensive to labor-intensive industries, and shifts in the composition of the labor force toward groups with relatively little work experience (women and teenagers).

If policies are sought which would limit or reverse the reduction in productivity growth, then there are a range of approaches to consider. Steps to promote investment, such as a combination of easy money and tight fiscal policy or various tax changes favoring investment in plant and equipment, are one strategy. Policies to encourage research and development and programs to promote education and training are among the other possibilities. Very little is known at present about which approach would be most effective.

CHAPTER I

THE OUTLOOK

Introduction

The economy is improving, but unemployment and inflation remain much worse than they were in earlier recoveries. While the growth in output since early 1975 has matched that of previous recoveries, it followed a recession far deeper than other recessions during the last 30 years (see Chart 1 on page x). As a result, total output is now barely ahead of its peak two and a half years ago, and the unemployment rate is still at a level reached only at the bottom of previous recessions. The rate of inflation is also worse than in previous recoveries. While inflation has receded from the peak rates of 1973 and 1974, it remains much higher than during the 1950s and 1960s.

Between now and the end of calendar year 1977 (the period covered by this report), the most likely economic prospect is for continued improvement in output and employment and no substantial change in the rate of inflation. Real output grew at an annual rate of 4.4 percent during the second quarter of 1976, distinctly lower than the 7 percent average during the first year of recovery. Growth will probably continue to average below 7 percent during the remainder of this year and 1977. Inventory investment, which accounted for more than one-third of the first-year recovery, will contribute much less to growth during the next year and a half. The fiscal policy embodied in the First Concurrent Resolution on the Budget for Fiscal Year 1977 is moderate rather than expansionary, and the monetary targets announced by the Federal Reserve point to a gradual reduction in monetary growth and slowly rising short-term interest rates in 1977.

Plant and equipment spending will probably be a source of growth next year, as the revival in fixed investment gathers momentum. Autos and housing have made important

contributions to the recovery so far and may continue to do so for a while to come. It is likely, however, that they will play their characteristic role of somewhat slower growth during the later stages of recovery than during the early stages.

As for inflation, important influences at the present time are not all pulling in the same direction. Current high unemployment rates are likely to reduce inflation, but the slowdown of productivity growth in recent years and the outlook for fuel prices are likely to increase it. The influence of past cost increases on current prices and wages tends to make recent rates of inflation persist. On balance, these factors suggest that inflation will continue at a rate of 5 to 7 percent per year through 1977.

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Trends in Demand

Consumption

By the beginning of 1975, American consumers had been through two battering years. They had experienced the highest rates of inflation since the outbreak of the Korean War, with price increases particularly large for food and energy. Interest rates reached unheard-of levels and common stock prices plunged. Real disposable incomes had the longest and largest decline in many years, resulting from the combined effects of rising inflation, declining productivity, the progressive income tax system, declining hours of work, fewer new hires, and rising layoffs. All of these events--compounded by the OPEC oil embargo--convinced many consumers that they could no longer take for granted that their standard of living would improve. They responded by saving more and spending less, and consumption spending declined in real terms.

During 1975, consumer purchasing power was bolstered by a sharp drop in the rate of inflation from 12 to "only" 7 percent, plus tax rebates and tax cuts. Consumer spending responded, and consumer demands, along with the ending of inventory liquidation and a pickup in housing investment, gave the initial impetus which brought about rises in production, hours of work, and employment. Falling interest rates and rising common stock prices also contributed to a more favorable atmosphere for consumer spending, and the University of Michigan Survey Research Center's consumer confidence index rose to a level in early 1976 that was the highest since the end of 1972.

In the first four quarters after the recession trough in the first quarter of 1975, consumer spending expanded at a fairly steady 12 percent annual rate in current dollars. Because the rate of inflation varied somewhat, the path of real (constant-dollar) spending was more uneven, but the increase averaged out to 6.1 percent over the four quarters.

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In the second quarter of 1976, the growth of consumption spending slowed to a 4 percent annual rate in real terms, and the personal saving rate, at 7.0, was little changed after a significant decline in the first quarter. Caution was reported in sample surveys of consumer confidence. Some special events of the second quarter--an upturn in food prices and a leveling off in common stock prices--probably contributed to this attitude. Unless setbacks of this nature recur, the projected recovery should bring some further increases in confidence and some further decline in the saving rate. A decline in the saving rate--usually associated with increasing confidence, purchases of autos and other durables, and use of credit--enables consumer spending to increase faster than income, thus providing extra stimulus to business activity.

Consumer purchases of new automobiles were at an annual rate of 10.2 million units in the second quarter of 1976, about the same as the first quarter and 29 percent higher than a year earlier. Along with the recovery in car sales has come a change in the composition of demand for autos. The share of imports and domestic subcompacts has declined, while the share of larger compacts and intermediate-size cars has increased, leading to widely publicized speculation that the American motorist is not interested in fuel conservation even at high gas prices. In fact, however, changes in the mix of auto sales have roughly paralleled changes in the price of gasoline relative to the price of other consumer goods. Between 1973 and 1974, gas and motor oil prices rose 20 percent faster than the general rate of inflation. Responding to this relative price increase, the mix of cars changed sharply from 1973 to 1975, away from standard and luxury-sized cars and toward imports and subcompacts. Since 1974 there has been a slight decline in the relative price of gasoline (although this decline is expected to be reversed in the projection period), and buyer interest in larger cars has increased. The switch away from imports and subcompacts in 1976 has only partly offset the changes that occurred between 1973 and 1975, however. Imports are back at about their 1973 market share, but among domestic cars, luxury and standard models have lost ground to compact and intermediate cars.

The Survey Research Center has reported that consumer sentiment and spending plans are significantly more optimistic among consumers with above-median incomes. The

shift toward somewhat larger cars may reflect, in part, greater willingness to buy at the present time on the part of higher-income consumers than on the part of lower-income consumers.

Housing

Housing activity was the first victim of the recession. Housing starts began to decline in early 1973 and dropped steadily for two years, to less than half of the record 1972 rate.

Recovery in this industry was early too--at least for the single-family sector, as Chart 2 shows. In addition to the revival of consumer incomes and demand in general, there were some developments specifically favoring housing: the decline in short-term interest rates, which encouraged savings flows into the thrift institutions which finance housing; the tax rebates, which were reflected in particularly large deposits at thrift institutions in the second quarter of 1975; and possibly the tax credit for the purchase of new homes, which had to be used during 1975 (although it is difficult to determine the effect of this device).

In spring 1976, savings flows, mortgage lending activity by thrift institutions, and single-family housing starts all seemed to be continuing at a high level. Despite high prices, the single-family sector has recovered to about 85 percent of its record performance in 1972.

Multifamily housing has had a very different experience, as Chart 2 shows. Although it has increased from last year's lows, the number of units started in structures with five or more dwelling units during the first half of 1976 was only one-fourth of the 1972 rate. Further gains in residential construction activity are likely to require an end to the stagnation in this sector. A number of interacting factors appear to be contributing to this stagnation:

- First, there has been excess supply in some areas, including a large inventory of unsold condominiums. As of late last year, the percentage of new apartments still not rented after 12 months was continuing to edge upward. Vacancy rates for all rental

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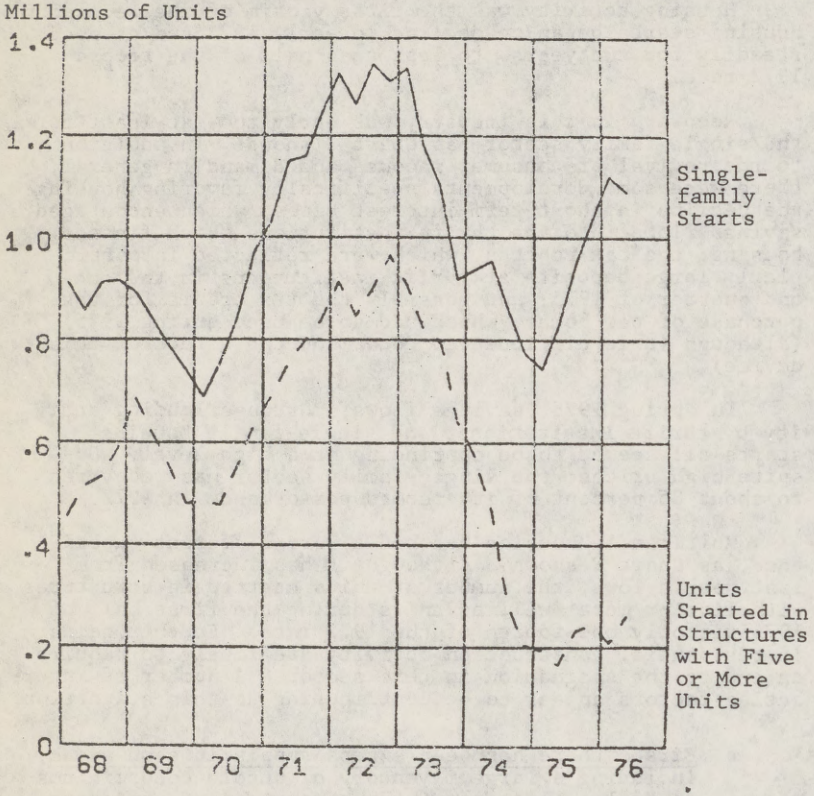
CHART 2
NEW PRIVATELY OWNED HOUSING UNITS STARTED, SINGLE AND MULTIFAMILY
(seasonally adjusted annual rates)



SOURCE: U.S. Department of Commerce.

housing were 6 percent or more in 1974 and early 1975, higher than in the early seventies but well below the rates of over 8 percent reported during the apartment glut of the early sixties. Late in 1975 the vacancy rate dropped to 5.5 percent.

- Second, financing for multifamily projects has dried up as a result of the financial difficulties of the real estate investment trusts, reflecting pessimistic assessments of the risks and profitability of rental housing. A new program of the Federal Home Loan Mortgage Corporation to commit to buy mortgages on multifamily projects may help to channel more funds into this market.

- Third, and more basically, present and future profitability of rental housing is widely regarded as unsatisfactory. In part, this may be because long-term interest rates remain relatively high, having fallen much less than short-term rates. However, homebuyers also have to pay high long-term rates (the effective rate on a conventional mortgage on a newly built house was 8.91 percent in June, little less than the high of 9.37 percent in late 1974) and there has been a marked recovery in single-family starts nevertheless. The difficulty seems to be that the high interest rates and other increased costs, such as construction, maintenance, heat, and utilities, have not been fully passed on to the consumer in the form of rent increases. The rent component of the Consumer Price Index has risen much more slowly than either the total CPI or the cost of homeownership in recent years. So has the median rent on new rental units, even when a rough adjustment is made for average size of apartments. This rent lag has been ascribed to several causes, notably to high vacancy rates; to rent controls, the threat of rent controls, and the fear of provoking rent controls; and to the substantial advantages of homeownership which result from the tax subsidies to homeowners and the capital gains arising from inflation. Whatever the cause, it seems unlikely that there will be much strength in multifamily housing if rents do not cover costs and provide a competitive profit margin. Though statistics do not yet show it, there have been reports that rent increases have recently become larger.

