March 1981

ECONOMIC POLICY AND THE OUTLOOK FOR THE ECONOMY

A Report to the Senate and House Committees on the Budget

As Required by Public Law 93-344

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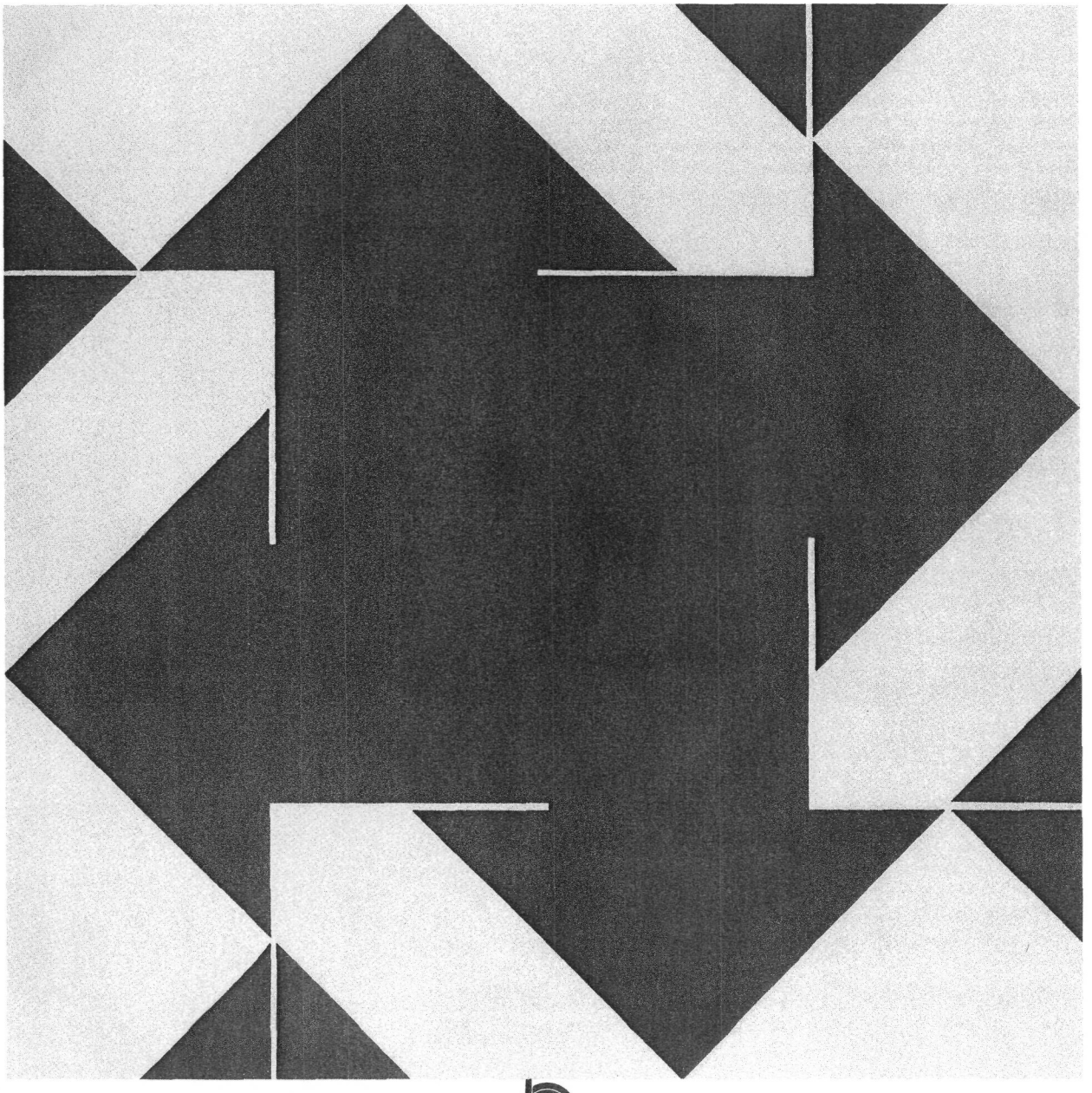

CONGRESS OF THE UNITED STATES

CONGRESSIONAL BUDGET OFFICE

ECONOMIC POLICY AND THE OUTLOOK FOR THE ECONOMY

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NOTES

Shaded areas between P and T lines on some graphs represent periods of cyclical downturn, as designated by the National Bureau of Economic Research. Periods of peak cyclical economic activity since 1950 are July 1953, August 1957, April 1960, December 1969, November 1973, and January 1980; they are designated by P lines on the graphic figures. Periods of trough or low cyclical activity occurred in May 1954, April 1958, February 1961, November 1970, March 1975, and midsummer 1980; they are designated by T lines.

Data are seasonally adjusted or not, according to conventional economic usage.

PREFACE

The Congressional Budget Office is required by Section 202(f) of the Congressional Budget Act of 1974 (Public Law 93-344) to submit to the Committees on the Budget of the House of Representatives and the Senate an annual report. This year's report examines the state of the economy and analyzes alternative fiscal policy options. In accordance with CBO's mandate to provide objective analysis, the report contains no recommendations.

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March 1981

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SUMMARY

In 1980, a combination of rapid inflation, high unemployment, lagging productivity, and record high interest rates battered the U.S. economy. In response to the poor performance of the economy, President Reagan has proposed a dramatic shift in economic policies designed to reduce inflation and increase economic growth. The proposed policies include large tax cuts, a reduction in the growth of federal spending, tight monetary policy, and substantial deregulation of the economy.

Inflation in 1980, as measured by the Consumer Price Index (CPI), remained near the record level of the previous year. Relatively large increases occurred in energy prices and mortgage interest costs; but sharp price increases were more widespread than in 1979, reflecting an acceleration in production costs. The rapid inflation had adverse effects throughout the economy.

The economy experienced a very sharp, though brief, decline in real output in the spring of 1980--the seventh recession since World War II. This was followed by a relatively weak recovery in the second half of the year. Along with the drop in output, the unemployment rate rose abruptly from 6 percent at the end of 1979 to 7.6 percent in May, and declined only slowly thereafter. An unusual factor was the unprecedented swings in interest rates: after hitting record highs early in the year, interest rates dropped sharply as credit demands declined during the recession. But as the recovery gained momentum, credit demands increased and interest rates rose sharply again--reaching new highs by year-end. As the new year began, economic growth, as measured by real gross national product (GNP), accelerated but many forecasters expected a slowing or even a decline during the spring as a result of the high interest rates.

THE "CURRENT POLICY" FORECAST

The Congressional Budget Office (CBO) "current policy" forecast for 1981 and 1982 is a forecast of economic performance assuming the budget policies of the Second Concurrent Resolution on the Budget for Fiscal Year 1981:

- Total federal spending on a unified budget basis is assumed to be $660 billion in fiscal year 1981 and $743 billion in fiscal year 1982.

- The second concurrent resolution incorporates an unspecified tax cut. The forecast assumes that the tax cut takes the form of a 10 percent reduction in federal personal income taxes beginning in July 1981 and a retroactive (effective to January 1981) business tax reduction based on the Senate Finance Committee's proposal for "2-4-7-10" accelerated depreciation.

In addition, growth in monetary aggregates over the next two years is assumed to be somewhat above the Federal Reserve's announced target ranges. The economy is expected to encounter persistent inflation and high nominal demands that will make it difficult for the Federal Reserve to achieve its announced targets without a significant increase in unemployment. The forecast also incorporates the following assumptions about food and fuel prices:

- Consumer food prices increase 12.3 percent in 1981 and 11.7 percent in 1982; and

- The world price of oil continues rising--reaching a level at the end of 1982 that is 28 percent higher than at the end of 1980.

The Current Policy Forecast

The highlights of CBO's current policy forecast, shown in Summary Table 1, are:

- Real GNP is projected to rise slowly during 1981, between 0.8 and 2.8 percent. A modest acceleration in real growth, to the 1.8 to 3.8 percent range, is projected over the four quarters of 1982.

- Inflation is expected to remain very high over the forecast period. The projected increase in the GNP implicit price deflator is from 9.0 to 11.0 percent over the four quarters of 1981 and from 8.0 to 10.0 percent over the four quarters of 1982.

- The unemployment rate is likely to rise gradually in 1981, to a range of 7.3 to 8.3 percent by the fourth

SUMMARY TABLE 1. THE CBO "CURRENT POLICY" FORECAST

Economic Variable	Actual 1979:4 to 1980:4	Projected 1980:4 to 1981:4	Projected 1981:4 to 1982:4
Nominal GNP (percent change)	9.4	10.0 to 14.0	10.0 to 14.0
Real GNP (1972 dollars, percent change)	-0.3	0.8 to 2.8	1.8 to 3.8
GNP Implicit Price Deflator (percent change)	9.8	9.0 to 11.0	8.0 to 10.0
Unemployment Rate, End of Period (percent)	7.5	7.3 to 8.3	7.1 to 8.1

quarter, and then to decline slightly to a range of 7.1 to 8.1 percent by the end of 1982.

Reasons for the Forecast of Weak Growth

Some advance indicators suggest that economic activity may weaken this spring or summer: income growth, adjusted for inflation, has been weak; consumer confidence has declined; the saving rate has fallen to low levels; housing starts have declined sharply in response to high interest rates; and the sales promotions that have recently boosted auto sales are scheduled to end soon. However, a decline in interest rates, resulting from the projected weakness, and the assumed tax cut in July are expected to set the stage for a rebound later in the year.

Real economic growth is not expected to be vigorous next year, however, since it will be severely restrained by rising interest rates resulting from high inflation coupled with tight monetary policy. Strong economic growth in 1982 is likely only if there is a rapid slowing of inflation; thus, a key aspect of the economic outlook is the momentum of inflation.

Inflation Momentum and Economic Growth

The CBO forecast incorporates the view that inflation is not likely to decelerate rapidly during the next few years despite relatively tight monetary policy. In addition to the food and fuel price assumptions noted above, the important reasons for this view are:

- Wage demands are expected to remain high as workers seek to "catch up" to recent price increases.
- Legislated increases in payroll taxes and the minimum wage are expected to add about 0.8 percentage point to labor compensation in 1981 and a smaller amount in 1982.
- Productivity growth is projected to be below the postwar average during the next few years.
- Businesses will probably seek to rebuild profit margins as economic growth picks up.
- Because inventories are relatively lean, a typical inventory cycle is not expected, thus providing little reason for significant retail price cutting.

If inflation persists, as the CBO forecast suggests, it will have a detrimental effect on economic growth over the next few years. The present monetary policy targets of the Federal Reserve are consistent with a decline in the growth of nominal GNP. This means that, if inflation remains high, there will be little, if any, room for growth in real activity. Even if money aggregates grow somewhat faster than the targets, rapid growth of output is unlikely.

Uncertainty in the Outlook

A number of important factors could change economic performance substantially. For example, given the Federal Reserve's determination to reduce inflation, monetary policy might turn out to be substantially more restrictive than assumed by CBO. As indicated earlier, such a policy is likely to reduce inflation more quickly than in the CBO projection, but at the cost of less growth and more unemployment.

Recent experience suggests that the most important factor may be the behavior of commodity prices, especially for food

and fuel. With a given monetary policy, higher commodity prices would lead temporarily to higher general inflation and interest rates and to lower real growth. On the other hand, lower commodity prices would have a more favorable effect. Simulations with various large econometric models indicate that if both food and fuel prices rise only a little--specifically, if each of these prices is 20 percent lower by the end of 1982 than assumed in the CBO forecast--the general price level and the unemployment rate might be 1.7 percent and 0.4 percentage points lower, respectively, by the last quarter of 1982.

THE OUTLOOK WITH ADMINISTRATION POLICIES

The Administration's budget proposals involve a fundamental shift in federal priorities from nondefense to defense spending and from public allocation of resources to increased private allocation. The spending proposals include:

- Rapid growth in defense spending, averaging about 9 percent per year in real terms during the 1980-1986 period; and

- Large reductions in nondefense spending, building from about $48 billion in fiscal year 1982 to $138 billion in 1984, relative to the spending proposals in the January budget of the Carter Administration. The spending cuts are mostly concentrated in grants to state and local governments, in nondefense purchases, and in transfer programs.

Individuals and businesses would receive substantial tax cuts. Specifically, the Administration's major tax proposals are:

- For individual income taxes, three 10 percent rate cuts would occur in July 1981, July 1982, and July 1983.

- Businesses would receive much faster tax depreciation of capital and some liberalization of the investment tax credit. The depreciation proposal is similar to the "10-5-3" proposal (with somewhat longer depreciation lives for structures). The first phase of the business tax cuts would be retroactive to January 1, 1981, followed by additional phases in 1982 through 1985.

These fiscal policy changes lead the Administration's budget estimates to show a marked reduction in the growth of federal

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spending, a reduction in the federal sector's share of GNP, and a balanced budget by 1984 (see Summary Table 2).

In addition to the above budget policies, the Administration's economic program includes:

- o Strong support for a steady reduction in the growth of money aggregates; and
- o Substantial deregulation of the economy.

SUMMARY TABLE 2. ADMINISTRATION'S BUDGET TOTALS (By fiscal year, in billions of dollars)

	Actual	Projected			
	1980	1981	1982	1983	1984
Revenues	520.0	600.3	650.3	709.1	770.7
Target Outlay Ceiling	579.6	655.2	695.3	732.0	770.2
Target Surplus or Deficit (-)	-59.6	-54.9	-45.0	-22.8	0.5
Percent of GNP					
Revenues	20.3	21.1	20.4	19.7	19.3
Target outlay ceiling	22.6	23.0	21.8	20.3	19.3
Percent Growth					
Revenues	11.6	15.4	8.3	9.0	8.7
Outlays	17.4	13.0	6.1	5.3	5.2

SOURCE: Executive Office of the President, Office of Management and Budget.

The Outlook with the Administration's Policies

Estimates of the economic impact of policy changes are always difficult to make. The course of the economy without policy

changes cannot be forecast with a high degree of reliability; the effects of policy changes add even more uncertainty, especially when they are as large as those proposed by the Administration. Using econometric models that incorporate the U.S. experience with economic activity since World War II, CBO has analyzed the effects that the Administration's budget policies might be expected to have on inflation and growth. That analysis suggests that, compared with a policy that involved no tax or spending cuts, the Administration's proposals would significantly increase real economic growth and reduce unemployment, while causing some upward pressure on inflation, particularly in later years. The inflationary demand pressures from the personal income tax cut would be largely offset by increases in productive capacity, resulting largely from the business tax cuts, together with cuts in federal spending.

Nevertheless, this CBO five-year projection incorporating the Administration's budget policies--referred to as the CBO alternative--is not as optimistic as the Administration's own economic scenario (see Summary Table 3). There are only minor differences between them in 1981, when both foresee lackluster real growth and continued high inflation. Between 1982 and 1986, however, the differences become more substantial. The CBO projection shows a more gradual improvement in inflation, reflecting the historical experience with the momentum of inflation. The CBO projection also shows weaker growth in the near term, but its growth rates approach the Administration's in out-years when the stimulative impact of tax cuts overcomes the restrictive effect of spending cuts.

Reasons for Different Projections

There are four likely, not mutually exclusive, explanations of why the CBO economic projection derived from historical experience is more pessimistic than the Administration's projection:

- The economic baselines from which the effects of changed fiscal policies have been calculated may differ. The Administration has not provided the Congress with its assessment of how the economy would behave absent its proposed fiscal policy changes, but its baseline projection may be more optimistic in its assumptions about such things as world oil prices, weather, and international economic relations.

- The Administration's fiscal policies, especially the tax cuts, could have a more favorable effect on economic

SUMMARY TABLE 3. A COMPARISON OF ECONOMIC ASSUMPTIONS (By calendar year)

Economic Variable	1981	1982	1983	1984	1985	1986
GNP (percent change, year over year)						
Administration	11.1	12.8	12.4	10.8	9.8	9.3
CBO Alternative a/	11.8	11.9	11.5	11.4	11.7	10.9
Real GNP (percent change, year over year)						
Administration	1.1	4.2	5.0	4.5	4.2	4.2
CBO Alternative a/	1.3	2.5	2.7	3.0	3.8	3.7
GNP Deflator (percent change, year over year)						
Administration	9.9	8.3	7.0	6.0	5.4	4.9
CBO Alternative a/	10.3	9.2	8.6	8.1	7.5	7.0
CPI (percent change, year over year)						
Administration	11.1	8.3	6.2	5.5	4.7	4.2
CBO Alternative a/	11.3	9.5	8.9	8.2	7.7	7.1
Unemployment Rate (percent, annual average)						
Administration	7.8	7.2	6.6	6.4	6.0	5.6
CBO Alternative a/	7.8	7.9	7.8	7.7	7.5	7.2
Three-Month Treasury Bills (percent, annual average)						
Administration	11.1	8.9	7.8	7.0	6.0	5.6
CBO Alternative a/	12.6	13.7	11.5	10.2	9.7	9.3

NOTE: These projections were prepared using the Commerce Department's preliminary estimates of GNP data for 1980.

a/ Based on the Administration's budget assumptions, derived by removing from the current policy baseline all tax changes not already legislated, and then incorporating the effects of the Administration's proposals.