- Finally, tax advantages to apartment builders and owners were reduced in 1969, and tax advantages to other forms of investment, mainly producers' durable equipment, have been increased since then. As a result, multifamily housing has less tax advantage than it used to, relative to other forms of investment.

Housing activity is not likely to increases as fast over the next year and a half as it did in the first stage of the recovery. But as long as short-term rates do not rise enough to induce outflows of savings from thrift institutions, and expanding consumer incomes permit lowering of rental vacancy rates and increases in rents, housing will continue to contribute to growth in real gross national product (GNP).

Investment in Plant and Equipment

As Chart 3 shows, business capital spending declined more during the recession and lagged more after the trough than in earlier recessions. In the past two quarters, healthy rates of increase have taken place. Business capital spending plans, as reported by the U.S. Department of Commerce, appear consistent with further increases at about the same rate for the rest of 1976.

Of the industries surveyed by the Commerce Department, about half reported substantial increases in spending for 1976 compared with 1975. These included industries which had favorable demand changes in 1975, such as the auto and rubber industries, and energy and other industries which had experienced shortages during the 1973 boom, such as petroleum refining, utilities, paper, and textiles.

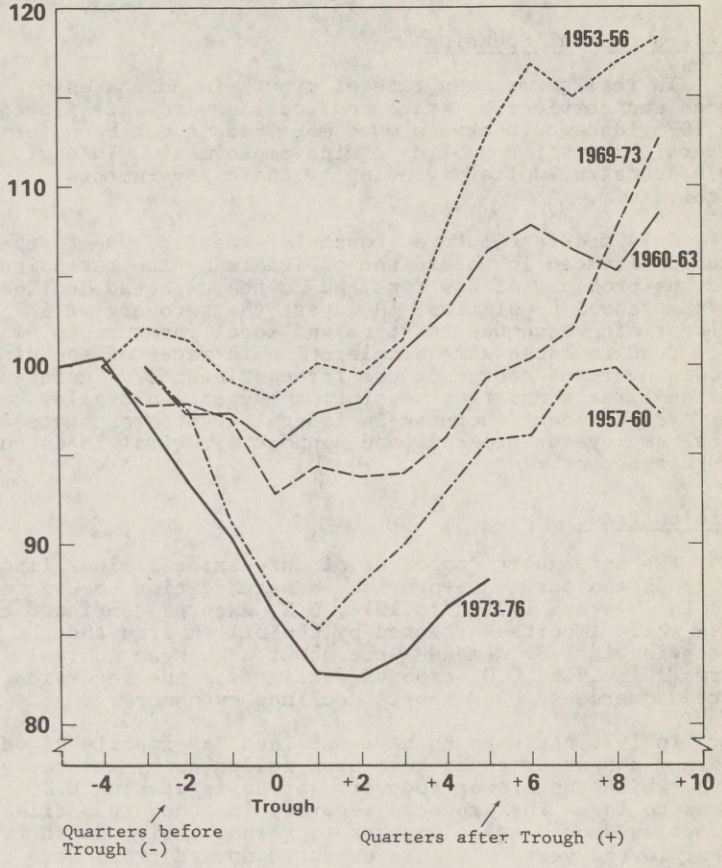
The increased and expanded investment tax credit, enacted in 1975 and now scheduled to expire at the end of 1976, may have influenced the amount of capital spending this year, if only by encouraging businesses to make investments earlier than they normally would have. The provisions of the 1975 act were especially favorable to electric utilities in that they may now receive the tax credit at the same rate as other industries instead of a lower rate.

Further, more widespread strength in capital spending is expected to emerge next year as output and capacity utilization continue to increase. The first signs of this

CHART 3

NON RESIDENTIAL FIXED INVESTMENT IN FIVE RECESSION-RECOVERY PERIODS

(Indexes of 1972-dollar investment, previous peak = 100)



SOURCE: U.S. Department of Commerce.

NOTE: The 1973-76 data are before the July 1976 revision; second quarter 1976 is based on the percentage change in revised data. Peak and trough dates are the business cycle (reference) peaks and troughs designated by the National Bureau of Economic Research. The first quarter of 1975 is a tentative date for the latest trough, it has not been officially designated by NBER.

expected acceleration are not yet clearly apparent; such leading indicators as manufacturers' appropriations and contracts and orders for plant and equipment have not shown an uptrend in real terms recently, but are expected to do so over the rest of this year.

State and Local Spending

In real terms, the rate of growth in purchases of goods and services by state and local governments slowed in 1975, and would have slowed more had it not been for federal grants for public service employment. In early 1976, constant-dollar spending by these governments leveled off.

Only moderate future growth is expected, due to the caution induced in voters and officials by the recession and the problems of New York and to the expected decline in the school population. However, the recovery will bring rising revenues to state and local governments, which will tend to cause some acceleration in rates of spending growth over the course of the forecast period. Enactment of the first concurrent resolution budget would allow room for a significant increase in federal grants for state and local employment programs and support a revival in demands by this sector.

Foreign Trade

The net export component of GNP--exports minus imports of goods and services--provided a net addition to U.S. output in 1974 and 1975. In 1974, U.S. exports continued to rise while imports--affected by the oil embargo and the recession in U.S. demand--were about unchanged in real terms. In 1975, U.S. exports declined as the recession spread overseas, but imports declined even more.

In 1976 net exports have declined, as imports of petroleum and other goods have been pulled up by the recovery here, while the slower recovery abroad is causing U.S. exports to lag. The expected recovery in other industrial countries should cause exports to resume their upward trend later in the year. If this expected upward trend were to cause an increase in the value of the dollar relative to other currencies, then the exchange rate movement would reduce the stimulation to GNP arising from net exports, while tending to reduce domestic inflation as well.

Inventory Investment

Added to the recession in final demand was the biggest inventory swing in the postwar period. At peak output at the end of 1973, inventory investment reached a record rate of over $25 billion in 1972 dollars. Much of this investment was involuntary, as unbought automobiles piled up on dealers' hands in the first reaction to the oil embargo. At the trough in output in early 1975, inventories were being run down at a $21 billion annual rate in 1972 dollars. This swing from stock building to liquidation accounted for more than half of the total decline in GNP.

The recovery in inventories has been as rapid as the decline, and has accounted for more than a third of the recovery in GNP. By the end of 1975, the ratio of business inventories to business final sales in real terms had been reduced to about its long-term average level, partly because of the reduction in inventories during 1975 and partly because of the increase in final sales. In the first quarter of this year, inventory investment increased at roughly the rate required to maintain that ratio. If the ratio continues to be stable in the next year and a half, then inventory investment would increase only in line with final sales growth and would no longer be a factor causing GNP to deviate from its trend growth path.

In fact, in the second quarter inventory investment was a little lower than in the first, while final sales rose faster than they had in the first quarter. The decline in the inventory-sales ratio was small, and there was little indication of conditions that would lead to destabilizing movements in inventory investment. With continued steady growth in final sales, it seems possible that the economy could avoid both the buildup of inventories (and subsequent slowdown in output) that would result from a slowdown or decline in final sales and the panic rates of ordering that occur when inventories get too low in relation to sales.

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The Outlook

Growth in Output

Both the natural dynamics of economic recovery and the likely course of economic policy lead to a forecast of less growth in the second half of 1976 and 1977 than took place in the first year of recovery. Inventory investment will contribute less to growth because the inventory turnaround of the first year of recovery has succeeded in bringing the economy fairly close to normal inventory-sales ratios. Other sectors of demand are unlikely to take up all of the remaining slack. The tax reductions of 1975 boosted the rate of growth during the first year of recovery. However, as reflected in the First Concurrent Resolution on the Budget, fiscal policy for 1977 does not provide any additional boost and, in fact, by some measures moves slightly in the restrictive direction. The monetary targets announced by the Federal Reserve System probably imply a gradual increase in short-term interest rates (although last year's targets, which most observers felt would increase rates, did not in fact do so).

A forecast reflecting these trends in demands and policies, presented in Table 2, shows:

- a rate of growth of real GNP of 5 to 6.5 percent (annual rate) during the remainder of 1976 and 4.5 to 6.5 percent during 1977;
- an inflation rate (as measured by the GNP deflator) of about 5 to 7 percent during the next six quarters, roughly the same as the 5.5 percent rate during the first year of recovery;
- an unemployment rate between 6.9 and 7.3 percent of the labor force by the end of this year and between 5.8 and 6.4 percent by the end of 1977.

TABLE 2

ECONOMIC PROJECTIONS, 1976 AND 1977

	Actual (preliminary) 1976:II	Projected Range		Projected Growth (annual rate, percent)	
		1976:IV	1977:IV	1975:II to 1976:IV	1976:IV to 1977:IV
GNP, Billions of Current Dollars	1673	1755 to 1785	1965 to 2005	11.5 to 12.5	11.0 to 12.5
GNP, Billions of 1972 Dollars	1260	1290 to 1300	1350 to 1380	5.0 to 6.5	4.5 to 6.5
General Price Index (GNP deflator, 1972 = 100)	133	136 to 138	143 to 147	5.5 to 6.5	5.0 to 7.0
Consumer Price Index (1967 = 100)	169	172 to 175	181 to 186	5.0 to 6.0	4.7 to 6.7
Unemployment Rate (percent)	7.4	6.9 to 7.3	5.8 to 6.4	--	--

As always, the forecast is subject to great uncertainty. Some of the principal assumptions underlying it--assumptions which actual events could easily invalidate--are: (1) adherence to the First Concurrent Resolution on the Fiscal Year 1977 Budget, with outlays at $413 billion (unified budget); (2) monetary growth near the high end of the Federal Reserve targets, leading to a gradual rise in the Treasury bill rate to just over 7 percent by the end of 1977; (3) total exports rising at an annual rate of 5.5 percent (in 1972 dollars) as other countries recover from the world-wide recession; and (4) farm prices rising at about 4 percent and wholesale fuel prices at 8 percent (annual rates) during the forecast period.

Growth rates of real GNP in the forecast are somewhat more rapid than is characteristic of the same period in most (though not all) other recoveries. Nevertheless, because of the depth of the 1974-75 recession, recovery at the projected range should not create serious strains on capacity through 1977. The projections thus do not represent a rate of recovery which necessarily contains the seeds of a future slowdown and downturn. If the forecast is realized, it may be possible to sustain the expansion for some time beyond 1977.

The Rate of Inflation

Between the second quarter of 1975 and the second quarter of 1976, the general price level (as measured by the GNP deflator) increased about 5.5 percent, substantially less than the double-digit rates of 1974 but considerably faster than most Americans regard as normal or desirable. Over the next 18 months, the CBO forecasts imply a continued inflation rate of 5 to 7 percent. This projection reflects a balancing of conflicting forces, some tending to push prices up and some to moderate past rates of inflation.