SOURCES: Executive Office of the President, Office of Management and Budget; Congressional Budget Office.

growth than historical experience suggests. It is possible that the marginal income tax rate cuts will have a larger effect on saving and work effort than indicated by postwar experience. At most, however, they would not greatly increase economic growth during the next few years. In addition to such incentive effects the rate of saving could be pushed up as a result of the distribution of the individual income tax--about five-sixths of the relief would go to households earning more than the median income.

- The monetary policy assumed in CBO's estimates differs from that of the Administration's scenario. In addition, the Administration assumes that a steady decline in money growth would reduce inflationary expectations relatively quickly. If so, the impact on inflation might occur more quickly than indicated by past experience.

- The Administration is assuming unspecified, but apparently substantial, changes in government regulations. These could affect prices, resource allocation, and economic growth. The CBO estimates assume no regulatory changes.

Budget Implications of CBO's Alternative Projection

Economic projections are subject to substantial error, and the range of error can be wider than the difference between the projections of the Administration and of CBO. Nevertheless, the differences in projections have significant budgetary implications. A reestimate of the Administration's budget outlays on the basis of the more pessimistic CBO projection shows sizable increases in Social Security and other indexed benefit payments, unemployment insurance compensation, net interest costs, and defense fuel costs. In sum, applying the CBO economic projection to the Administration's policies adds over $35 billion to outlays by fiscal year 1984. On the revenue side of the budget, however, the differences between the two projections are slight. CBO's projection of lower growth is offset by higher inflation, so that the projection for nominal income (the tax base) is very close to that of the Administration.

CONCLUSION

The U.S. economy experienced high inflation and lagging productivity during the last several years. CBO's forecast

suggests that a continuation of current budget policies would not produce a quick turnaround in economic performance. The Administration has proposed major changes in budget policies. It expects that these policies, together with a steady decline in the growth of money and substantial deregulation of the economy, will have a large, favorable effect on inflation and economic growth within a year or so. Such an outcome is possible if commodity price inflation is very low or if the Administration's policies have their anticipated effects on supply and on inflation. Without such effects, however, CBO's analysis indicates that the Administration's economic scenario is optimistic in the light of historical experience.

CHAPTER I. INTRODUCTION

The economy in 1980 continued the poor performance of recent years. Inflation remained near the record levels of 1979; productivity growth was very weak; and interest rates reached new highs that threatened the stability of some financial and nonfinancial institutions.

In the spring of 1980, the economy experienced a very sharp decline, the seventh recession since World War II. The downturn was followed by a weak recovery in the second half of the year. The unemployment rate jumped from 6 percent at the end of 1979 to 7.6 percent in May and improved only slightly thereafter. The demand for durable goods, especially autos, was very weak. By year-end, business investment and residential construction had not recovered to 1979 levels.

In his address to the Congress on February 18, President Reagan proposed dramatic changes in economic policies designed to slow inflation, encourage saving and investment, and stimulate economic growth. The Administration's budget policies would shift resources from nondefense spending to defense spending and from the public sector to the private sector. The major elements of the budget proposals are:

- o A sharp reduction in the growth of nondefense spending, concentrated largely in grants to state and local governments and in transfer payments;
- o A large increase in defense spending sufficient to boost the growth of such outlays, in real terms, to about 9 percent per year;
- o A 30 percent reduction in the marginal tax rate on personal income, phased in over three years; and
- o Increased depreciation allowances for businesses, phased in over several years.

In addition to changes in budget policies, the Administration's economic program includes:

- o Strong support for a steady reduction in money growth; and

- o Substantial deregulation of the economy.

The Administration has indicated that it expects the combination of these policies to improve economic growth and productivity while at the same time sharply reducing inflation.

The outlook for the economy remains, however, the subject of a great deal of uncertainty--with or without the policies proposed by the Administration. This report contains an analysis of the economic outlook with current policies and with the budget policies of the Administration. The performance of the economy during the past year is reviewed in Chapter II. Chapter III examines monetary and fiscal policies during the past year and the policies proposed for the future. Chapters IV and V present the outlook for the economy under a continuation of policies now in effect (current policy) and under the budget policies proposed by the Administration. Chapter VI examines the recent decline in business profits, its effect on investment, and policies that have been proposed to encourage investment.

CHAPTER II. RECENT ECONOMIC DEVELOPMENTS

The total output of goods and services of the U.S. economy, after adjusting for inflation, was about the same at the end of 1980 as it was at the end of 1979. During the year, the economy fluctuated sharply. The seventh recession of the postwar period occurred early in 1980, as real gross national product (GNP) contracted at a postwar record rate in the second quarter and unemployment rose by 1.5 million workers. The recession, however, was the shortest of the postwar period. 1/ Total production began rising again in the second half of the year, albeit at a relatively weak pace for the beginning of a cyclical recovery, and has continued to improve into early 1981.

The timing and composition of the recession were partly an outcome of ongoing rapid inflation. The inflation, together with monetary policy led to a rapid surge in interest rates in late 1979 and early 1980, which dampened real economic activity. Another contributing factor was the Federal Reserve's credit control program, imposed in mid-March and continued until midsummer.

The recovery during the second half of the year was characterized by a sharp easing of credit conditions, a rebound in final sales, and an unusually small liquidation of inventories. The rate of inflation, however, remained extremely high throughout 1980, and interest rates reached new highs by year-end as the quickening pace of economic activity increased credit demands and the Federal Reserve resisted the growth of the money supply. Thus, with high interest rates restraining borrowing, the economy entered 1981 much as it began 1980, leading to the widespread expectation of another year of lackluster economic growth.

1/ The National Bureau of Economic Research, the widely recognized arbiter of cyclical turning points, designated January 1980 as a cyclical peak but has yet to date the subsequent trough.

CONSTANT-DOLLAR PRODUCTION AND SALES

Final sales of goods and services, measured in constant dollars, fell at an annual rate of 10.4 percent in the second quarter of 1980 (see Table 1). The relative size of the contraction was without precedent in the postwar period, being more than four times as large as the average drop in real final sales during the previous six recessions. The decline was concentrated in purchases most sensitive to high interest rates and/or those purchases that are easily postponed--notably housing, automobiles, and business plant and equipment.

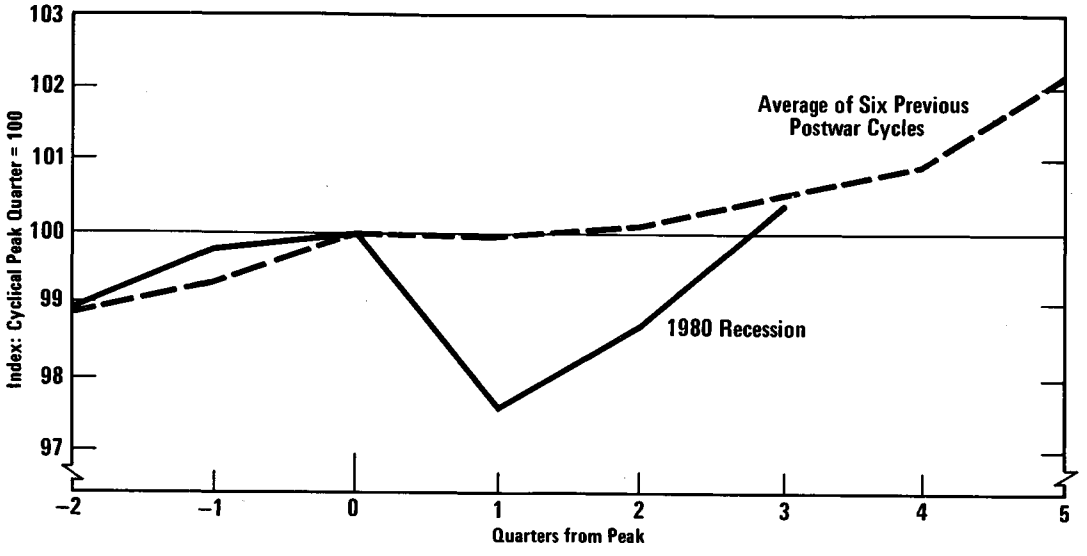
A substantial recovery in real final sales during the second half of 1980 did not, however, wholly make up for the decline. By year-end, housing, autos, business fixed investment, and related industries were still quite depressed. By contrast, over the year as a whole, there was substantial growth in federal government purchases of goods and services and in net exports, which are both relatively insensitive to credit conditions.

Personal Consumption Expenditures

Recent Behavior. In past recessions, consumption spending has typically fallen very little. That was not the case in 1980, as constant-dollar consumption spending fell at a nearly 10 percent annual rate in the second quarter (see Figure 1). Most of that

Figure 1.

Inflation-Adjusted Consumer Spending in the 1980 Recession Relative to Previous Recessions



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

TABLE 1. CONSTANT-DOLLAR FINAL SALES (Percent change from previous period at annual rates)

	1977:4 to 1978:4	1978:4 to 1979:4	1979:4 to 1980:4	1980:1	1980:2	1980:3	1980:4
Total Final Sales	5.2	2.5	0.1	3.1	-10.4	4.1	4.4
Personal Consumption Expenditures	4.8	2.0	0.6	0.8	-9.8	5.1	7.0
Durable goods	5.8	-3.1	-4.7	-1.6	-43.3	21.7	21.2
Motor vehicles and parts	4.2	-9.7	-9.5	12.5	-67.2	44.2	26.3
Nondurable goods	4.0	2.2	-0.2	0.2	-5.3	-1.8	6.3
Services	5.1	3.6	3.0	2.1	0.0	6.4	3.7
Residential Investment	0.0	-6.1	-12.9	-24.2	-60.2	16.0	64.2
Nonresidential Fixed Investment	9.0	2.9	-4.3	2.2	-19.9	-1.5	4.0
Structures	11.8	9.5	-5.7	-1.4	-13.1	-15.3	9.0
Producers' durable equipment	7.7	0.4	-3.7	3.8	-22.7	5.3	1.9
Exports	22.3	13.3	1.7	32.0	-12.3	-0.2	-7.4
Imports	13.2	6.0	-3.3	11.9	-21.9	-20.4	25.8
Federal Government Purchases	-1.3	2.1	4.2	18.9	11.9	-13.1	2.0
Defense	1.4	3.8	5.3	9.8	6.2	-0.1	5.9
Nondefense	-6.1	-0.9	1.7	38.4	23.1	-33.1	-5.3
State and Local Government Purchases	3.3	1.7	0.1	0.6	-2.8	0.3	2.3

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

TABLE 2. CONSTANT-DOLLAR PERSONAL CONSUMPTION EXPENDITURES, BY MAJOR TYPE OF PRODUCT (Percent change from preceding quarter, seasonally adjusted annual rates)

	1980			
	Q1	Q2	Q3	Q4
Total Personal Consumption Expenditures	0.8	-9.8	5.1	7.0
Durable Goods	-1.6	-43.3	21.7	21.2
Motor vehicles and parts	12.5	-67.2	44.2	26.3
Furniture and household equipment	-7.1	-16.3	10.2	16.7
Other	-17.9	-24.3	7.4	23.0
Nondurable Goods	0.2	-5.3	-1.8	6.3
Food	5.2	-3.0	-4.5	-0.4
Clothing and shoes	-7.4	-1.0	8.6	9.5
Gasoline and oil	-2.9	-8.6	-17.0	18.6
Fuel oil and coal	-24.1	-9.2	21.0	-9.0
Other	-1.1	-13.6	-1.2	17.8
Services	2.1	0.0	6.4	3.7
Housing	3.0	3.5	3.2	4.2
Household operation	-0.7	9.0	8.8	-3.2
Transportation	-3.3	-11.9	7.2	4.7
Other	3.4	-3.3	8.1	5.4

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

drop reflected a sharp decline in the sales of motor vehicles and parts (see Table 2). Excluding the auto sector, real consumption spending fell at a 4 percent annual rate, a decline widely distributed among durable and nondurable goods. Purchases of services, which are fairly insensitive to credit conditions, were about unchanged from the first quarter.

The recovery in constant-dollar consumption during the second half of the year was substantial, rising at a 6 percent annual

rate. Among the main sectors, only spending on autos failed to approach, or pass, its prerecession peak. Real consumption spending has continued to expand into early 1981. The January level of personal consumption expenditures, after adjustment for inflation, was nearly 5 percent (at an annual rate) above its fourth-quarter average. And the upward trend apparently continued in February.

The growth of personal income has not kept pace with the recent increases in consumer outlays. As a result, the saving rate has once again fallen to a low level; personal saving was estimated at 3.9 percent of personal disposal income in February. This compares with 5.1 percent in the fourth quarter of 1980 and is the lowest rate in four years.

Determinants of Consumption Spending. The major determinants of consumption spending are disposable personal income, the availability and cost of credit, expectations about the future, and changes in household balance sheets. By most of these measures, consumers were in a precarious position at the beginning of 1980 (see Figure 2).

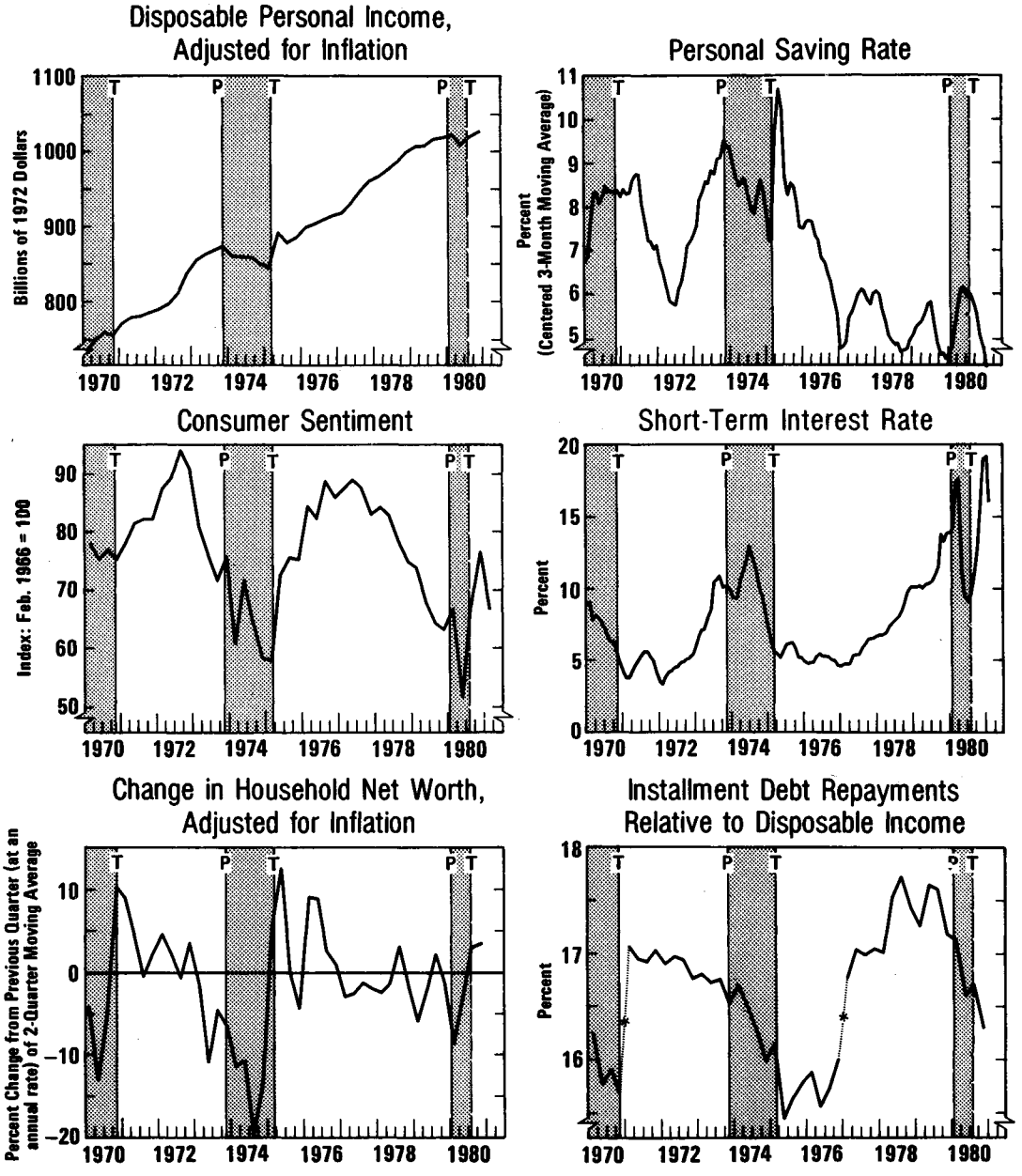
Real disposable income failed to keep up with consumer spending growth in 1979, resulting in a low and declining saving rate as the year progressed. The practice of buying in advance of price increases had raised installment debt to historically high levels relative to income. High interest rates around the turn of the year discouraged some installment purchases, and consumers' real net worth declined at the end of 1979 and in the first part of 1980, further weakening their ability to maintain the high rate of spending growth. In addition, consumer confidence about current and expected economic and financial conditions was approaching historical lows.