The main anti-inflation factor at present is the existence of substantial unused capacity in the economy. Unemployment is still high and output is well below capacity

in the great majority of industries. Therefore, increases in demand as the economy improves can be expected to lead to increases in output, with relatively little upward pressure on prices.

Bottlenecks in a few critical industries were among the causes of accelerated inflation in 1973 and some forecasters are predicting a return of the bottleneck problem a year or two hence. However, the analysis of likely trends in output and capacity for a number of critical industrial materials in Chapter III of this report suggests that general shortages of materials capacity are unlikely to develop before the end of 1977, given overall output growth at a rate of 4.5 to 6.5 percent.

But there are also forces pushing prices up--especially the current legacy of past inflation. An important lesson from the recent history of inflation is that it takes a long time for an initial price increase to exert its full influence. In part, the influence of past inflation persists because households and businesses form expectations about inflation on the basis of past history and these expectations themselves affect the actual inflation rate.

The influence of past inflation is especially evident in the cost of labor which is, in turn, an important influence on prices. As can be seen in Chart 4, compensation changes in recent quarters have reflected the existence of substantial unemployment; they have declined during the last year from an average of more than 10 percent to under 8 percent. As the chart shows, this deceleration of wage inflation during the recovery period is by no means typical. In previous recoveries, rates of wage inflation after a year of recovery have been at least as high as the bottom of the recession.

Nevertheless, rates of wage inflation remain high by historical standards, as the chart also shows. Past rates of inflation, reflected in current inflationary expectations and in the desire to catch up to past price and cost increases, are keeping the rate of wage inflation close to 8 percent rather than the 3 to 5 percent typical of past recoveries in the 1950s and 1960s. It will probably take a long time for these expectations and catch-up factors to recede; that is the main reason for an inflation forecast of 5 to 7 percent for the next six quarters rather than a rate closer to past history.

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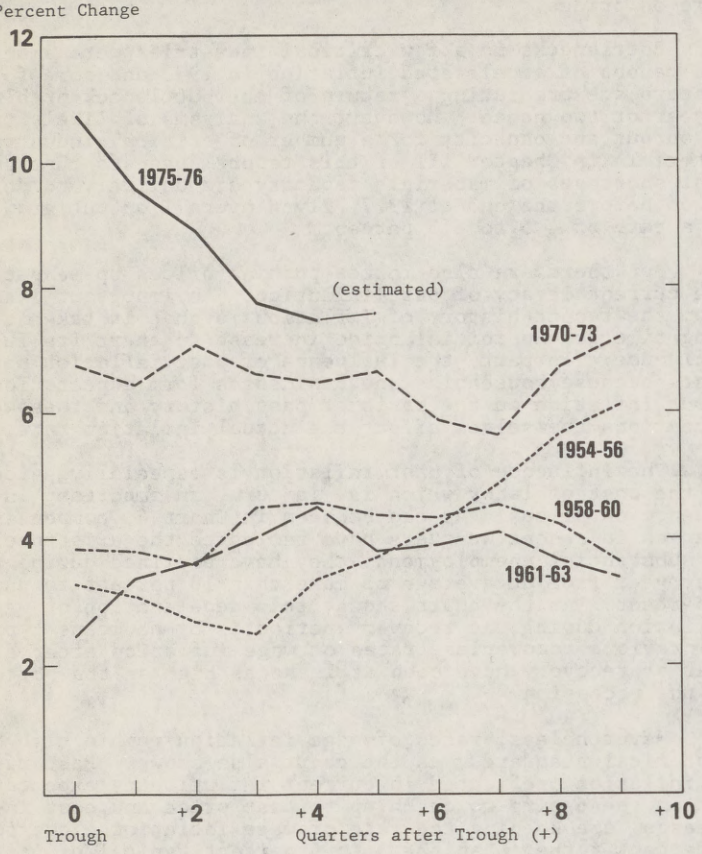
CHART 4
WAGE INCREASES IN FIVE RECOVERIES



SOURCE: U.S. Department of Labor.

NOTE: The rate of wage increase is the percentage change from four quarters earlier in compensation per hour of all persons in the private nonfarm economy. Trough dates are the business cycle (reference) troughs designated by the National Bureau of Economic Research. The first quarter of 1975 is a tentative date for the latest trough; it has not been officially designated by NBER.

Increases in output per hour tend to offset the effect of rising wages on prices. Unfortunately, there is some evidence that, apart from the influence of the recession and recovery, the underlying rate of productivity growth has slowed in recent years. Chapter III of this report discusses productivity trends, which may be another cause of persisting inflation.

All inflation forecasts are subject to great uncertainty, especially in the short run. As recent history teaches, unexpected changes in world markets for food and raw materials can exert strong pressure on domestic prices.

Developments in such special markets could influence the current outlook substantially. After declining this winter, farm prices have begun rising again, but most forecasters expect the increase to be at a much lower rate than the run-up of 1972-73. Farm prices, however, depend on the size of this year's crops in many parts of the world, and there is still widespread uncertainty about the crop outlook. As for oil, the Energy Policy and Conservation Act of 1975 was responsible for reductions in domestic oil prices early this year and will be responsible for increases at more than the overall inflation rate for several years in the future. Domestic oil prices will thus almost certainly be a factor adding somewhat to inflation. The future of world oil prices is, as always, an enigma.

In summary, it is mainly the influence of the past that is keeping the inflation rate well above historical averages. Other factors--the current high unemployment rate, the slowdown in productivity growth, the absence of widespread bottlenecks, the food and fuel outlook--have mixed influences, but on balance will probably not increase the inflation rate. Unfortunately, present policy tools allow only gradual inroads to be made against the inflation inherited from earlier years.

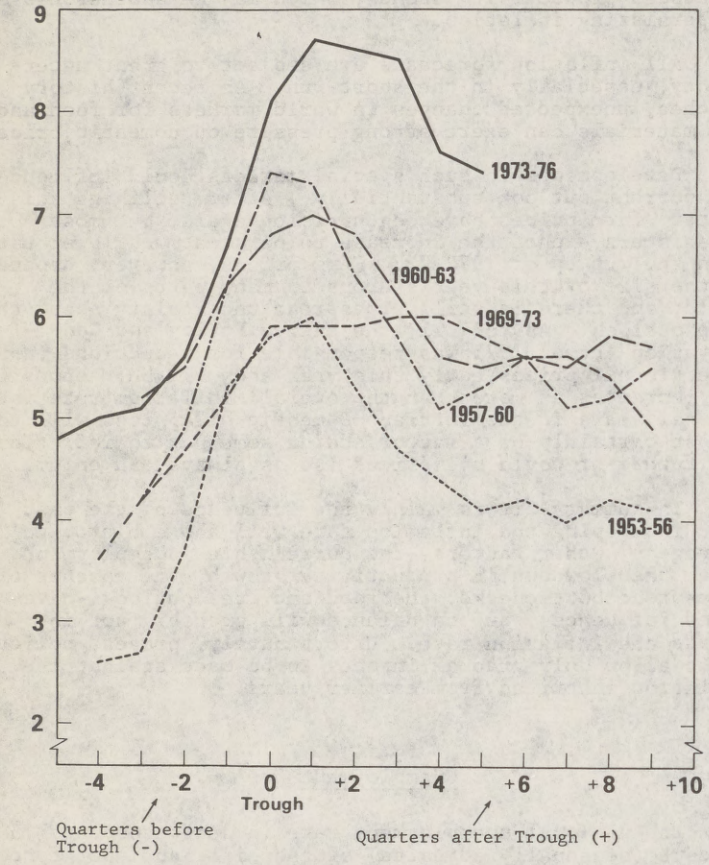
Unemployment

The national unemployment rate in June stood at 7.5 percent (seasonally adjusted) of the civilian labor force, an improvement over the 8.9 percent peak in the spring of 1975 but still far above levels at the same stage of other recovery periods. As Chart 5 shows, the second quarter

CHART 5

UNEMPLOYMENT RATES IN FIVE RECESSION-RECOVERY PERIODS

Percent of Civilian Labor Force



SOURCE: U.S. Department of Labor.

NOTE: Peak and trough dates are the business cycle (reference) peaks and troughs designated by the National Bureau of Economic Research. The first quarter of 1975 is a tentative date for the latest trough; it has not been officially designated by NBER.

average rate of 7.4 percent was higher than the worst quarter of most other postwar recessions. While the unemployment rate is projected to improve during the next 18 months, it is still estimated to lie in the relatively high range of 5.8 to 6.4 percent by the end of 1977.

Measuring Unemployment

Unemployment statistics have been criticized both for not including enough workers and for including too many. The unemployment rate does not take any account of part-time workers seeking full-time work, nor does it include "discouraged" workers who are not currently seeking a job but would do so in a tighter labor market. On the other hand, unemployment measures do include more than simply persons laid off their jobs. Workers who quit their jobs and persons seeking work for the first time are also counted among the unemployed.

These questions of what categories to include in the concept of unemployment probably have very little effect on comparisons from month to month or from one business cycle to another. The Department of Labor has calculated unemployment rates corresponding to both broader and more restrictive definitions of unemployment. While their levels differ, of course, from the published national rate, they all show a strong tendency to move together, and all of them show that recent rates are unusually high.

Month-to-month statistics on unemployment are complicated by the need to adjust for normal seasonal forces. Before any seasonal adjustment, the national unemployment rate rose from 6.7 percent in May to 8.0 percent in June. But unemployment nearly always rises from May to June because of the influx of persons looking for summer work. It is of no great interest that unemployment also rose from May to June this year. What is of interest is whether the rate was rising or falling after correction for these normal seasonal influences. That is what the widely quoted seasonally adjusted rate is intended to measure.

Estimating the appropriate seasonal adjustment is particularly troublesome when the economy is changing rapidly. Problems in the adjustment may well have contributed both to the apparent rapid improvement in the unemployment rate in the early months of the year and to the

rise from 7.3 to 7.5 percent from May to June. The routine updating of seasonal factors to include 1975 data resulted in an unusually large revision of the size of estimated seasonal movements in unemployment. Unemployment rose very rapidly in the first part of 1975 and fell during the second half, and the procedures for seasonal adjustment may have mistaken some of this cyclical movement for a change in the seasonal pattern. If this happened, the result would be an exaggerated decline in the seasonally adjusted rate in the early months of this year, perhaps accounting for 0.2 points in the rate--and the rate in coming months may be about 0.2 points higher by the same token. The June rate itself may be free of this seasonal bias.

Interpreting the Unemployment Rate

Does the current 7.5 percent unemployment rate represent approximately the same degree of labor market tightness that the same rate represented a decade or two ago? One of the problems about comparisons with earlier periods is that the composition of the labor force has changed significantly during the last 20 years. In the first half of 1976, adult women accounted for 36 percent of the labor force, while 20 years earlier, they comprised only 29 percent of the labor force. For teenagers the shift has been equally dramatic; they accounted for 9.5 percent of the labor force in the first half of 1976 compared to 6.5 percent 20 years earlier. Adult males, in contrast, have been a declining fraction of the labor force, from 64 percent 20 years ago to 54 percent in the first half of this year. These are all significant changes which affect the interpretation of unemployment, because adult males typically have somewhat lower than average unemployment rates while teenage unemployment rates typically are quite high. Some economists contend that the higher unemployment rates of women and teenagers largely reflect their relative lack of work experience which results in a need for longer periods of job search. Furthermore, women and teenagers may be willing to search longer for the "right" job because they are frequently secondary earners in the household. If this interpretation is accepted, a given overall unemployment rate today is equivalent to a rate nearly one percentage point lower 20 years ago.

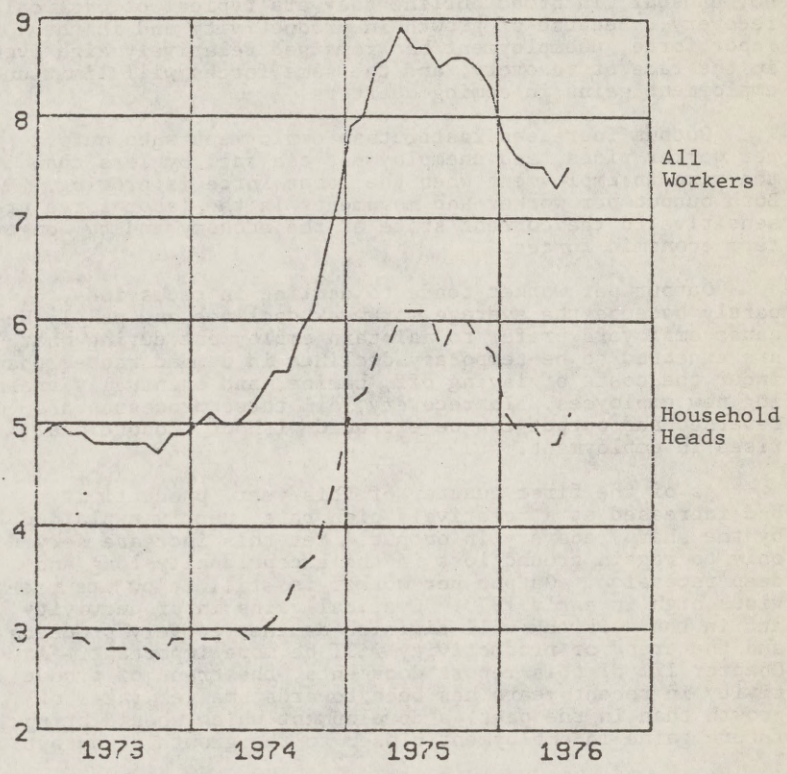
Yet at the present time, unemployment is by no means confined to secondary workers. As Chart 6 demonstrates, unemployment among household heads increased sharply during the recession and has generally paralleled the overall rate.

CHART 6

UNEMPLOYMENT RATES

(Seasonally adjusted, monthly)

Unemployment as Percent of Civilian Labor Force



SOURCE: U.S. Department of Labor.

Output, Employment, and Unemployment

Over the first four quarters of recovery, output rose by 7 percent, but employment rose 2.5 percent and the unemployment rate came down only 0.5 percentage points. Such diverse changes in output, employment, and unemployment are not unusual; in broad outline they are typical of cyclical recovery. Because of growth in productivity and in the labor force, unemployment has remained relatively high even in the face of recovery, and the same forces will limit unemployment gains in coming quarters.

Output increases faster than employment when output per worker rises, and unemployment can fall by less than the rise in employment when the labor force is growing. Both output per worker and movements in the labor force are sensitive to the current state of the economy and to longer-term economic forces.

Output per worker tends to decline in recessions, partly because the average workweek declines and partly because employers prefer to maintain employment during what are expected to be temporary declines in demand rather than incur the costs of laying off, hiring, and eventually training new employees. In recovery, all these processes are reversed and output can be expanded without proportional rises in employment.

As of the first quarter of this year, productivity had increased at a relatively high rate, partly explained by the sharp recovery in output. Yet this increase served only to regain ground lost in the exceptionally long and deep recession. Output per worker is still below its previous high in early 1973. Cyclical gains in productivity and in the workweek will diminish as the recovery proceeds and the trend of productivity will be more important. As Chapter III of this report documents, the trend of productivity in recent years has been towards smaller rates of growth than in the past, a development which should bring future gains in employment closer to the growth of output.

Growth in the labor force, like growth in productivity, is sensitive to the state of the economy and also works in the direction of limiting reductions in unemployment during recovery periods. The reason is that the labor force participation rate--that is, the proportion of working-age

population which actually works or is actively seeking work--responds positively to general employment opportunities, rising when job prospects are good and falling when job prospects are bad. During recoveries, the gain in employment is partly offset by a rise in the labor force so that the number of unemployed falls relatively slowly.

Participation rates are also affected by longer-run trend forces. Over the entire postwar period there has been a downward trend in the participation rate of males over 20, due partly to early retirement and partly to longer schooling. This has been more than offset by an upward trend in the participation rate for females over 20, also extending over the whole period; this was supplemented in the mid-1960s by an upward trend in participation by teenagers.

Some economists find that the unemployment insurance system tends to raise unemployment, mainly by inducing the unemployed to remain in the labor force rather than dropping out and pursuing "nonmarket" activities when employment opportunities are poor. Yet general employment opportunities and the long-term trends just discussed explain most of the changes in labor force participation rates during the last 26 years, leaving relatively little variation to be explained by the substantial extensions and liberalizations of unemployment insurance which have taken place in the 1970s. However, there was a marked "bulge" in the participation rate last summer--an increase at the beginning of the summer, offset by a decrease at the end--which seems to have reflected the new Special Unemployment Assistance (SUA) program for workers not eligible for other forms of unemployment insurance. SUA may have kept school teachers and other workers, who would have normally dropped out of the labor force in the summer, counted among the unemployed. This same factor may be raising participation rates this summer. The 1975 summer "bulge" can account for, at the most, 0.2 percentage points on the average unemployment rate for the entire year.

Despite its shortcomings, the unemployment rate allows relative judgments to be made about the degree of nonutilization of available human resources in the U.S. economy. Taking the latest reading of 7.5 percent and reducing it by about 1 percent to account for the change in labor force composition since 1956, and 0.2 percent to account for the effect of SUA, produces a "1956-comparable" unemployment

rate of 6.3 percent, still higher than at this point in any previous postwar recovery, and two full percentage points higher than at the comparable point in the 1954-56 recovery.

It is also possible to compare the 1977 unemployment forecast with unemployment in 1973 (the year preceding the recession). Changes in labor force composition over that four-year period have been relatively small and can be ignored. Both the total unemployment rate and the rate for heads of households are projected about a percentage point higher than they were in 1973. Now and during the forecast period, there is and will be an above-average amount of unused human resources, and an above-average proportion of families with lower and more uncertain income. The unemployment burden on blacks will be greater than implied by their proportion in the labor force, and the difficulties of teenagers in obtaining job experience will be magnified, in comparison with a high-employment period as recent as 1973.

CHAPTER II

ECONOMIC POLICIES

Fiscal and monetary policies are the traditional tools with which the federal government attempts to influence aggregate output, employment, and prices. This chapter describes current policy and considers the effects of some policy alternatives.

Economic Policy, Inflation, and Unemployment

Most economic analysis indicates that fiscal and monetary policies have a fairly prompt effect on output and unemployment and a delayed effect on the rate of inflation. Aggregate policies which in the short run add to output and lower unemployment have an eventual cost in the form of increased inflation. Policies which eventually reduce the rate of inflation do so at the cost of at least a temporary increase in unemployment.

This conventional view of the ways in which monetary and fiscal policies operate has been under attack recently from advocates of both expansionary and restrictive policies. Some critics dispute the conventional view that expansionary policies drive up prices, and argue that monetary and fiscal policies should be set with low unemployment as the only objective. Other critics dispute the view that expansionary fiscal policies affect employment, and conclude that moving toward a stable price level should be the overriding objective of macroeconomic policies. Both groups support their contention that there is no stable inflation-unemployment relationship by citing developments during the last year, when the recovery of demand caused unemployment to decline significantly from its recession peak while the rate of inflation, instead of accelerating, also declined.

Developments during the last year, however, hardly warrant rejecting the conventional view that there is at least a short-run tradeoff between unemployment and

inflation. The moderation of inflation during the last year is, in part, a response to the recession which reached its trough in March 1975 rather than to the recovery which has taken place since. Moreover, declines in farm and fuel prices during the early part of 1976 were major contributors to the lower rate of inflation during the first quarter.

In short, although special factors may mask the relationship for a time, monetary and fiscal policy makers still face an unemployment-inflation dilemma. At a time when both unemployment and inflation are high in relation to historical averages, the dilemma is leading to interest in other alternatives outside the realm of traditional fiscal and monetary policies. The United States has had intermittent experience with one alternative, namely, price and wage guidelines and controls.

A number of other new policy departures have been proposed. Policies to strengthen competition in both product and labor markets might bring down selected prices and costs. Deregulation of transportation prices, reform of health pricing, repeal of the Davis-Bacon Act,[1] and modification of the minimum wage are among the proposals in this area. Programs to train workers and disseminate job information might reduce the amount of unemployment associated with any given rate of inflation. New forms of fiscal policy which reduce costs at the same time as they provide purchasing power are another possibility. A subsidy to state and local governments in return for a reduction of sales taxes is one such proposal. Tax rates related to wage and price increases, or tax credits related to price and wage restraint, have also been proposed.

It is nearly impossible to know in advance how much these new departures would reduce inflation and what their other consequences would be. This report does not attempt to analyze them. The longer the United States continues to suffer from the twin problems of high unemployment and high inflation, however, the more likely it is that one or more of these alternatives will receive serious consideration.

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1. The provisions of this act, in effect, result in wage levels at or near union scale being paid on construction projects supported wholly or in part by federal government funds.

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Fiscal Policy

The targets voted in the First Concurrent Resolution on the 1977 Budget may be characterized as calling for a moderate budget. If implemented, it will provide more fiscal stimulus to the economy than the Administration budget, but less than a "current policy" budget of simply continuing the government programs approved in last year's final resolution (including adjustments for inflation and population growth). On the revenue side, the resolution provides for continuation of the 1975 tax reductions and total revenues of $362.5 billion. On the outlay side, the resolution specifies a total of $413.3 billion and also subtotals for 17 functional categories. The functional breakdown represents slowdowns in growth for some categories and acceleration in others.

Spending Trends

Trends in broad categories of federal spending, measured in dollars of constant purchasing power, are depicted in Chart 7. When measured in constant dollars, purchases of defense goods and services, have been declining for a number of years. The Congressional budget continues this decline into fiscal year 1977, but at a slower rate than in recent years. Furthermore, authorizations for future spending in the first concurrent resolution point to an increase in real defense spending in the future. Purchases of nondefense goods and services--a category which includes such diverse items as public works, veterans' hospitals, and scientific and medical research, to name only a few--are scheduled to increase slightly in real dollars in fiscal year 1977, a continuation of the trend during fiscal years 1972-76.