On top of those inhibiting factors, credit controls were imposed on some sectors of the economy in March 1980 as part of a larger anti-inflation program. Their imposition coincided with a dramatic drop in the use of consumer installment credit. Net increases in consumer installment credit typically slow and may even turn negative during recessions; the behavior in 1980 was in sharp contrast to historical experience (see Figure 3).

One survey, conducted three months after the controls program began, indicated that 63 percent of credit cardholders did not change their use of credit cards, 3 percent used them more often,

Figure 2.

Household Sector Conditions

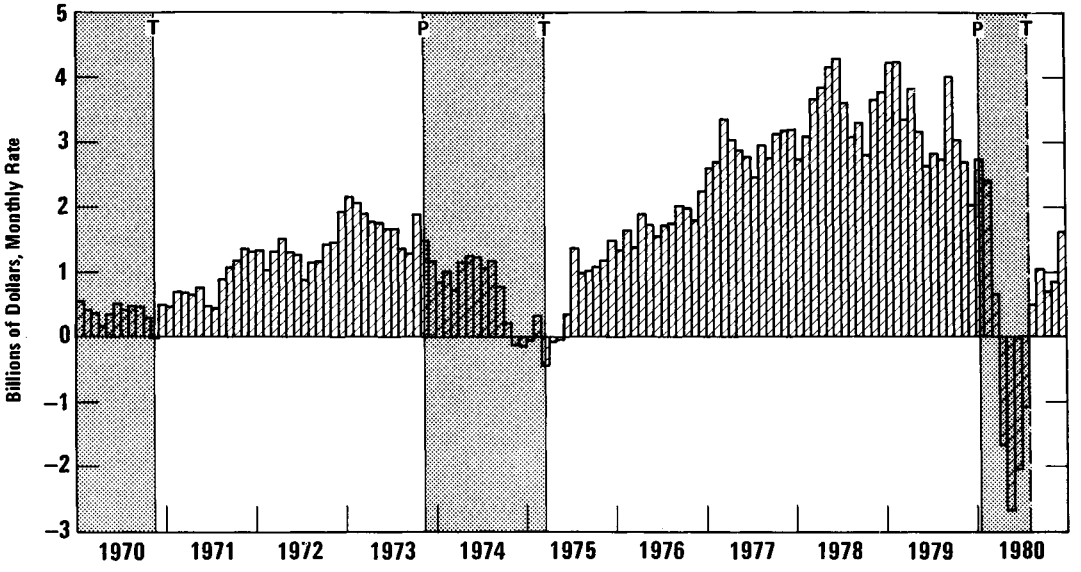


NOTE: Asterisk indicates a change in the definition of the data series.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; U.S. Department of Labor, Bureau of Labor Statistics; Federal Reserve System, Board of Governors; University of Michigan, Survey Research Center.

Figure 3.

Net Change in Consumer Credit Outstanding



SOURCE: Federal Reserve System, Board of Governors.

and 34 percent used them less often. About one-third of those who used credit cards less often reported delaying or cancelling purchases, especially of automobiles, furniture, other household items, and home entertainment. The other two-thirds maintained planned purchases by drawing down their cash balances. 2/

The difficult question is how much of the retrenchment by consumers last year resulted from credit controls, and how much from weakened personal financial situations and high interest rates. The evidence here is mixed. The coincident timing of the controls program and the sharp drop in the use of consumer credit strongly suggest that the controls played a predominant role. Three factors, however, work against the view. (1) The controls program was designed to raise the cost of consumer credit, which it did; but the response to this cost increase was much larger than indicated by historical experience. In the attempt to explain that

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2/ The survey information is from University of Michigan, Survey Research Center.

anomaly, some analysts have contended that many consumers came to the mistaken conclusion that use of credit cards had been outlawed. But it is difficult to believe that such a misperception could have been widespread for very long. (2) The drop in constant-dollar retail sales began in February, before the program began, and did not accelerate when the controls were imposed. (3) Most important, the lifting of controls in July was not accompanied by a sharp increase in the use of consumer credit. Such a sharp increase would be expected if the controls program had worked, through whatever means, to hold credit usage well below the level desired by households.

On balance, the evidence may suggest that the credit controls helped to concentrate the drop in consumer spending in the second quarter, while without controls the slowdown would have been spread over a longer period. The consumer sector weakness was basically the result of the fundamental factors of falling real disposable income, heavy debt burdens, and the high cost of credit.

Residential Investment

Recent Behavior. Another major contributor to the 1980 recession was the slump in housing activity. Spending on residential construction, after adjusting for inflation, fell at a 40 percent annual rate during the first half of last year (see Table 1). Housing starts dropped from 1.68 million in the second half of 1979 to 1.14 million in the first half of 1980--their lowest rate since the depths of the 1973-1975 recession (see Table 3).

After midyear, housing activity rebounded, contributing especially to the increase in final sales in the fourth quarter. Between June and December, units were started at an annual rate of 1.46 million units--almost a third greater than in the first half of the year. After housing starts rose again in January 1981, the sharply higher interest rates apparently took their toll. Starts fell 25 percent in February to a 1.22 million unit annual rate--the sharpest one-month decline in twenty years. Building permits also declined and were almost 13 percent below their fourth-quarter average. If the February weakness in residential construction is signaling another building downturn, the rate of overall economic growth will likely slow significantly--or perhaps turn negative--by the middle quarters of 1981.

TABLE 3. INDICATORS OF RECENT HOUSING ACTIVITY

	1978	1979	1980	1980 Q1	1980 Q2	1980 Q3	1980 Q4	1981 Jan.	1981 Feb.
Housing Starts a/	2.02	1.75	1.29	1.23	1.06	1.39	1.53	1.62	1.22
Single-Family	1.43	1.19	0.85	0.79	0.69	0.96	1.00	0.99	0.78
Multi-Family	0.59	0.55	0.44	0.44	0.37	0.43	0.53	0.62	0.44
Building Permits a/	1.80	1.55	1.18	1.14	0.90	1.39	1.31	1.23	1.14
Single-Family	1.18	0.98	0.70	0.68	0.53	0.85	0.79	0.72	0.67
Multi-Family	0.62	0.57	0.48	0.45	0.37	0.54	0.52	0.51	0.47
New House Sales a/	0.82	0.71	0.53	0.53	0.45	0.60	0.55	0.49	n.a.
Median Price b/	55.7	62.9	64.6	63.4	63.8	65.4	67.0	67.2	n.a.
Mortgage Interest Rate c/	9.6	10.9	12.9	12.5	13.7	12.4	13.2	13.7	14.1
Prime Interest Rate c/	9.1	12.7	15.3	15.3 d/	19.8 d/	11.5 d/	13.8 d/	20.2	19.4

a/ Millions of units, seasonally adjusted annual rates.

b/ Thousands of dollars.

c/ Percent.

d/ First month of quarter.

SOURCES: U.S. Department of Commerce, Bureau of the Census; Federal Home Loan Bank Board; Federal Reserve System, Board of Governors.

Determinants of Housing Activity. The volatile movement of residential construction in 1980 is explained largely by the behavior of credit conditions during the year. Interest rates rose sharply to postwar record highs early in the year, fell just as sharply toward the middle, and then jumped back up to new postwar record levels by year-end. (The behavior of financial markets last year is analyzed in Chapter III.)

The sensitivity of housing activity to conditions in financial markets works principally through two channels. First, tighter credit conditions raise the cost, and perhaps limit the availability, of long-term home mortgages. The effect on buying conditions, in combination with rising house purchase prices, can be substantial (see Figure 4, upper panel). The household income needed to qualify for an average mortgage--if monthly payments of principal and interest are not to exceed one-quarter of gross

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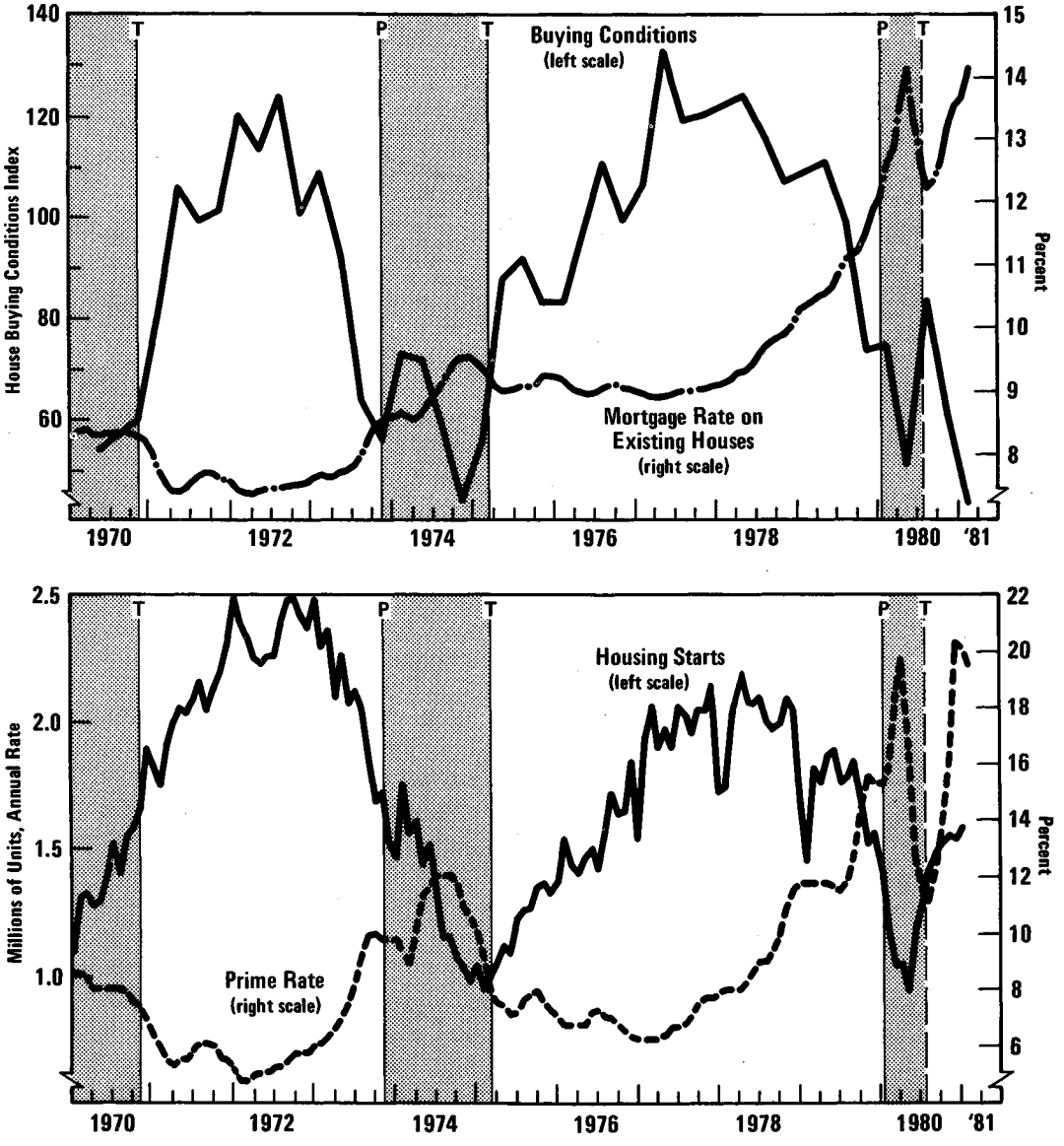
Figure 4.

Borrowing Costs and Housing Activity



NOTE: The house buying conditions index is calculated as the percent of respondents saying it is a "good time" to buy a house minus the percent saying it is a "bad time" plus 100.

SOURCES: U.S. Department of Commerce, Bureau of the Census; Federal Reserve System, Board of Governors; University of Michigan, Survey Research Center; Federal Home Loan Bank Board.

TABLE 4. MORTGAGE PAYMENTS AND ASSOCIATED INCOME LEVELS (In dollars)

Quarter	Mortgage Payment a/	Annual Qualifying Income	Median Family Income b/
1978:2	360	17,280	17,640
4	405	19,440	
1979:2	456	21,888	19,684
4	507	24,336	
1980:1	562	26,976	21,800 est.
2	616	29,568	
3	542	26,016	
4	614	29,472	

a/ Monthly repayment (principal and interest) on a 25-year loan for a new single-family house for which a 25 percent downpayment was made.

b/ Average income for the entire year.

SOURCES: U.S. Department of Commerce, Bureau of the Census; Data Resources, Inc.

monthly income--jumped about 20 percent between the fourth quarter of 1979 and the second quarter of 1980, outpacing the growth in median family income (see Table 4). 3/

Second, home builders typically must borrow--at an interest rate often greater than the prime--to finance land acquisition,

3/ Record high mortgage rates resulted partly from continuing deregulation of financial markets--especially the 1978 change permitting financial institutions to issue six-month certificates with yields competitive with Treasury bills. Previously, in periods of relatively tight money, loanable funds in this sector were allocated more by availability than by price.

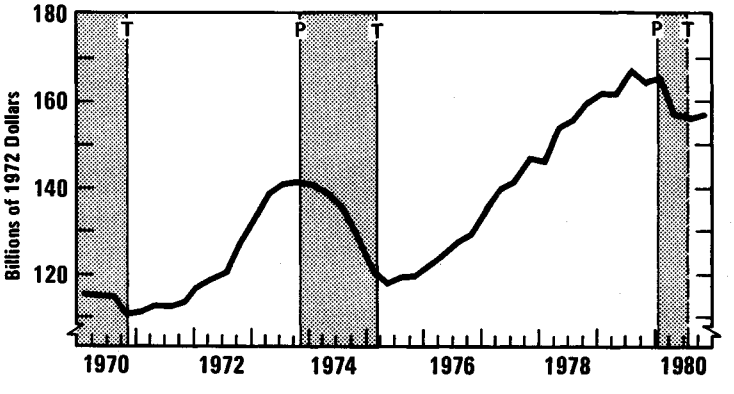
materials, and labor during construction. High borrowing costs, in combination with the expectation that tight credit will weaken new home demand, make it especially risky to build in anticipation of future sales. Consequently, the level of construction activity tends to be cut back, perhaps after a short lag, as interest rates rise (see Figure 4, lower panel).

The sharp drop in interest rates that occurred in the spring of 1980 worked through both channels to boost housing activity after midyear, contributing to the quick recovery of real GNP. That revival in residential construction, however, was apparently short-lived. The upturn of economic activity and credit demands, in combination with the stubborn momentum of inflation, led to sharply tighter credit conditions late in 1980. Tighter credit, in turn, apparently helped induce the large drop in residential construction activity early in 1981.

Nonresidential Fixed Investment

Recent Behavior. Business fixed investment is a key sector of the economy. Not only is it an element in total demand, helping to determine to what degree existing productive capacity is employed, but it is also a major determinant of the growth of productive capacity. During 1980 as a whole, constant-dollar spending on plant and equipment fell more than 4 percent (see Figure 5 and Table 5). Most of this decline was concentrated in the second quarter, as purchases of both structures and equipment fell sharply. Investment in automobiles and trucks was particularly weak, continuing the decline that began in 1979.

Figure 5.
Business Fixed Investment, Adjusted for Inflation



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

TABLE 5. CONSTANT-DOLLAR BUSINESS FIXED INVESTMENT (BFI) AND ITS DETERMINANTS

	1978:4 to 1979:4	1979:4 to 1980:4	1980:1	1980:2	1980:3	1980:4
Total BFI (percent change, annual rate)	2.9	-4.3	2.2	-19.1	-1.5	4.0
Structures	9.5	-5.7	-1.4	-13.1	-15.3	9.0
Producers' durable equipment	0.3	-3.7	3.8	-22.7	5.3	1.9
Automobiles, trucks a/	-22.9	-15.8	-14.7	-58.3	60.8	-12.9
Other	7.3	-1.1	4.9	-13.2	-2.5	4.9
Manufacturers' Rate of Capacity Utilization (percent, end of period)	84.4	79.2	82.8	75.7	76.7	79.9
After-Tax Corporate Profits with IVA and CCA b/ (percent change, annual rate)	-7.4	-4.2	15.7	-27.5	7.1	-6.3
Cost of Borrowing (percent)						
Prime rate	12.7	15.3	16.4	16.3	11.6	16.7
AAA corporate bond rate	9.6	11.9	12.1	11.2	11.6	12.8

a/ Includes a small amount of residential investment spending for motor vehicles.

b/ IVA: inventory valuation adjustment.
CCA: capital consumption adjustment.

SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis; Federal Reserve System, Board of Governors; Moody's Investor Service, Inc.

Business fixed investment remained sluggish in the third quarter, after the overall recovery had begun, but began expanding again in the final quarter of 1980. And this upward momentum has apparently been maintained early into 1981. Shipments of nondefense capital goods (not adjusted for inflation) in January and February averaged nearly 10 percent (at an annual rate) more than their fourth-quarter level. More important, private commercial and industrial construction put in place (also not adjusted for inflation) in January was 44 percent (at an annual rate) above its fourth-quarter average, although part of that increase may reflect unusually mild weather. Furthermore, the Department of Commerce's survey of anticipated plant and equipment expenditures, conducted in January and February, shows planned constant-dollar spending in the second half of 1981 to be 3 percent above the second half of 1980--if businesses expect price increases similar to those of last year.

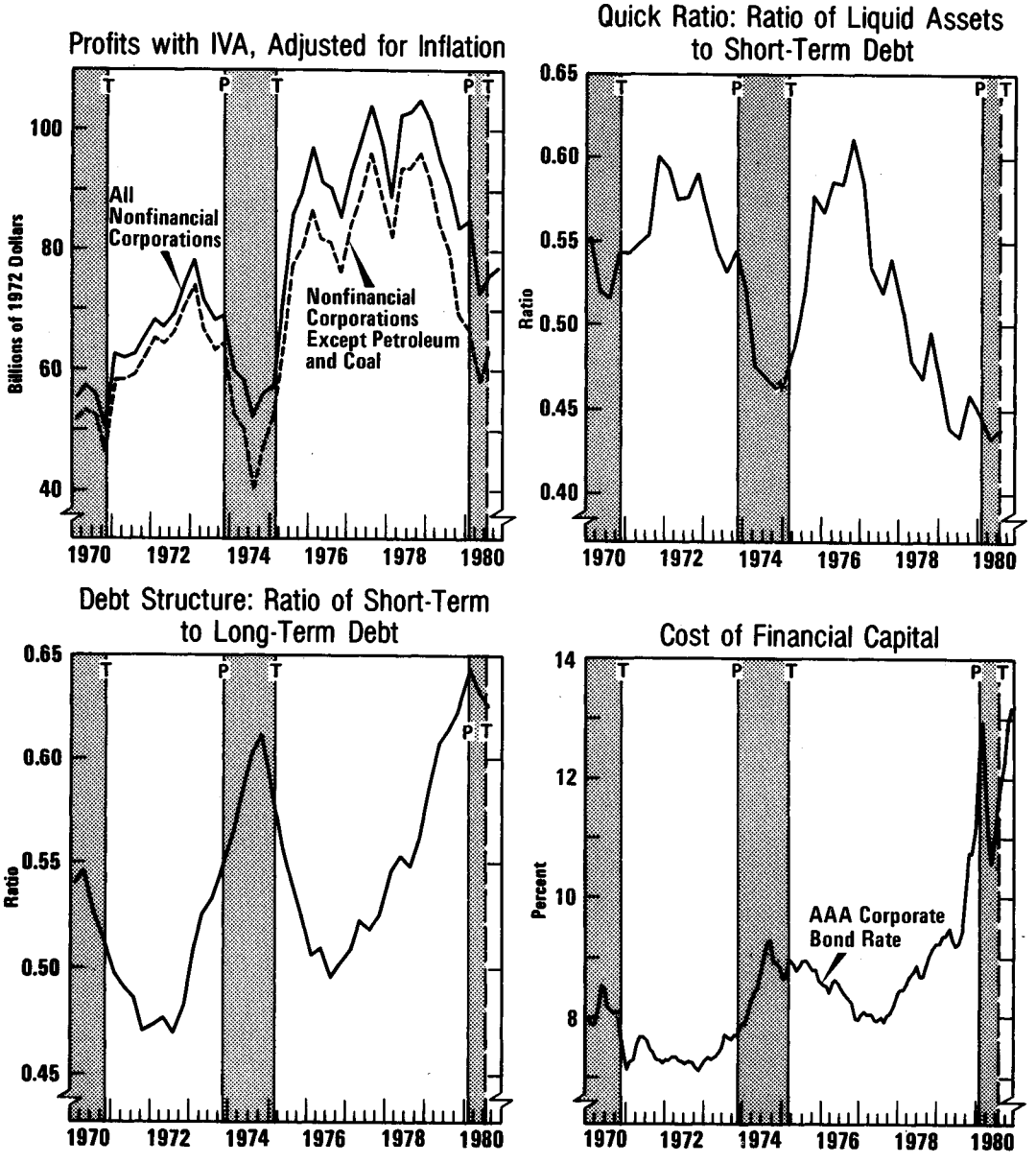
Continued strength of business fixed investment throughout 1981, however, is very uncertain. The Commerce survey typically overstates actual investment spending when capacity utilization is low and profits depressed. In addition, most of the recent pick-up in investment activity probably was financed when interest rates were relatively low. Perhaps indicative of some business retrenchment in the face of the dramatic rise in borrowing costs, new orders for nondefense capital goods (not adjusted for inflation) fell 14-1/2 percent (not at an annual rate) in February from the previous month--the largest decline since 1971, although one month in this volatile series hardly constitutes a trend.

Determinants of Business Fixed Investment. The major determinants of business fixed investment are: (1) the cost of external funds, (2) the state of corporate balance sheets, (3) the utilization of existing capacity as well as expected capacity utilization in the future, and (4) the efficiency of new capital relative to existing capital. The first three factors worked to inhibit investment activity last year (see Figure 6).

Along with all other potential borrowers, businesses faced a sharp deterioration of credit conditions from late 1979 to early 1980. Interest rates rose at an extraordinarily rapid rate, and the long-term bond market--an important vehicle for gathering the financial capital for fixed investment--tightened substantially, as high and volatile inflation made it risky to commit

Figure 6.

Financial Conditions of Nonfinancial Corporations



NOTES: Real profits are calculated using nominal profits and the implicit price deflator for GNP. IVA is inventory valuation adjustment. The farm sector is excluded from the data for the quick ratio and the debt structure. Asterisk indicates a change in the definition of the data series.

SOURCES: Federal Reserve System, Board of Governors; U.S. Department of Commerce, Bureau of Economic Analysis; Moody's Investors Service, Inc.

funds at fixed interest charges for long periods of time. Thus, many firms were forced to defer long-term borrowing, often postponing their capital projects as a result.

Investment from retained earnings was also cut back, as a result of recession-depressed profits. The average profit margin of nonfinancial corporations fell sharply from 12.2 percent at the close of 1978 to 8.5 percent in the second quarter of 1980. This drop of 3-3/4 percentage points was comparable to the profit-margin decline in the 1973-1975 recession. A margin drop of that magnitude implies a decline in profit levels.

An even gloomier profit picture emerges when the earnings of petroleum companies, which rose rapidly the past two years, are deducted from total corporate profits (see Table 6). Exclusive of petroleum and coal firms, before-tax corporate profits, with inventory valuation adjustment but not generally adjusted for inflation, fell nearly 17 percent during the first three quarters of 1980, compared with a 3.6 percent drop in 1979. Since profits are both a source of investment funds and the major inducement for

TABLE 6. BEFORE-TAX CORPORATE PROFITS WITH IVA (Percent change from previous year)

	1978	1979	1980 a/
Nonfinancial Domestic Corporations	8.9	0.5	-9.5
Petroleum and Coal Firms	6.8	45.2	43.0
Other Firms	9.1	-3.6	-16.8

NOTE: IVA: inventory valuation adjustment.

a/ Based on first three quarters of 1980.

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

households to invest their savings in productive capital formation, poor profit performance is basically not compatible with strong investment spending. (The recent behavior of corporate profits is analyzed in detail in Chapter VI of this report.)

Depressed profits and tight credit conditions have also been straining corporate financial balance sheets. By midyear 1980, the ratio of liquid assets to short-term debt was lower than at the trough of the 1973-1975 recession, although this may have resulted partly from improved cash management techniques. In addition, the ratio of short-term to long-term debt was at historically high levels in 1980. As a result, corporations generally were faced with a strong need to rebuild liquidity and restructure their debt; their ability to do so, however, was abruptly curtailed by the interest-rate run-up late in 1980.

The third inhibiting factor was the sharp drop in factor utilization rates last year. New investment looks less desirable when a significant portion of existing capacity is idle. Manufacturing capacity utilization fell from 84.4 percent in the fourth quarter of 1979 to 75.7 percent in the third quarter of 1980--a decline about in line with previous postwar recessions. At year-end, even with some recovery in real output, the factory utilization rate was 79.9 percent--4-1/4 percentage points below a year earlier. And the excess capacity continues into 1981, with factory utilization of 79.3 percent recorded in February.

The final factor--the relative efficiency of new plant and equipment--has worked to keep investment high. Especially with the dramatic run-up in energy prices, new investment to economize on the use of energy in the production process or to produce energy-efficient consumer products can be quite profitable.

Inventory Investment

Recent Behavior. The change in constant-dollar inventory investment did not contribute to the sharp contraction of production during the 1980 recession. As noted earlier, the decline was wholly attributable to an exceptionally large drop in real final sales. By contrast, every previous postwar recession had been, to a significant degree, the result of an inventory liquidation (see Table 7).

TABLE 7. MAXIMUM REAL GNP DROPS FROM CYCLICAL PEAKS, WITH FINAL SALES AND INVENTORY COMPONENTS (In percentage points)

	1948:4 to 1949:2	1953:2 to 1954:2	1957:3 to 1958:1	1960:2 to 1960:4	1969:4 to 1970:4	1973:4 to 1975:1	1980:1 to 1980:2
Change in Real GNP	-1.5	-3.2	-3.3	-0.9	-0.4	-4.8	-2.6
Final Sales Component	1.0	-1.8	-1.8	0.3	0.1	-1.8	-2.7
Inventory Change Component	-2.5	-1.5	-1.5	-1.2	-0.5	-3.0	0.1

NOTE: The cyclical peaks are those designated by the National Bureau of Economic Research.

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

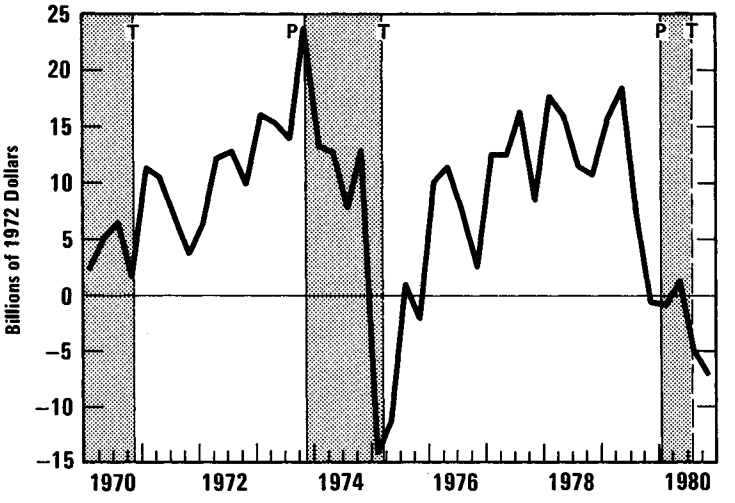
For 1980 as a whole, constant-dollar inventories declined somewhat (see Figure 7). Stock liquidation occurred in each quarter except the second, when the sharp drop in final sales caused an unintended buildup of inventories in the production pipeline. Partly in response to the lower sales, orders were cut back and inventories drawn down in the second half of the year.

The second-half liquidation, however, was not nearly large enough to prolong the contraction in total production. The small size of the inventory adjustment was the major factor distinguishing the 1980 recession from previous postwar downturns.

Determinants of Inventory Change. Why did a greater inventory liquidation not follow the sharp slowdown in total spending in 1980? The major determinants of planned inventory investment are two-fold: the expectation of future sales, and the cost of holding inventories.

Figure 7.

Change in Business Inventories, Adjusted for Inflation



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

The first factor does not appear to be an adequate explanation for the unusual inventory behavior. Final sales fell at an exceptionally rapid rate early in 1980, and the general outlook suggested weakness in future sales and production.

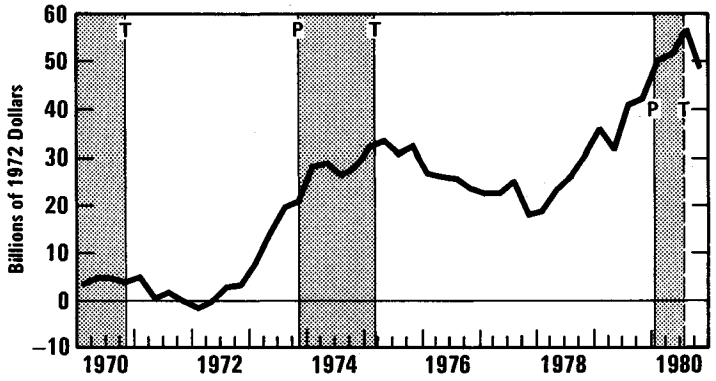
A better case can be made for the second factor. Most inventories are financed with borrowed funds. It is reasonable to expect that stocks will be cut back if interest rates rise significantly. And that is apparently what happened. The general reduction in inventory investment began with the run-up in interest charges in late 1978 and continued through 1979. As a result, inventories were quite lean by the time total spending contracted early in 1980. In effect, much of the inventory adjustment occurred before the slowdown in final sales, instead of after it as had been typical in previous downturns.

Net Exports

Constant-dollar net exports of goods and services rose by $6.3 billion in 1980, with fourth-quarter exports $2.6 billion above a year earlier and imports $3.7 billion lower (see Figure 8). Merchandise export growth, adjusted for inflation, slowed considerably as major U.S. trading partners experienced economic downturns in the first half of 1980. Meanwhile, real merchandise imports fell: automobile imports continued at close to the 1979 rate, while lower petroleum product imports accounted for about

Figure 8.

Net Exports, Adjusted for Inflation



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

half of the overall decline. On the services account, real exports and imports both increased in 1980, although at slower rates than in the previous year.

Midyear upturns in industrial production of many major U.S. trading partners slowed or reversed toward the end of 1980, suggesting that near-term exports may continue falling. In addition, the reductions in petroleum imports realized last year are probably not sustainable at a similar rate, as increased fourth-quarter petroleum import figures may indicate.

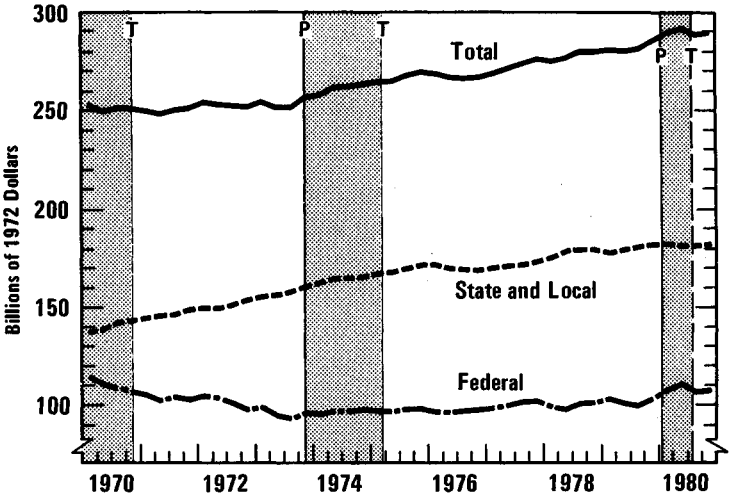
Relatively high interest rates helped buoy the exchange value of the dollar in the early part of 1980 and again at the end of the year. As high interest rates boost the exchange value of the dollar and attract some capital flows to the United States, however, the appreciated value of the dollar and the high inflation rates underlying the interest rates work to hurt U.S. exporters' competitive positions. Should interest rates ease to lower levels in 1981, capital flows may continue if the differential between U.S. and foreign interest rates remains. On the negative side, the persistent inflation that erodes U.S. competitiveness in high-productivity products will probably continue to hurt U.S. exports of such goods.