Over half of federal outlays consist of transfers of funds to individuals or to state and local governments rather than purchases of goods and services. Transfers to individuals (social security is by far the largest item in this category, followed by unemployment benefits) have risen at a very rapid rate during the past few years. Part of this increase is attributable to the 1974-75 recession; unemployment benefits necessarily rise when the number of insured unemployed increases. Even apart from increases due to the recession, however, transfer payments have risen

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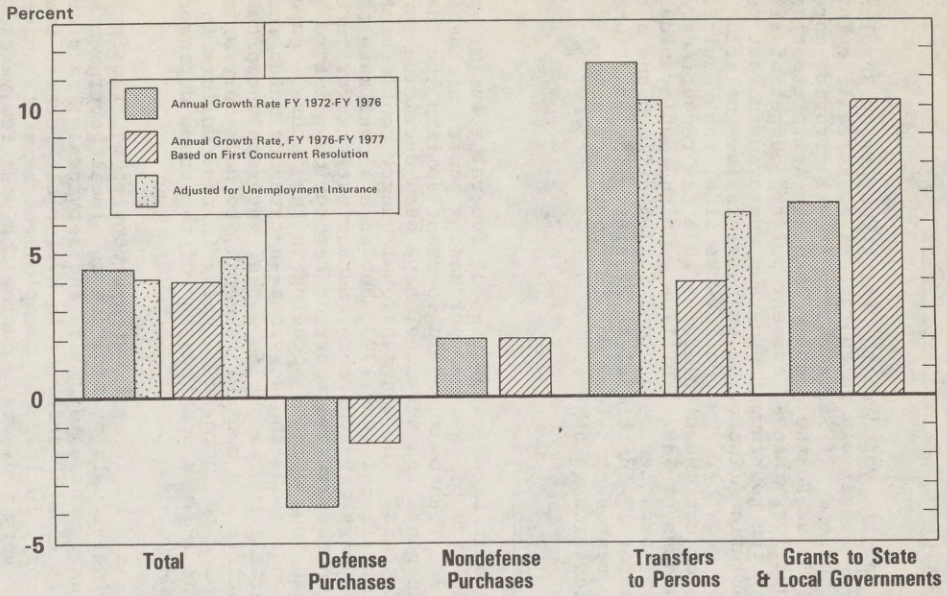
CHART 7

GROWTH OF FEDERAL SPENDING, 1972-1977

(Annual Rates of Change in Constant Dollars)



SOURCE: Current-dollar federal spending, 1972-76, U.S. Department of Commerce.

NOTE: Converted to 1972 dollars using the following deflators from the GNP accounts: defense and nondefense purchases--deflator for federal government purchases; transfers to persons--deflator for personal consumption expenditures; grants to state and local governments--deflator for purchases by those governments; other federal spending (not shown separately)--overall GNP deflator. Fiscal year 1977 estimates and adjustments for unemployment insurance are by the CBO.

rapidly and will continue to rise in fiscal year 1977, although not so rapidly as in previous years. Grants to state and local governments--a category which includes welfare and medicaid payments, public employment grants, and other programs--have also grown rapidly, and are projected to accelerate further in the next year. Expansion of public employment programs is a major element in this increase and a major source of difference between the first concurrent resolution and the Administration budget, which proposes a sharp reduction in public employment spending.

High-Employment Budget

The concepts of "high-employment" receipts and outlays may also be used to characterize the first concurrent resolution budget. High-employment receipts equal actual receipts plus the additional tax revenues that would be generated if the economy were operating at high employment. High-employment outlays equal actual outlays less some of the payments due to excessive unemployment. The difference between high-employment receipts and outlays, the high-employment surplus or deficit, serves as a broad indication of the posture of discretionary budgetary policy. The actual budget surplus or deficit, in contrast, reflects not only discretionary fiscal policy but also the automatic response of the budget to recession and expansion.

There are many conceptual problems in measuring the high-employment budget, including defining "high employment" and identifying outlays "caused" by the recession. The figures cited below are based on 4 percent unemployment as a high-employment baseline, a basis which yields a larger high-employment surplus than would a 5 percent rate. At the same time the figures subtracted from outlays include only a portion of unemployment insurance payments and no recession-induced outlays for food stamps, welfare, and a number of other programs, an omission which reduces the high-employment surplus.

In terms of the high-employment budget, the first concurrent resolution represents a moderate shift toward restrictiveness. As of the first half of calendar year 1976, the high-employment budget was in deficit by approximately $10 billion, a position considerably more expansionary than the high-employment surplus immediately preceding the 1974-75 recession. The first concurrent resolution

would move the high-employment deficit close to zero during fiscal year 1977. The change from the current position to fiscal year 1977 is thus a move in a restrictive direction by this measure; but it is a much smaller move in that direction than the Administration's proposed budget for fiscal year 1977.

Budget Alternatives

The range of budget alternatives under consideration for fiscal year 1977 is fairly narrow. A budget more restrictive than the first concurrent resolution would result if much of the public employment legislation in the first concurrent resolution were vetoed (and the vetoes sustained). Specifically, elimination of $5.6 billion in outlays on public employment is the assumption underlying the "low public employment" alternative listed in Table 3. This policy is estimated to result in 400,000 fewer employed persons than the baseline forecast by the end of calendar year 1977, a reduction which translates into an unemployment rate 0.3 percentage points higher than the baseline. This more restrictive policy is unlikely to affect inflation in 1977, but would probably reduce the rate of inflation by about 0.3 percentage points by 1980.

These employment effect estimates assume a significant amount of "fiscal substitution" by the state and local governments which receive employment grants. Specifically, only half of the grants are assumed to be earmarked effectively for special employment programs. State and local governments are assumed to find ways to use the other half of the grants as if they were simply general additions to revenue. The economic impact of a change in public employment programs is thus assumed to be half of what would take place if there were no fiscal substitution, plus half of what would take place if the grants were simply general revenue sharing. Although the assumption of fiscal substitution reduces considerably the estimated impact of employment grants, the assumption seems consistent with recent experience.

Policy alternatives more expansionary than the first concurrent resolution are not under active debate at present. The alternative labeled "expansionary alternative" in Table 3 is not a concrete legislative package, but simply illustrates the probable outcome of exceeding the first concurrent resolution spending targets due to such factors as upward revisions of "uncontrollable" spending on personal transfers,

TABLE 3

ALTERNATIVE FISCAL AND MONETARY POLICIES

	Departures from Baseline Forecast, 1977:IV			Inflation Rate, 1980 (additions to or subtraction from rate of change of CPI, percentage points)
	GNP, ($ billions, annual rate)	Real GNP (1972 dollars, billions)	Unemployment Rate (percentage points)	
FISCAL POLICY				
Restrictive Alternative: vetoes of $5.6 billion public employment bills	-7	-5	+0.3	-0.3
Expansionary Alternative: $10 billion more outlays	+12	+8	-0.2	+0.2
MONETARY POLICY				
Expansionary Alternative: 1 percent faster growth in M2	+10	+6	-0.2	+0.2
Restrictive Alternative: 1 percent slower growth in M2	-10	-6	+0.2	-0.2

emergency situations with respect to state and local finances, or new spending requests to meet special defense or international needs. Specifically, adding $10 billion in outlays to the first concurrent resolution is estimated to reduce the unemployment rate by 0.2 percentage points by the end of 1977, and increase the rate of inflation by 0.2 percentage points by 1980.

Monetary Policy

Monetary policy in the current recovery cannot be unambiguously characterized as expansive, restrictive, or accommodative. Difficulties arise because some of the convenient indicators of monetary policy impact are giving conflicting signals. In a typical upswing, a slower rate of money supply growth than of the money value of GNP would be viewed as restrictive, because it would lead, at least temporarily, to higher interest rates. In the present recovery, the narrowly defined money stock, M_1[2], has grown less than half as fast (about 6 percent) as GNP (12 percent), while a more broadly defined money stock, M_2[3], has grown almost as fast (10 percent) as GNP. Interest rates, which normally rise during the first year of a recovery, are actually slightly less than levels recorded at the trough of the recession. Monetary policy, accordingly, could be described as restrictive judging by M_1 behavior, accommodative by M_2 standards, and expansive in terms of interest rates.

Since it no longer appears possible to sum up the posture of monetary policy in a single money stock growth rate or interest rate level, the effects of policy on the economic outlook must be assessed in light of the likely behavior of several such policy indicators. The announced policy targets of the Federal Reserve are also relevant to the outlook.

M_1, V_1, and Interest Rates

The more rapid growth in national income than in M_1 during the current recovery means that the rate at which the money supply is being spent has accelerated. The number of times M_1 is spent per time period, or the

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2. Currency and bank checking account balances held by the public.

3. M_1 plus bank time and savings deposits except for large denomination certificates of deposit.

velocity of M_1 (denoted as V_1),[4] typically increases during economic recoveries, but the increase is rarely as large or as rapid as in the current recovery (see Chart 8). Furthermore, a rising V_1 is usually accompanied by rising short-term interest rates, which induce people to hold smaller money balances and, in effect, to spend the existing money stock faster. The usual pattern, therefore, contrasts sharply with the present acceleration in V_1 which has occurred without an upward trend in interest rates.

Some of the reasons given to explain the decline in money balances held by businesses and households include rising confidence in an improved economic outlook and recent financial structure changes, including new regulations permitting business passbook savings accounts and telephone transfers of funds between checking and savings accounts. Whatever the true causes of recent V_1 behavior, there is much uncertainty about its future behavior. If V_1 continues to increase, a modest rate of growth in M_1 will not inhibit a fairly vigorous growth in national income. If, however, the rate of growth in velocity should begin to slow, more rapid rates of growth in M_1 may be necessary for continued recovery. The Federal Reserve's present target range for growth in M_1 is 4.5 to 7.0 percent per year.