Government Purchases

After adjustment for inflation, government purchases rose 1.6 percent in 1980 (see Figure 9). The increase is wholly attributable to the federal sector. Over the year, federal defense

Figure 9.

Government Purchases, Adjusted for Inflation



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

purchases rose 5.3 percent in real terms, and nondefense purchases 1.7 percent. Real state and local government purchases increased slightly in 1980. While most spending categories grew very modestly, outlays for structures fell by 5.6 percent, reflecting, in part, the high cost of borrowing. State and local budget surpluses, exclusive of social insurance trust funds, fell only slightly last year despite the recession. Slowed revenue growth in the second quarter pushed the balance into deficit, but only for one quarter.

LABOR MARKETS AND PRICE DEVELOPMENTS

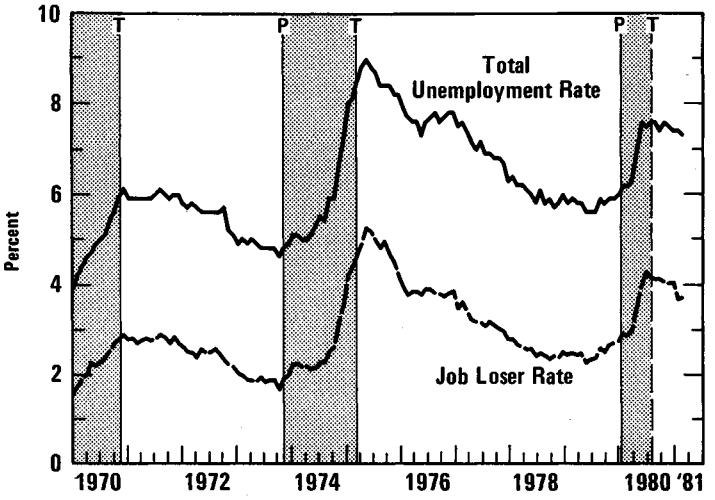
Labor Market

The unemployment rate rose sharply during the 1980 recession, from 5.9 percent in 1979:4 to 7.5 percent in 1980:3--an increase of 1-3/4 million in the number of unemployed workers (see Figure 10). Like the change in total production, the unemployment rise was concentrated in the second quarter. Between March and May 1980, the jobless rate increased by 1.3 percentage points. For the remainder of the year, the unemployment rate hovered around 7-1/2 percent.

The impact of the recession was not evenly distributed throughout the work force. The downturn in production hit hardest

Figure 10.

Unemployed Workers as a Percent of the Civilian Labor Force



SOURCE:
U.S. Department of Labor,
Bureau of Labor Statistics.

in goods that are sensitive to interest rates and postponable--automobiles and related products, housing and related products, and capital investment. Consequently, workers in these areas were affected disproportionately (see Table 8). Thus, the unemployment rate increase was concentrated among workers with the most stable attachment to the labor force--adult males and full-time workers (see Table 9). Job losers accounted for about 90 percent of the rise in joblessness.

The recovery in production during the second half of the year brought with it some improvement in labor-market conditions. Employment growth resumed, and average weekly hours rose. But significant slack remained in the labor market as 1981 began. The unemployment rate was 7.3 percent in February 1980--1.1 percentage points (about 1-1/3 million workers) above a year earlier. Aggregate weekly hours of production of nonsupervisory workers in February 1981 were below year-ago levels in construction (-9.0 percent), durable goods manufacturing (-7.2 percent), nondurable goods manufacturing (-1.3 percent), and transportation and public utilities (-1.6 percent).

Inflation

Despite the recession, the Consumer Price Index (CPI) rose 12.4 percent in 1980--the second most rapid rise in three decades (see Figure 11). The most rapid increase was 13.3 percent in 1979.

TABLE 8. PERCENT CHANGE IN THE INDEX OF AGGREGATE WEEKLY HOURS WORKED

	Jan. 1980 to July 1980	July 1980 to Jan. 1981
By Industry		
Goods-Producing Industries	-10.5	8.0
Mining	-2.0	10.8
Construction	-12.4	11.9
Manufacturing	-10.5	7.0
Durable goods	-12.8	8.1
Nondurable goods	-7.2	5.5
Service-Producing Industries	-0.5	1.8
Transportation and public utilities	-1.1	-1.2
Wholesale and retail trade	-2.8	2.8
Financial, insurance, and real estate	2.0	1.3
Services	1.7	1.8
By Nature of Output		
Auto- and Housing-Related Goods		
Transportation equipment	-13.0	9.5
Primary metals	-20.8	18.0
Lumber and wood	-16.7	12.1
Furniture and fixtures	-17.0	12.9
Rubber and misc. plastics	-18.2	17.0
Capital Goods		
Nonelectrical machinery	-8.2	3.0
Electrical machinery	-11.1	7.8
Instruments	-4.8	3.0
Miscellaneous Consumer Goods		
Printing and publishing	-3.7	3.9
Chemicals	-6.3	3.9
Apparel	-4.7	3.4

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

TABLE 9. UNEMPLOYMENT RATES (Percent of civilian labor force)

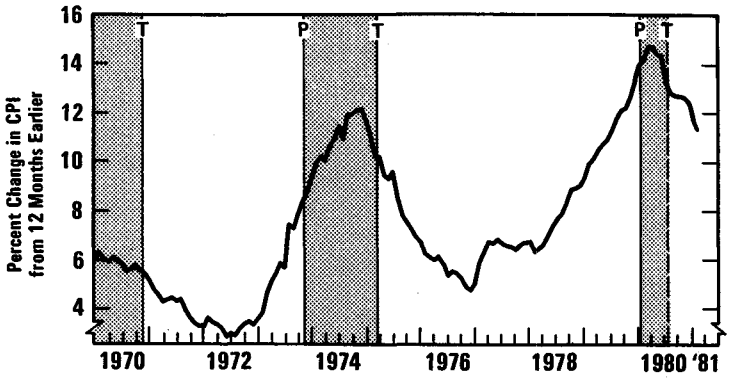
	1979	1980				1981	
	Q4	Q1	Q2	Q3	Q4	Jan.	Feb.
All Workers	5.9	6.2	7.3	7.5	7.5	7.4	7.3
Demographic Breakdown							
Males, 20 years and older	4.4	4.8	6.2	6.6	6.3	6.0	6.0
Females, 20 years and older	5.7	5.8	6.4	6.4	6.7	6.7	6.5
Teenagers	16.2	16.4	17.9	18.4	18.3	19.0	19.3
Married men, spouses present	3.0	3.4	4.4	4.8	4.4	4.2	4.1
Women who maintain families	8.4	8.7	8.6	8.9	10.2	10.5	9.6
Full-time workers	5.5	5.8	7.0	7.3	7.3	7.1	7.1
Occupation							
White-collar workers	3.3	3.4	3.7	3.8	3.9	3.9	3.7
Blue-collar workers	7.5	8.1	10.5	11.1	10.7	10.2	10.1
Craft and kindred workers	4.8	5.2	7.2	7.4	7.1	6.8	7.2
Service workers	6.8	7.0	8.0	8.3	8.1	8.0	8.7
Industry							
Construction	10.6	11.8	15.6	16.3	14.4	13.3	13.2
Manufacturing	6.0	6.7	9.1	9.4	9.0	8.4	8.4
Transportation and public utilities	4.1	4.3	4.9	5.5	5.0	5.8	5.5
Trade	6.4	6.5	7.4	7.7	8.1	7.6	7.6
Previous Employment Status							
Job losers	2.7	2.9	3.9	4.1	4.0	3.6	3.7
Job leavers	0.8	0.8	0.9	0.8	0.8	0.9	0.8
Reentrants	1.7	1.7	1.8	1.8	1.8	1.9	1.9
New entrants	0.8	0.8	0.8	0.8	0.8	0.9	0.9

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

The items within the CPI that led to the acceleration in 1979 were the same ones that did the most to maintain the high rate of inflation in 1980 (see Table 10). Mortgage interest costs rose 34.7 percent in 1979 and 27.6 percent in 1980. Direct energy costs rose 37.4 percent in 1979 and 18.1 percent in 1980. Food prices increased by about 10 percent in both years.

Figure 11.

Consumer Prices



SOURCE:
U.S Department of Labor,
Bureau of Labor Statistics.

Excluding mortgage interest costs, energy, and food, consumer prices were up 9.9 percent in 1980--compared with 8.6 percent the preceding year. The jump reflected the typical lagged response of production costs--especially wages--to an increase in energy prices and interest rates.

The heavy weight assigned to interest rates, most notably mortgage interest rates, in the CPI contributed greatly to its volatility in 1980. Interest rate movements have an exaggerated impact on the CPI because the interest rate level is a function of

TABLE 10. INFLATION RATES BY SELECTED CATEGORIES OF THE CPI

	1978	1979	1980
All Items	9.0	13.3	12.4
Energy	8.0	37.4	18.1
Mortgage Interest Costs	22.0	34.7	27.6
Food	11.8	10.2	10.2
Remaining Items	7.3	8.6	9.9

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

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TABLE 11. INFLATION AS MEASURED BY THE CPI, WITH AND WITHOUT MORTGAGE INTEREST COSTS (Annual rates of change)

	1980			
	Q1	Q2	Q3	Q4
All Items	16.5	13.1	7.7	12.9
All Items Less Mortgage Interest Costs	13.3	10.0	10.2	11.2

SOURCE: U.S. Department of Labor, Bureau of Labor Statistics.

inflation, while, in turn, inflation is driven by interest rates. In 1980, for example, the quarterly movements in consumer prices without mortgage interest costs were quite different from the behavior of the total CPI (see Table 11). The distortion resulting from interest-rate volatility does not, however, change the basic message that prices rose very rapidly in 1980.

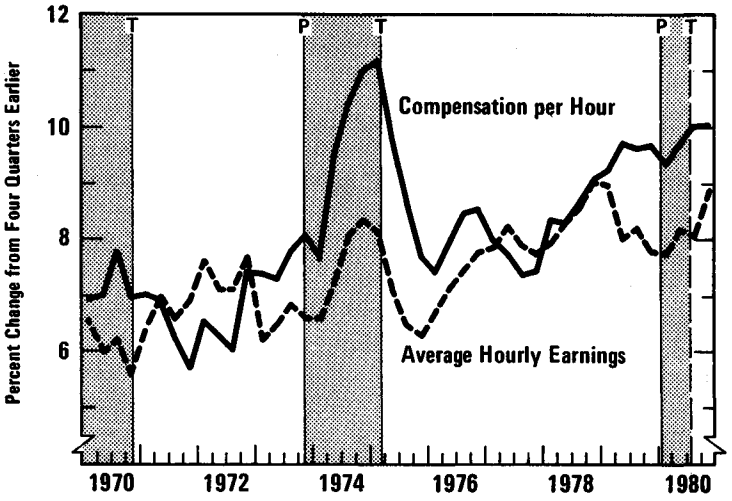
Costs of Production

Labor Costs. Labor costs account for about three-quarters of total business costs. Thus, rapid increases in labor costs put strong upward pressure on product prices. Compensation per hour in nonfinancial corporations rose at a 10.7 percent annual rate in the first three quarters of 1980--somewhat higher than the 9.8 percent gain in 1979 (see Figure 12).

Empirically, the three most important determinants of wage movements are labor-market slack, past price inflation, and government intervention. Labor-market slack increased substantially in 1980. The increase of 1-1/2 million unemployed workers was concentrated among those workers with the most stable attachment to the labor force, rather than among teenagers or labor-force reentrants. But the sharp increase in labor-market slack was not sufficient to prevent an acceleration in wage growth, largely because of workers'

Figure 12.

Compensation Per Hour and Average Hourly Earnings



SOURCE:
U.S. Department of Labor,
Bureau of Labor Statistics.

efforts to catch up to the previous acceleration of inflation, some labor scarcity for particular types of employment and in particular areas, and increases in the minimum wage and payroll taxes.

Catch-up to past inflation has been the most important factor keeping compensation increases around double-digit rates. The evidence suggests that many workers have been able to maintain their customary rates of real wage improvement despite economic changes working against them. Such adverse changes include rising oil prices, a slowing of productivity growth, competition from foreign manufacturing capacity, and the attempts by government to shift resources to the elderly, the sick, and the poor. Other workers have been less successful in defending their customary real income positions, as can be seen from changes in the structure of wages.

Direct government actions also pushed up labor compensation last year. The minimum wage was increased by 7 percent on January 1, 1980--from $2.90 per hour to $3.10. At the same time, maximum earnings subject to Social Security taxes rose 13 percent. Together, the two changes are estimated to have added a quarter of a percentage point to the increase in compensation per hour last year.

Labor Productivity. The impact of rising labor compensation on unit production costs can be offset by rapid growth in

output per hour. Unfortunately, this has been lagging badly for a number of years, although it picked up somewhat during 1980.

Output per hour in nonfinancial corporations, as measured by the Department of Commerce, rose at a 2.4 percent annual rate from the fourth quarter of 1979 to the third quarter of 1980. This was a significant improvement from the 0.8 percent decline in 1979, and is about the same as the nearly 2-1/2 percent average annual growth rate in the postwar period through 1973. Improving productivity performance is fundamental in the battle against inflation.

Nonlabor Costs. Unit nonlabor costs rose at a 19.3 percent annual rate in the first three quarters of 1980, up from the 10.6 percent increase in the previous year. Unit nonlabor costs include depreciation, interest, indirect taxes, and payments for inputs from outside the nonfinancial corporate sector. Thus, they reflect both the rapid run-up in interest rates and the passthrough of sharply higher world oil prices.

Total unit costs increased at a 10.9 percent annual rate during the first three quarters of 1980, well above the 9-1/2 percent rise in prices for nonfinancial corporations. As a result, unit profits fell by 4.5 percent--a decline that followed a 15.4 percent drop in 1979. Such a squeezing of profits lessens the direct impact of cost increases on prices, but offers little for the future. Profits are the chief source of investment funds as well as the major incentive to invest in productive plant and equipment, and business fixed investment is an important determinant of productivity growth. Consequently, a poor profit performance today can hurt productivity growth in the future, aggravating future inflation. (Profits are analyzed in detail in Chapter VI.)

CHAPTER III. MONETARY AND FISCAL POLICY

Rapid inflation and changes in the financial structure make it particularly difficult to characterize monetary and fiscal policy, or to assess their contribution to economic developments in 1980. Money aggregates grew very rapidly in the second half of the year, suggesting an expansive monetary policy. But at the same time, interest rates rose to record levels, implying restraint. In regard to fiscal policy, rapid growth in spending (17.4 percent) and the large deficit ($59.6 billion) in fiscal year 1980 suggest a stimulative federal budget, even when the budgetary effects of economic slack are taken into account. At the same time, however, payroll tax increases and the interaction of inflation with the progressive income tax structure have sharply increased tax burdens for most working people.

Recent announcements by the Federal Reserve (Fed) indicate a continued strong policy commitment to the goal of reducing inflation. Indeed, its monetary targets appear to leave little room for a strong expansion of real economic activity unless the rate of inflation subsides substantially more than expected by most forecasters. The Fed is aware of the implication of its monetary policy and has recommended a restrictive fiscal policy to help reduce inflation. But if the individual and corporate tax reductions proposed by the Administration are implemented by mid-1981, the budget will not provide fiscal restraint in 1982 unless federal spending is also reduced substantially. Even with sizable spending cuts in fiscal year 1982, the budget deficit is likely to remain large. Federal borrowing will continue to put some upward pressure on interest rates, dampening the stimulative effects of tax incentives for investment and economic growth.

MONETARY POLICY

In recent years, prospects for a return to price stability have rested on a planned, gradual, but steady reduction in the rate of money growth. Since the mid-1970s, the Federal Reserve has announced successively lower annual money growth targets. Although money aggregate growth accelerated in the 1977-1978 period, some retardation has been attained since then (see Table 12). At the same time, no reduction in inflation has been achieved.

TABLE 12. GROWTH RATES OF SELECTED MONETARY AND RESERVE AGGREGATES, 1976-1980 (Fourth quarter to fourth quarter)

Year	M1A	M1B	Adjusted Monetary Base	Adjusted Bank Reserves
1976	5.5	6.0	7.8	4.0
1977	7.7	8.1	8.4	6.1
1978	7.4	8.2	9.4	8.1
1979	5.0	7.7	8.3	5.5
1980	5.0	7.3	8.3	5.7

NOTES: M1A: the public's holdings of currency and demand deposits at commercial banks.

M1B: the public's holdings of currency and checkable deposits at depository institutions.