Other Monetary Aggregates

M_2, or money defined to include time and savings deposits at commercial banks (except for large denomination certificates of deposit) as well as currency and checking account balances, has grown at an annual rate of 9.9 percent since the first quarter of 1975. This rate is fairly close to the 9.6 percent annual growth rate of this aggregate over the past five years. The velocity of M_2, or the number of times M_2 is spent per year,[5] has stayed within its historical range during the current recovery (see Chart 8). Similar stability has been observed for the velocity

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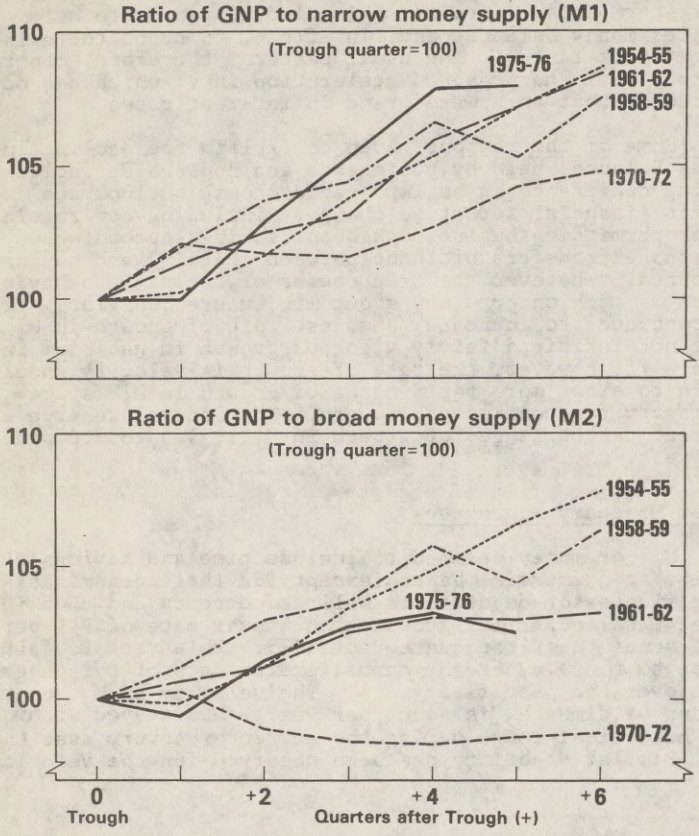
4. The money stock (M_1) multiplied by the number of times M_1 is spent per time period (V_1) equals total money spending per time period (GNP). Therefore, V_1 equals GNP/M_1.

5. V_2 equals GNP/M_2.

CHART 8

VELOCITY OF MONEY, FIVE RECOVERY PERIODS



SOURCE: U.S. Department of Commerce and Federal Reserve Board.

NOTE: The 1975-76 GNP data are before the July 1976 revision; second quarter 1976 GNP is based on the percentage change in revised GNP. Trough dates are the business cycle (reference) troughs designated by the National Bureau of Economic Research. The first quarter of 1975 is a tentative date for the latest trough; it has not been officially designated by NBER.

of M_3, a still broader monetary aggregate that includes deposits in nonbank thrift institutions. M_3 has also grown at nearly as fast a rate as GNP during the current recovery. Currently, Federal Reserve target ranges for annual growth rates of M_2 and M_3 are 7.5 to 10 percent and 9.0 to 12.0 percent, respectively.

Interest Rates

On balance, short-term interest rates have changed little since the bottom of the recession. The three-month Treasury bill rate, for example, averaged 5.75 percent in the first quarter of 1975, and since then has ranged from a monthly high of 6.44 percent (in August 1975) to a low of 4.86 percent (in April 1976). As of June, the bill rate was 5.41 percent.

Short-term rates, however, are expected to rise in late 1976 and 1977. CBO projects a three-month Treasury bill rate reaching 7 percent at the end of 1977, on the assumption that the Federal Reserve will allow money market conditions to tighten somewhat as the recovery proceeds. Some evidence of this willingness was provided by the increase in the federal funds rate[6] from 4.8 percent in April to 5.3 percent currently and the lowering on May 3 of the upper limit of the growth targets for the monetary aggregates.

Although the baseline forecast projects rising interest rates, it is not until well into 1977 that these higher rates begin to affect the growth of demands. In the course of 1977, projected rates reach levels which attract savings flows away from financial intermediaries and help bring the expansion of housing construction to an end.

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6. Federal funds are excess reserves which commercial banks lend each other on a very short-term basis through an organized market. The federal funds rate is the interest rate on such loans.

Alternative Monetary Policies

To some extent, fiscal and monetary policy are substitutes. Either one can be used to accelerate or retard economic growth and inflation. The detailed effects of the two on individual industries are not the same, but as far as broad aggregates are concerned, an expansionary fiscal move can be offset by a restrictive monetary move and vice versa.

The two monetary policy alternatives considered in this report can therefore be thought of in combination with fiscal alternatives as well as in isolation. If the easier money alternative were adopted, a more restrictive budget and a smaller deficit than the first concurrent resolution might be sufficient to achieve the overall economic path projected earlier in this report. If the tighter money alternative were adopted, then a more expansionary budget might be required to keep to the projected economic path.

The two alternative monetary paths are shown in the table below. The first is a more expansionary policy than the baseline and consists of 10 percent growth in M_2 through the fourth quarter of 1976, followed by four quarters of 11 percent growth. The second is a more restrictive policy with a 9 percent growth rate in M_2 for 1977.

	Baseline	Easier Money	More Restrictive Policy
Growth of M_2:			
1975:IV through 1976:IV	10%	10%	10%
1976:IV through 1977:IV	10%	11%	9%
Three-Month Treasury Bill Rate:			
1976	5.3	5.3	5.3
1977	6.6	5.8	7.3

CBO econometric simulations suggest that the easier money alternative would keep the bill rate down to an average of 5.8 percent during 1977, well below the level at which savings flows tend to be diverted from thrift institutions.

The economic consequences of this (and the more restrictive policy) are summarized in Table 3 on page 31. Real GNP would be increased by an estimated $6 billion by the end of 1977 and the unemployment rate would be reduced by 0.2 percentage points compared to the baseline solution. The consequences for inflation would be negligible during 1977, but by 1980 would add an estimated 0.2 percentage points to the annual rate of inflation. In terms of unemployment and inflation, this easier money alternative has estimated effects in the opposite direction from those of the restrictive fiscal alternative (public employment vetoed and sustained) also shown in Table 3. However, the monetary effects would be only about half as large as the restrictive fiscal effects. Therefore, both these policy alternatives were followed, the net effect would be to increase unemployment and reduce inflation compared to the baseline solution, but only by about half as much as the restrictive fiscal alternative alone.

The tighter money alternative would reduce the rate of growth of M_2 from the baseline of 10 percent to 9 percent in 1977, with the Treasury bill rate assumed to rise to 7.3 percent for 1977. This policy is estimated to lower real output by $6 billion at the end of 1977 and add 0.2 percentage points to the unemployment rate by the last quarter of the year. Effect on the inflation rate, once again negligible during 1977, would amount to an estimated 0.2 percentage point reduction by 1980, as compared to the baseline forecast.

CHAPTER III

INVESTMENT, CAPACITY LIMITS, AND PRODUCTIVITY

Introduction

Expenditure for new plant and equipment has lagged more than usual in the current recovery. The upturn did not really begin until early 1976, and in the second quarter, nonresidential fixed investment (in constant 1972 dollars) was little higher than the cycle trough, compared to an average rate of growth of 8.6 percent in four previous recoveries (see Chart 3 on page 9).

Investment in plant and equipment is important to the strength of the recovery and the durability of prosperity for two reasons. First, expenditure for tools, machines, and factories is an important component of aggregate demand. Second, new plant and equipment adds to the stock of capital and hence to the productive potential of the economy. It is the second of these reasons that is the focus of this chapter. Fears have been expressed that the current weakness in investment may forebode a revival of capacity bottlenecks and materials shortages in the near term and a decline in productivity and living standards over a longer period. This chapter assesses the likelihood that these fears will materialize.

A very small probability is assigned to the recurrence, within the next eighteen months, of shortages and capacity constraints equal in severity to those of 1973. Although capacity in pulp and paper and textiles could be tested by the end of 1977, widespread shortages are unlikely, principally because the 1974-75 recession reduced output so far below capacity that the present pace of recovery could be maintained well beyond the six-quarter horizon without approaching the high industrial utilization rates of 1973. In fact, continuous real output growth in excess of 7 percent per year would be required to produce generalized shortages within eighteen months. Given baseline

forecast growth rates of real output in the 4.5 to 6.5 percent range, a repeat of the 1973 scramble does not seem to be in the offing.

A verdict on the implications of the decline in plant and equipment expenditures for long-term growth in productivity and living standards cannot be reached with the same confidence as the outlook for shortages. Certainly, growth in the capital stock of the economy plays an important role in increasing labor productivity, and per capita living standards are unlikely to rise without increasing productivity or output per worker. Thus, the recent weakness in investment and in productivity (see Chart 9) is a matter of some concern. Moreover, an increasing fraction of investment in the 1970s has gone to replace equipment rendered obsolete by the dramatic change in energy prices, to meet environmental protection standards, and to enhance the safety of the work force. Investment for these purposes is of value, but it does not increase the potential output of the economy beyond what it was before the increase in energy prices, before clean air and water became costly to obtain, or before the imposition of occupational health and safety standards.

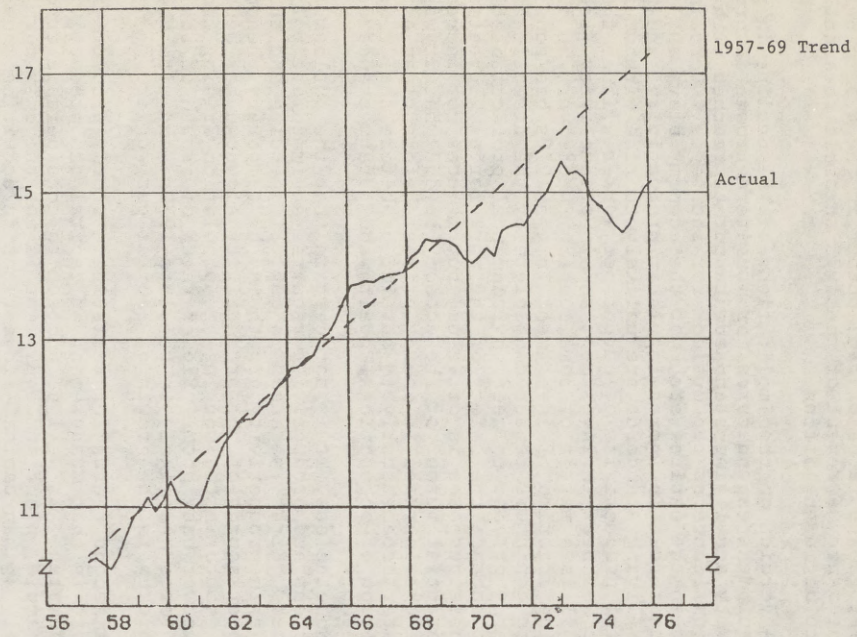
Nonetheless, it is not certain that the outlook for investment and productivity requires an immediate policy response. First, weakness in capital spending and the decline in productivity growth may be temporary phenomena. One major source of the productivity slowdown has been rapid growth in the working-age population arising from the postwar baby boom. Slower rates of growth of the labor force are likely in the late 1970s, and with them some pickup in the growth of capital per worker.

A second reason for resisting a gloomy productivity forecast is that measurement of capital and productivity is incomplete, as well as subject to considerable error. For example, plant and equipment is not the only form of capital. Human capital--investment in acquiring knowledge and skills--is another very productive one. Clean air and water resulting from investment in pollution reduction equipment are not measured as output in the national income accounts; measured output is lower than it would have been if these investments had been made in other types of capital equipment.

CHART 9

OUTPUT PER WORKER, 1957-1976

Thousands of 1972 Dollars per Person
Ratio Scale



SOURCES: Output--private gross domestic product, U.S. Department of Commerce. Data are before the July 1976 revision. Employment--total private employment, household survey, U.S. Department of Labor.