Adjusted Monetary Base: currency in circulation and bank reserves adjusted for reserve requirement changes.

Adjusted Bank Reserves: adjusted monetary base less currency held by the public.

SOURCES: Federal Reserve System, Board of Governors; and Federal Reserve Bank of St. Louis.

Dissatisfied with its success in controlling money growth, the Fed adopted a new operating strategy on October 6, 1979. Under the new procedure, the Fed was to give less attention to restricting short-term variations in interest rates and more attention to a steady reduction in the growth of bank reserves. Under the old procedure with its heavy emphasis on interest rate targets, the Fed usually increased the supply of bank reserves (and money) when interest rates rose, and reduced reserves (and money) when interest rates fell. Interest rate movements could, thereby, pull money growth away from the target paths.

Proponents of the new procedure believed it would increase the ability of the Fed to hit the money growth targets. Opponents argued that, by diminishing the Fed's role as financial market stabilizer, the new procedure would lead to large fluctuations in interest rates and increased economic instability. Both sides can now claim vindication: 1980 was one of the most turbulent years for interest rates in the postwar period; and, by one money aggregate measure (M1A), the Fed achieved its target.

A closer look at the last year suggests, however, that the effect of the new operating procedure as implemented was not as different from the old as many expected. It probably was not the main cause of the ups and downs of financial markets, nor does it appear to have given the Fed control over money growth.

Interest Rates

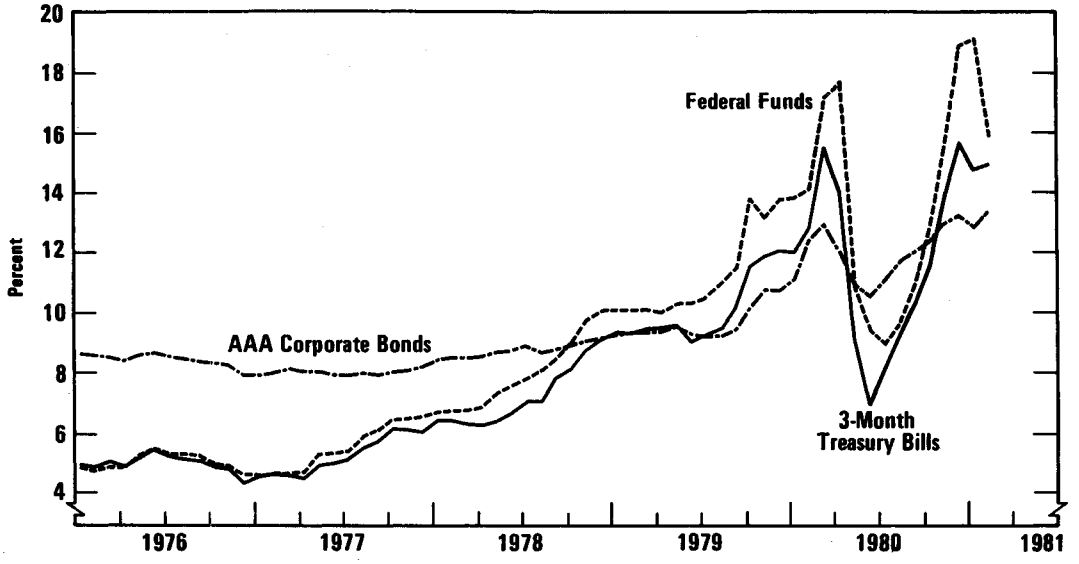
The closely watched prime interest rate charged by commercial banks opened the year at 15 percent, held steady until late February, rose to a peak of 20 percent in April, and then dropped rapidly to 11 percent by August. 1/ After late August, though, the decline was reversed, and by year-end the prime had reached a new peak of 21.5 percent. The long-term securities markets also endured huge price and rate movements; some analysts thought that the swings in long-term market rates threatened the very existence of those markets. The general pattern, with its two record peaks in rates, is illustrated in Figure 13.

The principal causes of these unprecedented movements in interest rates appear to have been:

- Sharp changes in the pace of economic activity;
- Changes in inflationary expectations;
- A more flexible financial structure; and
- The Fed's new operational procedures.

1/ Although "prime" suggests that this is the lowest rate charged the most creditworthy commercial borrowers, bank loans below the prime rate are fairly common.

Figure 13.
Interest Rate Behavior



SOURCES: Federal Reserve System, Board of Governors; Moody's Investors Service, Inc.

First, the quarterly pattern of economic activity during 1980 matched the direction of interest rate movements shown in Figure 13. The 3.1 percent annual rate of growth in real GNP during the first quarter paralleled the upward movement in interest rates, and the record-breaking 9.9 percent drop in real GNP during the second quarter shadowed the fall in rates that occurred after the March 14 credit controls. 2/ When the economy turned up quickly during the last half year, rates rose again. Thus, swings in the pace of economic activity during 1980 were accompanied by similar changes in the demand for credit (see Figure 14); and these changing credit demands--absent offsetting changes in supply--were reflected directly in interest rate fluctuations.

Second, because the inflation rate was high and variable, the range of expected changes in inflation rates could have been quite

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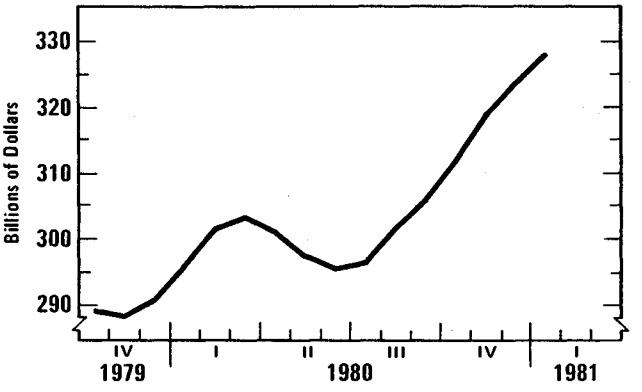
2/ For a discussion of this credit control policy, see Congressional Budget Office, The Economic Outlook at Midyear 1980 (July 1980), pp. 43-44, and Chapter II of this report.

Figure 14.

Commercial and Industrial Loans Extended by Commercial Banks



SOURCE:
Federal Reserve System,
Board of Governors.

wide. Large shifts in expected inflation appear to have been triggered in a relatively short period by increased political and military unrest in the Middle East, and by fluctuations in economic activity and changes in money growth. Fluctuations in anticipated inflation rates were quickly incorporated into interest rates. When inflationary expectations rose, for example, interest rates increased as lenders attempted to protect the real value of their capital and as borrowers expected to repay with increasingly depreciated dollars.

Despite the "new procedure" announcement of October 6, 1979, the Fed apparently did permit variations in the growth of reserves in order to resist even wider interest rate movements during 1980. The Fed set the stage for 1980 by permitting total bank reserve growth of 5.5 percent during 1978-1979. In January-March 1980, when interest rates were moving up, reserves grew at an annual rate of 10.1 percent. During the interest rate collapse of the second quarter, however, bank reserves declined at a 2.7 percent annual rate. In the last half year, reserve growth resumed at an 11.2 percent rate (over 13 percent in July-October). Indeed, with hindsight some observers suggest that the Fed delayed too long in responding to the rapid monetary growth in the second half of 1980, thereby boosting inflationary expectations and interest rates late in the year.

Another cause of the increasing frequency and amplitude of movements in interest rates is the changed structure of U.S. financial institutions. 3/ The removal of many interest rate ceilings, such as limitations on maximum rates paid and charged and the introduction of floating rate deposits, has rendered markets better able to cope with wider swings in interest rates. This has made interest rate fluctuations more likely. In the past, when these restrictions were in force and competitive rates rose above the legal ceilings, markets tended to stop functioning--that is, transactions halted. Thus, 1.3 million housing starts (the 1980 pace) would not have occurred in the 1960s or early 1970s in the face of a 13 percent mortgage interest rate. In those years, most mortgage lenders were prohibited from charging such rates or paying the double-digit time deposit rates necessary to obtain funds. Lending would have halted before interest rates reached double-digit levels, and housing starts would have dropped sharply.

With deregulated interest rates, economic activity is less subject to restraint from the complete absence of financing; rather, it is restrained by the cost of financing. This means that interest rate fluctuations will be greater and adjustments in activity more continuous than when the credit markets were prohibited by regulations from functioning at high interest rates.

Finally, the new operating procedure, which emphasizes steady growth in the supply of money and credit, can result in wide fluctuations in short-term interest rates (the price of money and credit) as a result of unexpected shifts in demand. This may have happened, at least for short periods, in 1980.

The Monetary Targets

Three of the Federal Reserve's monetary targets for 1980, together with the patterns of monetary growth that occurred, are shown in Figure 15. Measured by last-week-in-December values, M1A was at the bottom, M1B was near the mid-point, and M2 was at the top of the target ranges. In evaluating the success of the Fed in hitting its targets, however, average figures for quarters or

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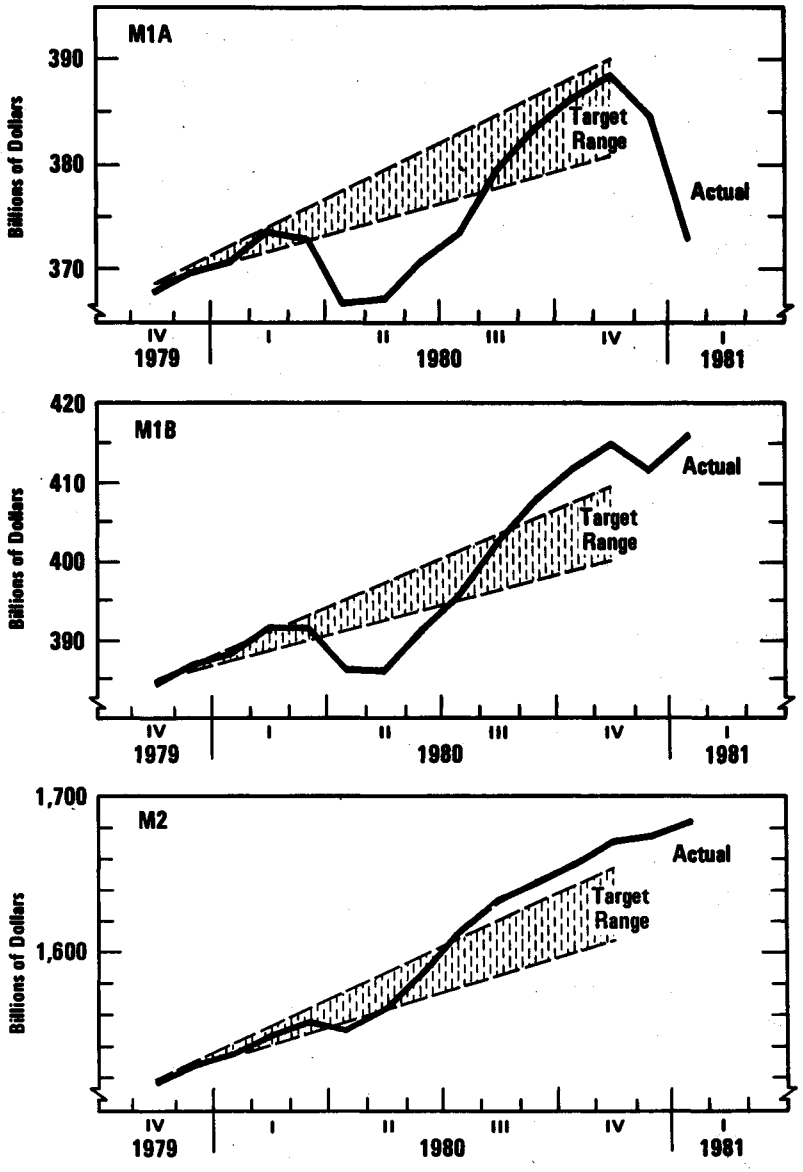
3/ This is emphasized in Economic Report of the President (January 1981), pp. 107-15.

Figure 15.
Money Aggregates: Target Ranges and Actual Levels



NOTE: **M1A** consists of currency plus commercial bank demand deposits held by the nonbank private sector excluding those held by foreign banks and official institutions; target growth for 1980 was 3.5 to 6.0 percent.

M1B consists of M1A plus other checkable deposits at all depository institutions; target growth for 1980 was 4.0 to 6.5 percent.

M2 consists of M1B plus overnight repurchase agreements and Eurodollars, money market mutual fund shares, and savings and small-denomination time deposits at all depository institutions; target growth for 1980 was 6.0 to 9.0 percent.

SOURCE: Federal Reserve System, Board of Governors.

longer periods are more meaningful. 4/ Comparing the average level in the fourth quarter of 1980 with the similar figure for 1979, M1A was within its target range, but both M1B and M2 were above the upper bounds of their targets by 0.8 percentage point.

The Fed has indicated that the overshoot in M1B (currently considered to be the most important of the aggregates for the economy) was due to larger than expected shifts of funds into ATS and NOW account components of M1B from other assets not included in M1B. 5/ This interpretation suggests that the M1B target miss occurred for "technical" reasons and had little real significance.

The experience illustrates the inherent weakness of attempting to hold the Fed accountable for slowing the growth of a measure of money so subject to "technical" distortion. Some of the switches between assets that "artificially" inflate M1B--for example, from demand deposits to NOW accounts--also "artificially" deflate M1A. M2 is unaffected by these shifts because it includes all of these assets, but it also contains forms of money, such as money market mutual funds, that are outside the immediate control of the Federal Reserve.

Given the weakness of M1A, M1B, and M2 as indicators of the Fed's success in carrying out its mandate to slow the rate of money growth gradually, some observers have suggested that the Fed's targets be specified for aggregates more closely controlled by the central bank such as the monetary base or total bank reserves. Others believe that such a change would shift the Fed's focus to variables less directly linked with economic performance.

4/ Weekly values of the monetary aggregates are subject to considerable random influence or statistical "noise." In the first week in January 1981, for example, M1B rose more than $12 billion, or more than the width of the M1B target range for 1980. Presumably, a significant portion of this large change was transient and without economic significance.

5/ ATS accounts permit automatic transfers from savings deposits to demand deposits to cover checks drawn on the demand accounts. NOW accounts are those on which interest and dividends are paid and from which owners can make third-party payments by use of negotiable orders of withdrawal.

The Outlook for Monetary Policy in 1981

For 1981, the Federal Reserve has reduced the growth ranges for M1A and M1B by 0.5 percentage point. The M2 target is unchanged from 1980. Thus, the target ranges will be 3.0 to 5.5 for M1A, 3.5 to 6.0 for M1B, and 6.0 to 9.0 for M2 measured from the fourth quarter of 1980 to the fourth quarter of 1981. Serious "technical" factors will again mar the meaningfulness of M1 growth in 1981. Effective December 31, 1980, all depository institutions in the United States were authorized to issue NOW accounts. (NOW accounts were formerly restricted to New England.) These accounts, included in M1B, will attract funds from commercial bank demand deposits (M1A) and from savings deposits (M2). The extent of these deposit switches and the degree to which they will inflate M1B and deflate M1A is unknown. The Fed argues that such switches are without economic significance and that the M1B target should be raised to fully accommodate these switches. That is, if deposit shifts are expected to add 2.5 percent to M1B growth, then the upper end of the M1B target range should be 8.5 percent (the unadjusted target of 6 percent plus the 2.5 percent due to "technical" factors).

Nonetheless, the Fed has made it clear that such adjustments in the targets to allow for account shifting do not constitute a departure from its anti-inflation policy. Speaking to the Senate Banking Committee in January 1981, Chairman Volcker said:

> . . . so long as inflationary forces are so strong and are expected to remain strong, money and credit targets . . . are likely to imply strong pressures on credit markets whenever business is strongly expanding, calling into question the sustainability of the advance.

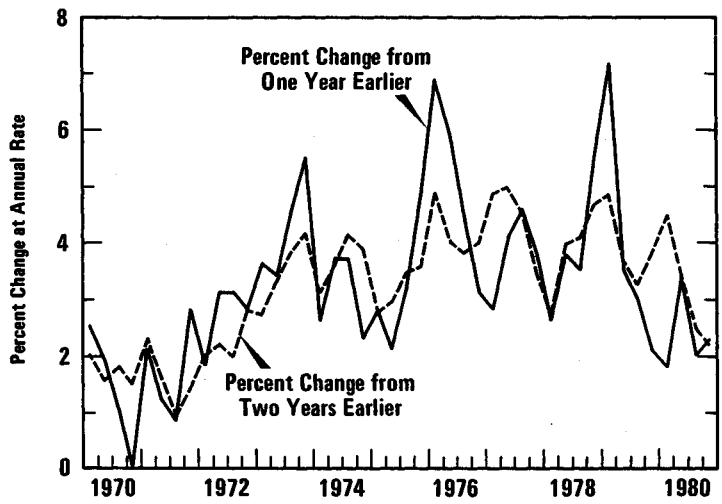
The thrust of the Federal Reserve policy over the next year or so may be expressed quantitatively in terms of money growth, money velocity (how fast money is turned over) and expected growth in nominal GNP. The rate of growth in money plus the rate of growth in velocity is approximately equal to the rate of growth in real output plus the inflation rate (nominal GNP).