If it is determined that public policy should be directed toward increasing the rate of growth of productivity, a number of alternative policies are available. These include tax incentives to stimulate private investment, a fiscal-monetary policy mix designed to produce low interest rates, and the expansion of subsidies to education or to research and development activities. Little is known at present about which approaches would be most effective.

Bottlenecks

In judging whether it is appropriate to stimulate or to restrain the economy, it is important to know how close the economy is to physical limitations on its capacity to produce. The most widely used capacity measures are the unemployment rate and the GNP gap.[1] The gap, because of the method by which it is currently calculated, is highly correlated with the unemployment rate. The association of low unemployment rates and low or negative GNP gaps with accelerating inflation reflects the association of high utilization of labor resources with increasing price pressures.

Yet labor resources are not the only constraint on potential output. Full utilization of capital would put pressure on prices even if unemployment of labor and the GNP gap were large. Some industries may be so strategic to the economy that, even when capacity is ample on average, full utilization of capital in those industries will limit the expansion of output in the economy as a whole. Selective capacity constraints were a serious problem in 1973. As the discussion below explains, they seem less likely to be a problem in 1977.

The problem of strategic output constraints is generally referred to as the "bottleneck" problem. It is

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1. The GNP gap is the difference between potential and actual real GNP. Potential GNP is calculated by the Bureau of Economic Analysis of the Commerce Department on the assumption that the economy was operating at 100 percent of potential in mid-1955. Potential GNP is then extrapolated forward from mid-1955 using actual and estimated growth rates of potential labor force, annual hours of work, and trend output per hour worked.

not necessarily a capital problem; a shortage of skilled labor can be a bottleneck, but recent bottleneck problems have been in capital-intensive industries such as steel, aluminum, basic chemicals, and paper. Typically, these industries operate on a 24-hour basis, so that the possibilities are limited for using capital more intensively in the short run by adding shifts. Because capital takes a long time to produce and install, next year's capacity in such an industry has already been determined by past investment decisions. Thus, the only way to avoid a bottleneck is to lower the demand for the product.

The Federal Reserve Board calculates measures of capacity utilization (output as a percent of capacity) for materials industries, based in part on physical quantity data. Chart 10 shows summary measures of capacity utilization for durable and nondurable goods materials during several recovery periods, and also shows peak utilization rates reached in 1969 and 1973. Durable goods materials include basic metals, building materials, and (from 1969 forward) other durable materials components of industrial production. Nondurable goods materials include textiles, paper, chemicals, and (from 1969 forward) other nondurable materials components of industrial production.

Utilization rates were at an extremely high level in mid-1973. Although unemployment rates indicated less pressure on the economy's capacity in 1973 than in 1969, major materials utilization rates, as Chart 10 shows, indicated more capacity pressure in 1973. The scramble for materials associated with the 1973 utilization rates played a role in the inflation of 1973-74--antedating the oil embargo and perhaps making the economy more vulnerable to it--and overordering of materials in the shortage period contributed to the huge destabilizing inventory swings of 1974-75.

As the chart also shows, utilization at the bottom of the 1975 recession was a record low for nondurable goods materials and near previous lows for durable goods materials. Since that time, however, utilization has recovered quite sharply in the nondurable materials industries, where the average utilization rate is about where it was at the same point in the previous recoveries. This increase in production of nondurable materials appears to have been caused by recent strength in consumption expenditures and by a

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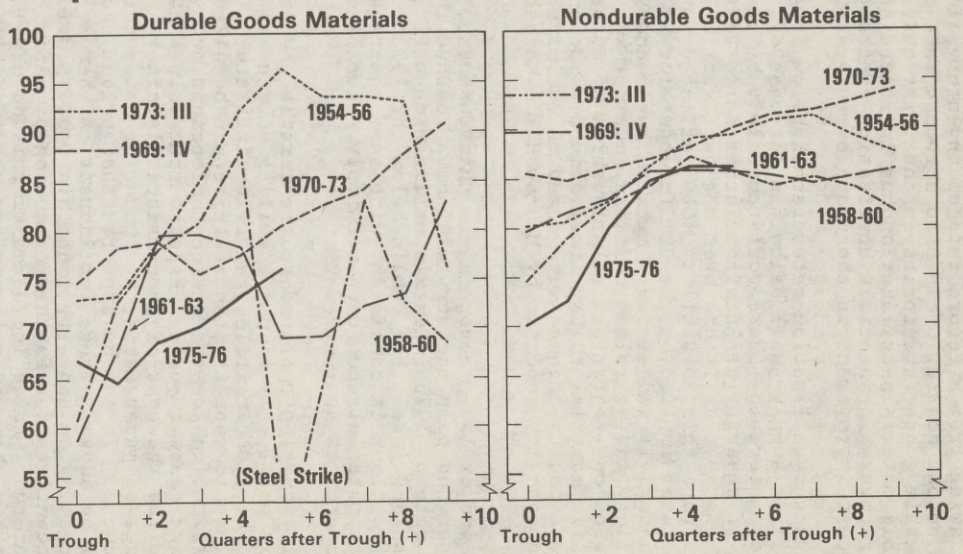
CHART 10

MATERIALS CAPACITY UTILIZATION IN FIVE RECOVERIES
(Output as a Percent of Capacity)



SOURCE: Data for 1969 to date--new Federal Reserve indexes of capacity utilization in materials industries. Data for earlier recoveries--Federal Reserve indexes of capacity utilization for major materials.

NOTE: The major materials indexes differ significantly in scope from the new materials indexes, but are roughly comparable with respect to the level of capacity utilization in 1969. Trough dates are the business cycle (reference) troughs designated by the National Bureau of Economic Research.

spectacular swing from a record rate of inventory liquidation in the second quarter of 1975 to a record rate of build-up of nondurable goods inventories in the first quarter of 1975. Durable materials utilization has increased somewhat less. The recovery in materials utilization contrasts with a rather modest improvement in the unemployment rate.

While recent utilization rates remain below levels indicating tight supply--well below, in the case of durable goods materials--there would certainly be reason for concern if capacity utilization increased as fast over the coming year as it has over the past year. In order to evaluate this possibility, CBO estimated future utilization rates implied by the CBO forecast for individual materials industries: metals, basic chemicals, paper, textiles, and petroleum refining. Output was estimated based on statistical relationships of output of the specific material to GNP final demand components, while future capacity changes were based on estimated additions to capacity reported by McGraw-Hill and other sources.

At the end of 1977, according to this forecast, only the paper and pulp industry will have reached the utilization rate of 1973. Textile utilization will approach its 1969 level, but remain below the 1973 level. This outlook is consistent with some shortages of particular materials but does not imply generalized, widespread shortages as in 1973-74.

A tight situation confined to the textile and paper industries is not likely to put a ceiling on general expansion. While the textile projection indicates operation close to capacity, shortages could be alleviated by substitution for the scarcest materials or by permitting increased imports. Paper output volume can be increased, at the cost of some relatively minor inconveniences to paper users, by producing fewer varieties of products. It can be expected that prices and profits will be above average for industries where output is pressing on capacity, and this would provide funds and incentives for further expansion of capacity in the longer run. Price increases of this nature--selective rather than general--perform the traditional task of guiding economic activity toward optimal resource allocation, and help stretch out the expansion rather than threatening to end it. Given the narrow range of materials industries where a tight capacity situation is forecast, it does not appear likely that these price

increases would set off a general inflation of materials prices (over and above the usual cyclical recovery of such prices). These price increases are consistent with CBO's overall price forecast.

A 7 percent rate of growth over the next year and a half, if produced by a more expansive fiscal and monetary policy than in CBO's baseline forecast, would increase the likelihood of metals shortages, since a principal estimated impact of the easier monetary policy would be to stimulate construction and other fixed investment. Increases in utilization rates would be relatively minor for the nondurable materials industries. If the same growth rate of 7 percent were composed of more inventory investment and less fixed investment, there might be a little less pressure on metals than in the high fixed investment path, but textiles would be pushed up to 1973 capacity utilization rates. In any case, to produce the generalized shortages of 1973 by the end of 1977 evidently would probably require growth in excess of 7 percent.

Potential bottlenecks are not confined to the major materials manufacturing sector. Information for most other areas is less precise, but serious constraints are not expected elsewhere during the forecast period. Electric utility capacity is expected to be adequate for recently reduced rates of growth in demand. Mining capacity should expand as a result of high rates of investment. However, industry spokesmen raise the possibility of shortages of iron ore if environmental restrictions result in closing of any major mining operations. According to Federal Reserve production indexes, oil and gas well drilling activity in the United States and offshore has declined in recent months, possibly because of price controls or the reduction in depletion allowances. The United States has become increasingly dependent on imported crude oil as the economy has recovered, raising the possibility of increased vulnerability to a new embargo or OPEC price increase.

Two aspects of the bottleneck problem that were important in 1973 are expected to be absent in 1976 and 1977. Whereas the major industrial countries were in a simultaneous boom in 1973, their recoveries are lagging behind the U.S. recovery now. This means that some shortages of domestic capacity could be met by imports. Iron and steel capacity in Europe and Japan is expected to increase even more than in the United States,

providing a source of supply for any excess domestic demand which might build up. Aluminum imports from other Western countries may be necessary to tide the United States over the next few years, when domestic aluminum may be in short supply.

Secondly, some observers believe that the inventory scramble of 1973, which magnified materials demand out of proportion to actual production requirements, was mainly a result of the expected end of price controls. With this factor absent, future inventory demand can be expected to be more moderate.

The Capital Stock and Labor Productivity

Rising productivity, or output per worker, is the main source of increases in living standards. Consequently, it is a cause for some concern that in recent years productivity has been growing less rapidly than in the past. The evidence is difficult to interpret, and some part of the slower growth may be a statistical artifact rather than an actual change in trend. Enough of the slower growth is actual, however, to make it important to summarize what is known about causes and possible policy responses. Of special interest is the possible relation of investment spending, which determines additions to the stock of physical capital, to future productivity gains.

Causes of Lower Productivity Growth

The best statistical measures available indicate a marked slowdown in the growth of output per worker in the 1970s, as compared to the two previous decades. As Table 4 shows, average annual rates of productivity growth during the 1950s and 1960s clustered near the 2.5 to 3 percent range (after adjusting for the short-run influences of recessions and recoveries). For the first half of the 1970s, the estimated rate of growth is only 1 percent. Continued growth at a rate as low as 1 percent would mean less improvement in living standards than the United States has enjoyed during most of the period since World War II.

Some, but not all of the recent change in trend may be due to purely statistical problems. For one thing, the benefits of pollution control, to which this country has directed a growing fraction of its labor and capital resources in recent years, are not counted in total output. For another, output in the increasingly important service sector is measured less accurately than output of goods, and its rate of growth may well be understated.

Apart from statistical problems, it is difficult even to identify, let alone quantify, the major causes of the slowdown in productivity growth. The most that can be done is to list some of the contributing factors together with broad judgments as to their probable importance.

TABLE 4

PRODUCTIVITY GROWTH IN THE PRIVATE ECONOMY[a]
(In Percentage Points)

Time Period[b]	Average Annual Growth in Output Per Worker	Growth in Output Per Worker Due To:	
		More Capital Per Worker	Other Factors
1950-55	3.2	1.2	2.0
1955-60	2.7	0.7	2.0
1960-65	2.7	0.7	2.0
1965-70	2.4	0.9	1.5
1970-75	1.0	0.4	0.6
1975-77[c]	--	0.2	--

a. All figures in the table exclude estimated variations in productivity due to short-run output fluctuations.

b. Fourth quarter to fourth quarter.

c. Forecast.

Capital per Worker

One important element in the change of productivity trend is less growth in physical capital per worker, but the figures in Table 4 suggest that this factor is only a partial explanation. Other factors taken together--such as the shifting composition of demands, changes in the quality of skills of the labor force, and new inventions--account for more of the change than trends in capital per worker.

Nevertheless, capital per worker is an important enough factor to warrant close attention. Once again, a warning about statistical problems is necessary. Problems of measurement complicate discussions of the stock of capital at least as much as they do discussions of output per worker. But as best as can be inferred from available statistics, the slowdown since 1970 in the growth of capital per worker is not due to a slowdown in investment or in the growth of the capital stock itself, but rather to an acceleration of the growth in the number of workers. As Table 5 documents, the rate of private capital growth in the 1970-75 period was similar to the rate of capital accumulation in earlier periods. While below the wartime years of 1950-55 and 1965-70, private capital growth was about the same in 1970-75 as in 1955-65.

It is labor force growth--a consequence of the baby boom following World War II--which is the major source of low growth in capital per worker. The civilian labor force grew by 24 percent from 1965 to 1975, a substantial increase over the 15 percent growth from 1955 to 1965. Relatively rapid labor force increases and consequent relatively slow growth in capital per worker are expected to continue through 1977. Toward the end of the 1970s, however, labor force growth is likely to return to a lower trend, as the declining birth rates of past years begin to have an influence.

TABLE 5

GROWTH OF THE PRIVATE CAPITAL STOCK, 1950-77
(In Percentage Points)

Time Period[a]	Nonresidential Fixed Investment as a Percent of GNP	Annual Rate of Growth	
		Private Effective Capital Stock[b]	Capital Per Worker
1950-1955	9.1	4.5	3.6
1955-1960	9.1	3.1	2.1
1960-1965	9.2	3.2	2.2
1965-1970	10.4	4.3	2.6
1970-1975	10.1	3.3	1.6
1975-1977[c]	9.5	2.5	1.0

SOURCES: Bureau of Economic Analysis; Data Resources, Inc.; and CBO forecasts.

a. Fourth quarter to fourth quarter.

b. Effective private capital stock includes nonresidential plant and equipment and excludes pollution abatement investment.

c. Forecast.

Trends in the capital-labor ratio vary greatly among industries. In manufacturing, recent growth in the ratio has matched its earlier trend. The growth rate declined in agriculture as outmigration from rural areas slowed. The main contributors to the overall change in trend were the service sectors, which have absorbed most of the recent increase in employment.

Investment in Pollution Abatement, Health, and Safety

The growing share of our resources devoted to investment in pollution control equipment and in meeting health and safety requirements has reduced the share devoted to other investment. The capital estimates in Tables 4 and 5 do not include investment devoted to pollution abatement. As mentioned earlier, however, the net effect of pollution requirements on productivity cannot be deduced from available statistics, since pollution abatement is not included in total measured output. To some extent, the same uncertainty is true of the effect of health and safety requirements.

Capital Replacement Requirements

Another important contributor to the slow projected growth of the capital stock is the rising proportion of investment necessary to replace worn-out or obsolescent plant and equipment. This increase is itself largely a product of the past growth of capital per worker, which has made depreciation a larger percentage of GNP currently than it was in the past. It is also influenced by the quadrupling of oil prices in 1973-75, which probably speeded the obsolescence of many energy-intensive production processes.

Low Profits

Also contributing to low growth in the capital-labor ratio is the falling share of profits in GNP. Low profits reduce funds available for investment and low profitability reduces business incentives to invest. From 1950 to 1970, corporate profits after taxes, adjusted by valuing depreciation at replacement cost and excluding inventory profits, were about 5.2 percent of GNP. In 1971-75, the average of this ratio fell to 3.9 percent. In part, the profit ratio declined because of inflation, which causes allowable depreciation for tax purposes to fall below replacement-cost depreciation and hence tends to raise profit taxes. Part of the decline was due to

the recession, and this portion will be remedied by sustained expansion.

All of the preceding discussion relates to slow growth in capital per worker, which is only one of the causes of the failure of productivity to grow as fast recently as in earlier decades. While other factors are more difficult to pinpoint, they deserve emphasis in any balanced view of the productivity problem.

Shifts in Output

A significant additional factor is the shift in output between high-productivity and low-productivity industries. Until 1970, a shift in the composition of output away from the agricultural sector was a source of measured productivity growth because productivity in agriculture was well below average (even though the growth rate for this productivity was above average). Since 1970, the shift out of agriculture has slowed, reducing this influence for higher productivity growth. To a lesser extent, a shift in demand toward the low-productivity service sectors has also held back overall productivity growth.

These shifts in output are typical of expanding, wealthy nations. Changes in productivity resulting from them are, in a sense, demanded as a byproduct of rising living standards in contrast to many of the other causes listed in this section.

Shifts in the Labor Force

Since 1966 the composition of the workforce has shifted toward groups with relatively little work experience. Teenagers (ages 16-19) were 8.6 percent of the workforce in 1966 and 9.5 percent in 1975. Women (aged 20 and over) comprised 32.2 percent of the workforce in 1966 and 35.6 percent in 1975. If wages for these workers are a reasonable measure of their productivity, then an increase in their relative importance in the labor force will lower the growth rate in output per worker, since women and teenagers earn about half as much as adult males. However, adjusting labor inputs for wage differences leads to little change in the overall slowdown of productivity growth. Calculations incorporating wage differences suggest that less than one-fifth of the decrease in the factor productivity growth rate is due to changes in composition of the workforce.

Spending on Research

Although it is difficult to make a quantitative estimate of the impact of research and development expenditures on productivity growth, it seems likely that it has been a minor factor in the productivity slowdown. Research and development expenditures did fall as a percent of GNP, from 3 percent in 1966 to 2.3 percent in the prerecession year of 1973. Even the 1973 ratio, however, was as high as the 1957 ratio and higher than averages based on the last few decades.

Educational Attainment

A final factor in the productivity slowdown is lower growth in educational attainment. Median years of schooling of the workforce (adjusted for age and sex composition) have been rising throughout the last several decades; but while educational attainment grew at 0.85 percent per year in the 1950-1966 period, it slowed to a growth rate of 0.71 percent per year between 1966 and 1975. While this reduction probably contributed to the productivity slowdown, it is not a big enough change to have been a major cause.

Policies Affecting Productivity

Improving productivity is not at present a major goal of national policy. There is, furthermore, no general agreement that it should become a major goal. To some extent recent trends in productivity are the result of shifting preferences of consumers and of errors in measurement. Few would argue that special steps are warranted to offset these influences.

There are, however, other influences on recent productivity trends whose effects might be offset in policies to improve productivity. These influences include the increasing share of investment required to replace worn-out and obsolescent capital stock, the increasing resources required to meet environmental and safety standards, the fall in the share of GNP going to after-tax profits, and the slowing of growth in educational attainment.

If productivity improvement does become a goal of national policies, then there is a wide range of approaches which could be adopted. Some of them would promote more business investment in plant and equipment. Others would

encourage more spending on research and development. Still others would stress improved education and training.

Business Investment

Business investment may revive during the present expansion without additional federal stimulation; in fact, projections in this report suggest that it will do so. But even rates of investment that make the ratio of business investment to GNP very high by historical standards will not bring increases in the capital-labor ratio up to levels attained before 1965 when labor force growth was much slower. According to the set of estimates given in Table 6, even a high ratio of nonresidential fixed investment to GNP would lead to a growth of output per worker due to increased capital of only about 0.6 percent per year through 1977, less than the 0.87 percent increase in output per worker due to growth of capital in the 1950-1970 period.

TABLE 6

ESTIMATES OF CONTRIBUTIONS TO OUTPUT PER WORKER GROWTH FROM TWO DIFFERENT INVESTMENT PATHS
(First Quarter 1975 to Fourth Quarter 1977)

	Ratio of Nonresidential Fixed Investment to GNP (1972 dollars)	Contribution to Per-Worker Productivity from Capital-Labor Ratio Growth (percent per year)
Forecast Path	.095	0.2
High Investment Path	.108[a]	0.6

a. This is the historical high for this ratio, attained in 1966.

While steps to encourage business investment cannot be expected to restore earlier growth rates in capital per worker, they can probably bring some improvement over recent trends. One aggregate policy for increasing business investment is a change in the "mix" of fiscal and monetary policy. More monetary expansion increases output and, through its immediate effect in lowering interest rates, at least temporarily increases the share of output devoted to investment. Tighter fiscal policy reduces output and, to the extent that it is accomplished through reductions in federal purchases, reduces the share of output absorbed by government. A combination of easier money and a tighter budget can be devised so as to keep output on the same expansion path but shift the composition of output in favor of investment and away from government spending and consumption.

However, evidence from econometric models of the economy indicates that moves toward tighter fiscal and easier monetary policy are relatively weak in affecting nonresidential fixed investment. Total investment will benefit, but much of the overall investment stimulus produced by these changes goes to housing rather than plant and equipment.

Tax incentives designed to reduce the cost of capital to businesses can be targeted more narrowly toward business investment than aggregate fiscal or monetary policies. Two tax incentives that are currently in place are the investment tax credit (ITC) and asset depreciation range (ADR), both designed to decrease the tax liability of businesses that engage in more investment. In fiscal year 1977, tax expenditures on (i.e., revenue lost because of) the ITC as it is currently enacted are estimated to be $7.6 billion, while tax expenditures on the ADR are estimated at $1.6 billion. Although it is clear that increased tax expenditures for the ITC and ADR would increase rather than decrease investment, it is hard to know how much additional investment would be obtained per dollar of revenue lost.

Research and Development

Research and development spending is probably not a major cause of the recent productivity slowdown. Nevertheless, steps to encourage more research, such as the granting of broader patent rights or changes in the tax treatment of research, could offset some of the other factors at work and lead to improvement in productivity.

Education and Training

Similarly, even if slower growth in educational attainment is not a major cause of low productivity growth, steps to encourage the development of specific, scarce skills could help to offset other forces which have been retarding productivity growth. Programs to reverse the downward trend in reading and calculation attainment levels of high school graduates might also make the workforce more productive.

These alternative approaches, of course, are not mutually exclusive. A joint approach to increase both human and physical capital might be an effective strategy for increasing productivity. Investments in physical capital, human capital, and technological improvements must all be considered when determining the most efficient way to increase further output.

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