For 1981, the Fed target for M1B is 3.5 to 6.0 percent (ignoring the expansion caused by deposit switching). During 1970-1980, the average four-quarter rate of growth in M1B velocity was 3.2

percent. If the Fed hits the upper end of the M1B target range, and if velocity increases at its 1970s' four-quarter average pace, nominal GNP will grow 9.2 percent (6.0 plus 3.2) in 1981. Faster nominal GNP growth might occur for, say, a one-year period but high growth is not likely for a long period. The maximum velocity increase over a two-year period in the 1970s was at a 5.0 percent annual rate (see Figure 16). Thus, an average two-year maximum money target of 5.75 percent per year (6.0 in 1981 and 5.5 in 1982) and peak velocity growth of 5.0 percent would be consistent with nominal GNP growth of 10.75 percent per year.

Thus, historical experience suggests that the Fed is intent on providing monetary growth consistent with a maximum nominal GNP growth of about 10 percent per year over the next two years. If inflation continues at 10 percent, real GNP growth will be close to zero. Thus, assuming the Fed achieves its monetary targets, significant and sustained real growth is unlikely unless there is a commensurate decline in the inflation rate.

Figure 16.
Behavior of M1B Velocity



SOURCE:
Federal Reserve System, Board of Governors.

FISCAL POLICY

The budget deficit increased sharply during fiscal year 1980, largely because of the decline in economic activity, to $59.6 billion--more than double the fiscal year 1979 deficit (see Table 13). Growth in receipts slowed to 11.6 percent (from 15.9 percent in fiscal 1979), reflecting the weakness of the economy and the

TABLE 13. ACTUAL AND PROJECTED BUDGET TOTALS WITH CURRENT POLICY ASSUMPTIONS, FISCAL YEARS 1979-1982 (In billions of dollars, on a unified budget basis)

			1981		1982
	1979 Actual	1980 Actual	Second Budget Resolution	CBO Current Policy Estimate a/	CBO Current Policy Estimate a/
Revenues	465.9	520.0	605.0	599.1	670.0
Outlays	493.7	579.6	632.4	660.3	743.0
Percent change	9.5	17.4	9.1	13.9	12.5
Surplus or Deficit (-)	-27.7	-59.6	-27.4	-61.2	-73.0

a/ Current policy estimates assume a 10 percent reduction in personal income tax rates in July 1981, corporate income tax depreciation changes equivalent to those contained in the Senate Finance Committee bill (H.R. 5829), and a continuation of current spending programs adjusted for inflation.

delayed impact of the 1978 tax law changes on net personal income tax collections. Outlays increased by 17.4 percent, largely in response to higher inflation, unemployment, and interest rates.

Current Policy

In the Second Concurrent Resolution on the Budget for Fiscal Year 1981, the Congress adopted targets of $632.4 billion for outlays and $605.0 billion for revenues, with a resulting $27.4 billion deficit. The resolution allowed for a net tax reduction amounting to $10.1 billion in fiscal year 1981.

Based on the Congressional Budget Office (CBO) current policy economic forecast (contained in Chapter IV) and the budget policies of the Second Concurrent Resolution for Fiscal Year 1981, CBO estimates that the deficit would be $61.2 billion in fiscal year 1981 and $73.0 billion in fiscal year 1982. Outlays would increase by $80.7 billion (13.9 percent) in fiscal year 1981 and by $82.7 billion (12.5 percent) in fiscal year 1982. This projected growth in spending primarily reflects large increases in defense purchases and interest payments, and substantial cost-of-living adjustments for Social Security beneficiaries.

The second resolution for fiscal year 1981 was not specific about the composition of the tax cuts it contained. CBO's current policy revenue projections assume that marginal personal income tax rates will be lowered by 10 percent, effective in July 1981, and that depreciation periods for business capital investment will be shortened, retroactively to January 1981. 6/ Despite these tax cuts, total receipts would rise by $79.1 billion in fiscal 1981, and by $70.9 billion in fiscal 1982, under current policy assumptions. 7/

In regard to economic impact, discretionary changes in the current policy budget would be restrictive during 1981, and slightly stimulative in fiscal year 1982 because of the tax cut. But

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6/ These tax policy measures are estimated to reduce budget receipts by $9.1 billion in fiscal year 1981 ($6.6 billion for individuals and $2.5 billion for corporations), and by $44.9 billion in fiscal year 1982 ($34.7 billion for individuals and $10.2 billion for corporations).

7/ The windfall profits tax would generate a total of $61.9 billion in revenues during these two fiscal years. The January 1981 increases in Social Security tax rates (from 12.26 percent to 13.30 percent) and in the maximum taxable earnings base (from $25,900 to $29,700) together are estimated to add $10.8 billion to receipts in fiscal year 1981, and $19.6 billion in fiscal year 1982. The maximum taxable earnings base will be raised again on January 1, 1982, according to a formula relating it to past increases in average weekly earnings. Also, the combined employer-employee tax rate is legislated to increase slightly.

considering the combined economic effect of automatic stabilizers as well as discretionary changes in federal spending and taxes, a current policy budget would probably be stimulative in both years.

The Reagan Administration Budget Proposals

In his February 18 message to Congress, the President proposed a dramatic change in economic policies designed to slow inflation and encourage growth in productive capacity. His budgetary proposals would shift priorities from nondefense to defense spending and from federal to private-sector allocation of resources. The size of the federal sector would be reduced by sharply reducing the growth of federal spending and by cutting federal taxes for individuals and businesses. The Administration also would reduce the growth of federal credit programs. In comparison to the current policy budget, the budget proposed by the President would have a moderately restrictive effect on aggregate demand during this year and next. The tax cuts proposed by the Administration are only slightly larger than the current policy tax cuts for 1982, and they are accompanied by a large spending reduction not included in current policy.

According to the Administration's March 10 budget document, its budget program would result in deficits of $54.9 billion in fiscal year 1981 and $45.0 billion in fiscal year 1982 (see Table 14). A balanced budget is projected for 1984.

TABLE 14. PRESIDENT REAGAN'S PROPOSED BUDGET, FISCAL YEARS 1981-1984 (In billions of dollars)

	1981	1982	1983	1984
Revenues	600.3	650.3	709.2	770.7
Outlays	655.2	695.3	732.0	770.2
Percent change	13.0	6.1	5.3	5.2
Surplus or Deficit (-)	-54.9	-45.0	-22.8	0.5

SOURCE: Fiscal Year 1982 Budget Revisions, March 10, 1981.

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The Administration's budget shows a sharp reduction in the growth of spending to 6.1 percent in fiscal year 1982, approximately half the projected growth rate of current policy spending for that period. In comparison, actual spending rose at an average annual rate of 13.4 percent between fiscal years 1978 and 1980.

The tax cuts proposed by the Administration are larger than its proposed spending reductions, and would channel about 80 percent of the tax savings to individuals during the fiscal year 1982-1984 period. Personal income tax rates would be lowered by 10 percent per year over the next three years. The first cut would be made effective July 1, 1981. According to Administration estimates, this action would reduce receipts by $6.4 billion in fiscal year 1981 and by $44.2 billion in fiscal year 1982. The across-the-board reduction in marginal tax rates, which would provide larger average tax savings for high-income taxpayers, is designed to encourage savings and investment. The proportion of total taxes paid by different income groups would not be significantly altered, although the after-tax incomes of high-income taxpayers would be raised by a greater proportion.

For businesses, tax reductions would be realized through faster depreciation write-offs for business equipment and structures. The Accelerated Cost Recovery System would establish five classes of investment with different depreciation periods and schedules. 8/ Equipment would be depreciated at an accelerated rate in either three years (autos, light trucks, and machinery and equipment used in research and development activities) or five years (other types of machinery and equipment). 9/ Certain classes of structures, such as factory buildings, retail stores, and warehouses used by their owners, would qualify for accelerated depreciation over a 10-year period. Nonresidential structures not included in the 10-year class and low-income rental housing would be assigned a 15-year straight-line depreciation schedule. Other residential structures for rental, such as apartment buildings,

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8/ In large part, the Administration's proposal resembles the "10-5-3" depreciation system set forth in the Capital Cost Recovery Act of 1979.

9/ A 6 percent investment tax credit could be claimed for assets in the three-year class.

would be depreciated on a straight-line basis over an 18-year period. The Administration estimates that these faster depreciation provisions would reduce business taxes by $2.5 billion in fiscal year 1981 and by $9.7 billion in fiscal year 1982. 10/

CBO Estimates With Administration Policies

Attainment of a balanced budget by 1984 depends to a large extent on the performance of the economy. Inflation, unemployment, and the level of nominal income have major effects on federal revenues and outlays.

CBO has estimated the economic effects of the Administration's policies in the light of historical experience. CBO's analysis of the economic impact of the Administration's budget proposals is contained in Chapter V. It suggests the probability of lower real economic growth and higher inflation over the 1982-1986 period than assumed by the Administration.

All estimates of the economic effects of alternative budget policies are subject to a large margin of error, and the range of error can be wider than the differences between the economic projections of the Administration and CBO. Nevertheless, the budget implications of these different projections are important. The more pessimistic CBO projection implies sizable additional spending for indexed benefit payments, unemployment compensation, and net interest costs, which would add over $13 billion to 1982 budget outlays and over $35 billion by 1984 (see Table 15). For revenues, the differences between the projections of CBO and the Administration are slight. CBO's projection of lower real growth through 1984 is offset by higher inflation, so that the projections of nominal incomes are very close.

In addition to the differences in economic assumptions discussed above, CBO in a number of instances makes different programmatic assumptions, and uses different spending rates, from those

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10/ The provisions for the 5-, 10-, and 15-year classes would be phased in over five years. This phase-in reduces short-term revenue costs, but may result in the postponement of some investment as businesses wait for larger tax benefits.

of the Administration. CBO bases its assumed spending patterns on analyses of historical outlay trends and careful monitoring of actual outlays as they are reported monthly by the Treasury Department. Similarly, CBO's programmatic assumptions are based on its own analyses of trends in the growth of benefit populations and the utilization of federal benefits, and on other factors. As shown in Table 15, the use of these different spending rate and programmatic

TABLE 15. CBO BUDGET OUTLAY REESTIMATES OF ADMINISTRATION SPENDING PROPOSALS BASED ON ALTERNATIVE ECONOMIC ASSUMPTIONS AND OTHER FACTORS (By fiscal year, in billions of dollars)

	1981	1982	1983	1984
Alternative Economic Assumptions				
Net interest	1.2	8.1	13.3	12.5
Social Security and other indexed benefit payments	0.2	0.9	3.0	9.3
Medicare and Medicaid	---	0.1	0.7	1.6
Defense fuel costs	0.3	1.4	2.4	3.4
Unemployment compensation	-0.7	1.9	4.6	6.0
Other programs	0.2	1.1	2.4	2.8
Subtotal	1.1	13.5	26.3	35.6
Alternative Programmatic Assumptions, Spending Rates, and Other Factors				
Defense programs	0.5	5.1	2.1	7.3
Farm price supports	1.6	.8	1.0	0.7
Social Security and other income security programs	-0.1	1.8	2.6	2.7
OCS rents and royalties a/	0.9	-0.3	-1.5	-2.9
Other programs	2.5	5.3	3.5	4.2
Subtotal	5.3	12.8	7.6	12.0
Total Reestimates	6.5	26.3	33.9	47.6

a/ OCS: Outer Continental Shelf.

SOURCE: Congressional Budget Office.

assumptions result in rather sizable reestimates of the Adminstration's projected outlays. 11/

The combined effects of CBO's outlay and revenue reestimates would add $8 billion to the Administration's projected budget deficit for fiscal year 1981 and $22 billion to the 1982 deficit. The estimated 1982 deficit that would result from the Administration's fiscal policies is similar to the deficit projected by CBO under a continuation of current policies ($67 billion for the Administration's budget compared to CBO's current policy estimate of $73 billion). CBO's repricing of the Administration's budget projections for 1984 using CBO's alternative economic assumptions and estimating methods result in a projected budget deficit of almost $50 billion in 1984 instead of a small surplus (see Table 16).

TABLE 16. CBO ESTIMATES OF BUDGET TOTALS BASED ON ADMINISTRATION TAX AND SPENDING PROPOSALS (By fiscal year, in billions of dollars)

	1981	1982	1983	1984
Revenues				
Administration	600	650	709	771
CBO	599	654	707	769
Outlays				
Administration	655	695	732	770
CBO	662	721	766	818
Surplus or Deficit (-)				
Administration	-55	-45	-23	1
CBO	-63	-67	-59	-49

11/ For a detailed discussion of the Administration's budget see Congressional Budget Office, An Analysis of President Reagan's Budget Revisions for Fiscal Year 1982, Staff Working Paper (March 1981).

CHAPTER IV. THE OUTLOOK THROUGH 1982 WITH CURRENT BUDGET POLICIES

The CBO current policy forecast shows real activity remaining relatively weak and inflation remaining quite high in 1981. Economic growth is expected to accelerate in 1982, but not as rapidly as the typical postwar recovery. A major reason for the relatively weak growth during this period is the substantial momentum of inflation in combination with the policy of the Federal Reserve to curtail the growth of the money supply.

This chapter presents the CBO economic forecast based upon the budget policies of the Second Concurrent Resolution on the Budget for Fiscal Year 1981. The impact of alternative tax and spending policies on the economy are discussed in Chapter V.

POLICY ASSUMPTIONS OF THE FORECAST

Economic forecasts are significantly affected by assumptions about fiscal and monetary policies. The policies assumed in the CBO forecast are as follows:

- Total federal government spending is $660 billion in fiscal year 1981 on a unified budget basis and $743 billion in fiscal year 1982.

- The second budget resolution for 1981 incorporated an unspecified tax cut. That tax cut is assumed to be a 10 percent reduction in personal income taxes beginning in July 1981 and a business tax reduction based on the Senate Finance Committee's proposed "2-4-7-10" accelerated depreciation, effective retroactively to January.

- The growth in money aggregates over the next two years is somewhat above the upper end of the Federal Reserve's announced target ranges.

In addition, the forecast incorporates the following assumptions about food and fuel prices:

- Consumer food prices increase by 12.3 percent in calendar year 1981 and by 11.7 percent in 1982; and

- The international price of oil continues rising--up 28 percent from the end of 1980 to the end of 1982.

THE OUTLOOK

The CBO current policy forecast is presented in Table 17. Its major features are:

- Growth in constant-dollar GNP is projected to rise in the 0.8 to 2.8 percent range from the fourth quarter of 1980 to the fourth quarter of 1981. Real growth is forecast to accelerate somewhat in 1982--rising by 1.8 to 3.8 percent.

- Inflation, as measured by the implicit price deflator for GNP, is forecast to remain quite high over the next two years. Prices are forecast to rise by 9 to 11 percent during 1981 and by 8 to 10 percent during 1982.

- The unemployment rate is likely to rise somewhat in 1981, to a range of 7.3 to 8.3 percent by the fourth quarter and then to decline slightly the next year to a range of 7.1 to 8.1 percent.

The CBO forecast expects weak economic activity this spring for many of the same reasons that the economy weakened last year. At the turn of the year, interest rates had reached new record high levels as credit demand revived with the economy, inflation remained stubbornly high, and the Federal Reserve struggled to restrain money-supply growth. Very high borrowing costs are expected to slow the economic expansion--especially by curtailing residential construction, intended inventory accumulation, business investment in new plant and equipment, state and local government capital spending, and some consumption outlays, notably for big-ticket items like appliances and automobiles. The recent decline in interest rates reflects reduced demand for credit and, along with early evidence on weaker housing starts and nondefense capital goods orders, does suggest economic growth is slowing.

In addition, the recent growth of personal income, after adjustment for inflation, has not been keeping pace with consumption spending--causing the saving rate to fall to 3.9 percent in

TABLE 17. ECONOMIC PROJECTIONS FOR CALENDAR YEARS 1981 AND 1982, BASED ON POLICIES CONSISTENT WITH THE SECOND BUDGET RESOLUTION FOR FISCAL YEAR 1981

	Levels			Rate of Change (percent)		
Economic Variable	1980:4 (actual)	1981:4	1982:4	1979:4 to 1980:4 (actual)	1980:4 to 1981:4	1981:4 to 1982:4
GNP (billions of current dollars)	2,730.6	3,004 to 3,113	3,304 to 3,549	9.4	10.0 to 14.0	10.0 to 14.0
Real GNP (billions of 1972 dollars)	1,485.6	1,498 to 1,527	1,525 to 1,585	-0.3	0.8 to 2.8	1.8 to 3.8
GNP Implicit Price Deflator (1972=100)	184	200 to 204	216 to 224	9.8	9.0 to 11.0	8.0 to 10.0
Consumer Price Index (1967=100)	257	282 to 287	306 to 317	12.5	9.7 to 11.7	8.6 to 10.6
Unemployment Rate (percent)	7.5	7.3 to 8.3	7.1 to 8.1	--	--	--

February 1981 from the 6.2 percent reached in the second quarter of 1980. That low rate and the decline in consumer confidence about the future suggest some retrenchment in personal consumption spending--especially once the automobile price rebate programs end.

Finally, many of the U.S. trading partners expect to experience slow growth--or recession--this year. As a result, export demand will likely suffer.

The projected weakness in the economy would slow the growth of private-sector credit demands, allowing interest rates to move down somewhat. This easing of financial markets, together with the assumed tax cut in July, will help set the stage for some rebound in real growth later in the year. In addition, the assumed increase in depreciation allowances is expected to boost business fixed investment. But the overall growth rate, both in late 1981 and in 1982, is expected to be modest. In large part, the problem is that inflation is forecast to remain stubbornly high; thus, with the revival of real economic activity and credit demands, interest rates would also rise and would work to curtail the growth in output.

The Persistence of Inflation and Monetary Policy

The persistence of high inflation, even during periods of slack labor and product markets, is the keystone of the current-policy forecast. The Federal Reserve is assumed to keep credit markets relatively tight in the effort to bring the inflation rate down. But the restrictive monetary policy is not forecast to achieve quick results. Postwar experience indicates that, in such circumstances, inflation comes down slowly.

The momentum of inflation is rooted in part in the assumed increases in food and energy prices, spelled out above. Other reasons for it include:

- Wage increases are projected to remain high as workers, especially in large and/or unionized firms, catch up to past increases in inflation.

- Legislated increases in payroll taxes and the minimum wage have added an estimated 0.8 percentage point to labor cost growth in 1981 and will add a small amount in 1982.

- Productivity growth is forecast to be below the postwar trend. To the extent that real wage demands remain keyed to the longer-term rate of productivity improvement, costs and prices are pushed up.

- Business profit margins, which have been very depressed recently, are projected to begin rising again late this year and continue to increase in 1982.

- The forecast does not include a typical inventory cycle; thus, the weakness is likely to result in less retail price cutting.

Risks to the Forecast

There are a number of plausible events that would change the short-term outlook substantially. Perhaps most important is the possibility that commodity prices--for food, oil, and the like--could be sharply different than assumed in the CBO current policy forecast. World commodity prices can be extremely volatile, as was demonstrated by the roughly 100 percent rise in OPEC oil prices in 1979--the reverberations from which continue to be felt. That volatility makes these prices, and consequently inflation in general, exceptionally difficult to forecast with accuracy. Indeed, a reasonable case can be made both for higher and for lower commodity prices than are assumed in the forecast.

Higher Commodity Prices. While upward price pressure could come from a variety of sources, the greatest risk comes from energy and food. If international oil prices increase more than assumed in the forecast, the most likely cause would be some supply restrictions. One such scenario has Saudi Arabia cutting back its own oil production in line with, or ahead of, increased production from Iran and Iraq. In addition, if economic growth in Europe in 1981 reaches 2 percent, instead of the 1/4 percent forecast by the Organisation for Economic Co-operation and Development (OECD), then price increases--perhaps in the neighborhood of 20 percent--could result.

There could also be larger increases in food prices than assumed in the current policy forecast. World feed grain stocks are low after the poor 1980 harvest. If the 1981-1982 crop year also results in relatively poor production, then increases in world grain prices could be very large.

Lower Commodity Prices. Although recent experience suggests that higher commodity prices are more likely than lower prices, the possibility that commodity prices may rise by less than assumed in the current policy forecast certainly cannot be ruled out. Given a glut in world oil markets, together with exceptional harvests, an optimistic scenario might show food and fuel prices rising little, if any, in the forecast period. Such a combination of fortuitous events occurred in 1976, helping to slow the rate of inflation significantly from 1975.

The Economic Impact of the Alternative Assumptions. Since world commodity prices cannot be forecast with accuracy, it is useful for policymakers to have some feel for the impact of sharp changes in commodity prices on the economic outlook. A CBO estimate of the impact on the economy of the more optimistic assumptions for food and fuel prices is summarized in Table 18.

TABLE 18. ESTIMATED IMPACT OF LOWER FOOD AND FUEL PRICES ON THE ECONOMY a/

	1982:4
Real GNP (billions of 1972 dollars)	18.0
GNP Implicit Price Deflator (percent)	-1.7
Unemployment Rate (percentage points)	-0.4

NOTE: Average results from simulations on three econometric models: Chase Econometrics, Data Resources, Inc., and Wharton Econometric Forecasting Associates.

a/ Retail food prices are assumed to be unchanged over the forecast period; world oil prices are assumed to rise at less than a 5 percent annual rate.

As shown, the optimistic scenario results not only in significantly lower prices but also in higher economic growth and reduced unemployment. This beneficial impact on the economy occurs mainly through increased purchasing power, lower interest rates, and greater efficiency in the allocation of resources.

Unfavorable price shocks would have the opposite effects. The relative impacts of the pessimistic assumptions might be roughly symmetrical to those in Table 18.

CHAPTER V. ANALYSIS OF TWO FISCAL POLICY OPTIONS

This chapter analyzes two fiscal policy options. 1/ The first is the fiscal policy proposed by the Administration on February 18, 1981. In broad outline, it contains:

- A sharp increase in defense spending, which boosts the average annual growth of defense spending in real terms to nearly 9.0 percent over the 1980 to 1986 period;
- A large reduction in nondefense spending, building from $48 billion in fiscal year 1982 to $138 billion in 1984, relative to the spending proposals in the January 1981 budget of the Carter Administration;
- Three 10 percent reductions in individual income tax rates effective July 1981, July 1982, and July 1983; and
- Much faster depreciation of business capital for income tax purposes.

The second fiscal policy option is a scaled-down version of the first. It proposes:

- Slightly lower growth in defense spending than proposed by the Administration;
- Smaller nondefense spending cuts (about 70 percent of the first package);
- The same size individual income tax cuts, but phased in over a longer period; and
- A smaller depreciation reform.

The Congressional Budget Office has estimated how the economy would respond to these policies in comparison with a baseline

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1/ The Senate Budget Committee requested the analysis of these two fiscal policy options.

forecast assuming the continuation of current policies (described in Chapter IV). Estimates of this sort are always difficult to make. The course of the economy, even without policy changes, cannot be predicted with a high degree of reliability, and the effects of policy changes are subject to even more uncertainty. Forecasting the effect of these changes is particularly difficult for at least two reasons:

- The unusual economic conditions at this time--a sustained high level of inflation together with high unemployment, relatively low capacity utilization, and record high interest rates--have raised some questions about using historical experience as a guide to the future; and

- The policy changes under consideration, particularly the multiyear cut in personal income taxes, are unusually large.

Hence, the estimates presented below are subject to a large margin of error. An initial estimate of the effect of each policy option is made here--based on historical experience--followed by a discussion of factors that might alter those estimates.

ANALYSIS OF THE TWO FISCAL POLICY OPTIONS

The systematic analysis of the economic effects of alternative fiscal policies requires a model of how the economy works. 2/ The outcome of such an analysis depends on four factors: the nature of the model; the degree to which it corresponds to the actual behavior of the economy; an estimate of how the economy would behave absent the policy change--the baseline economic projection; and the specification of the policy change--its size, timing, and other significant characteristics.

2/ The model used does not have to be empirical in nature (where the various responses by households, firms, and governments to economic change are quantified on the basis of previous experience and/or surveys of intentions). It can, instead, be wholly abstract. Since economic theory tends to say more about the direction of a response than its size, however, abstract models typically cannot provide specific forecasts of the economy under alternative fiscal policies. For that, an empirical model is needed.

The CBO Five-Year Projection

The baseline economic path used in the analysis of the two fiscal policy options is the CBO five-year economic projection. For 1981 and 1982, that projection is CBO's current policy forecast of economic activity--which assumes the continuation of the tax and spending policies of the Second Concurrent Resolution on the Budget for Fiscal Year 1981. This two-year forecast is presented in detail in Chapter IV.

For 1983 through 1986, the CBO projection assumes a moderate growth of real nonfederal spending and productive capacity, which on the basis of postwar experience implies tax cuts sufficient to prevent a rise in effective tax rates resulting from the interaction of the progressive tax system and rising nominal incomes. The additional and unspecified tax reductions in the baseline projection total about $30 billion in 1983, rising to roughly $110 billion by 1986 (see Table 19). Without these further tax adjustments, the rising tax burden would probably slow economic activity substantially.

TABLE 19. TAX REDUCTIONS IMPLICIT IN THE CBO FIVE-YEAR PROJECTION (By calendar year, in billions of dollars, on an NIA basis)

	1981	1982	1983	1984	1985	1986
Specified Tax Cuts	-20	-47	-55	-64	-74	-85
Unspecified Tax Cuts	0	0	-30	-50	-80	-110
Total	-20	-47	-85	-114	-154	-195

Specification of the Administration Policy Option

The estimates of the year-by-year direct budget costs (National Income Accounts basis) of the Administration's policy proposal used in the CBO analysis are presented in Table 20. The total reduction in nondefense spending amounts to $46 billion

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TABLE 20. CHANGES IN SPENDING AND REVENUES UNDERLYING THE FIRST POLICY OPTION (By calendar year, in billions of dollars, on an NIA basis)

	1981	1982	1983	1984	1985	1986
Expenditure Changes						
Nondefense	-9	-46	-76	-96	-105	-109
Defense	2	6	18	25	48	57
Total	-7	-40	-58	-71	-57	-52
Revenue Changes						
Roth-Kemp Tax Cut	-15	-49	-93	-130	-153	-179
10-5-3 Allowances	-6	-15	-25	-35	-47	-57
Total	-21	-64	-118	-165	-200	-236

in calendar year 1982, increasing to nearly $100 billion by calendar year 1984, as compared to spending under current law. The increase in defense spending builds from $6 billion in 1982 to $25 billion in 1984.

The estimated static revenue losses from the personal income tax cut and from the increase in depreciation allowances are also shown in Table 20. 3/ These estimates are relative to a baseline without tax cuts.

Estimates of the Economic Impact of the Administration's Budget Proposals--Based on Historical Experience

Economists have developed several large-scale econometric models based on the history of the U.S. economy since World War

3/ Static revenue estimates include no feedback effects on revenues from the economic impact of the changes.

II. These models can be used to answer the question: What does past experience tell us about the likely effect of a given policy change? Since the models differ in structure, they tend to give somewhat different answers. CBO has developed techniques for averaging their results. 4/

The CBO projection incorporating the Administration's budget policies (referred to as the CBO alternative) indicates that the effects of the Administration's proposed budget changes on gross national product, inflation, unemployment, and interest rates would not be greatly different from the CBO five-year baseline projection (see Table 21). This is because the net effects of the fiscal policies in each are similar. The CBO five-year projection has assumed tax cuts that are smaller than those specified in the Administration's proposals, but the Administration assumes net spending cuts not present in the CBO projection.

Relative to a baseline with no tax cuts, the Administration's proposals would significantly increase real economic growth and lower the unemployment rate while causing some upward push on inflation in the out-years. The delayed inflationary impact of the personal income tax cut would be curtailed by spending cuts and by the increases in productive capacity in later years resulting largely from the cuts in business taxes.

Specification and Estimation of the Second Option

The second fiscal policy option to be examined assumes substantially smaller nondefense spending cuts (about 70 percent as large as those proposed by the Administration) and defense increases that are about three-fourths as large as those in the Administration program. In addition, the second package assumes the same personal income tax cuts as the Administration proposal, but phased in over a longer period, and a smaller adjustment in depreciation allowances (see Table 22).

The effects of the second fiscal policy option, relative to the CBO five-year projection, are smaller, although they show a

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4/ See Congressional Budget Office, The Multipliers Project: A Methodology for Analyzing the Effects of Alternative Economic Policies (August 1977).

TABLE 21. ESTIMATES OF THE EFFECTS OF THE ADMINISTRATION'S BUDGET CHANGES COMPARED WITH THE CBO FIVE-YEAR PROJECTION (By calendar year)

	1981	1982	1983	1984	1985	1986
GNP (percent change, year over year)						
CBO Alternative a/	11.8	11.9	11.5	11.4	11.7	10.9
CBO Five-Year Projection	11.9	12.3	11.8	11.7	11.2	10.8
Real GNP (percent change, year over year)						
CBO Alternative a/	1.3	2.5	2.7	3.0	3.8	3.7
CBO Five-Year Projection	1.4	2.9	2.9	3.3	3.4	3.5
GNP Deflator (percent change, year over year)						
CBO Alternative a/	10.3	9.2	8.6	8.1	7.5	7.0
CBO Five-Year Projection	10.3	9.2	8.6	8.1	7.6	7.1
CPI (percent change, year over year)						
CBO Alternative a/	11.3	9.5	8.9	8.2	7.7	7.1
CBO Five-Year Projection	11.3	9.5	9.0	8.3	7.7	7.2
Unemployment Rate (percent, annual average)						
CBO Alternative a/	7.8	7.9	7.8	7.7	7.5	7.2
CBO Five-Year Projection	7.7	7.6	7.5	7.4	7.2	7.0
Three-Month Treasury Bills (percent, annual average)						
CBO Alternative a/	12.6	13.7	11.5	10.2	9.7	9.3
CBO Five-Year Projection	12.7	13.8	11.6	10.3	9.8	9.6

NOTE: The CBO current policy forecast in Chapter IV reflects the recently revised GNP data for 1980. These revisions have not been incorporated here.

a/ The CBO alternative projection was derived by removing from the current-policy baseline all tax changes not already legislated, and then incorporating the effects of the fiscal policy changes proposed by the Administration.

TABLE 22. CHANGES IN SPENDING AND REVENUES UNDERLYING THE SECOND POLICY OPTION (By calendar year, in billions of dollars, on an NIA basis)

	1981	1982	1983	1984	1985	1986
Expenditure Changes						
Nondefense	0	-35	-51	-63	-72	-74
Defense	0	4	9	17	33	52
Total	0	-31	-42	-46	-39	-22
Revenue Changes						
Modified Roth-Kemp	-10	-37	-69	-113	-152	-180
Smaller Depreciation Plan	-5	-14	-15	-16	-17	-18
Total	-15	-51	-84	-129	-169	-198

roughly similar pattern (see Table 23). The major difference is that the second option is less inflationary, and the growth in real GNP is less than in the first policy option.

ADMINISTRATION AND CBO PROJECTIONS COMPARED

The CBO alternative--that is, the CBO projection incorporating the Administration's budget policies--is compared with the Administration's own projection in Table 24. There are only minor differences in 1981. Both foresee lackluster real growth and continued high inflation. Between 1982 and 1986, the differences become more substantial. The CBO alternative has weaker growth in the near term but approaches the Administration's growth rates in the out-years when the effects of the tax cuts outweigh the effects of the spending cuts. Inflation and interest rates come down more slowly in the CBO estimates. In the CBO alternative, real GNP growth averages 1 percentage point a year below the Administration's estimates, inflation (as measured by the GNP deflator) 1-1/2 percent a year higher, and the Treasury bill rate more than 3 percentage points higher.

TABLE 23. ESTIMATES OF THE EFFECTS OF THE SECOND FISCAL POLICY OPTION COMPARED WITH THE CBO FIVE-YEAR PROJECTION (By calendar year)

	1981	1982	1983	1984	1985	1986
GNP (percent change, year over year)						
Second Option	11.7	11.1	10.7	11.6	11.3	11.0
CBO Five-Year Projection	11.9	12.3	11.8	11.7	11.2	10.8
Real GNP (percent change, year over year)						
Second Option	1.2	1.8	2.0	3.4	3.8	4.2
CBO Five-Year Projection	1.4	2.9	2.9	3.3	3.4	3.5
GNP Deflator (percent change, year over year)						
Second Option	10.3	9.1	8.5	7.9	7.3	6.5
CBO Five-Year Projection	10.3	9.2	8.6	8.1	7.6	7.1
CPI (percent change, year over year)						
Second Option	11.3	9.5	8.8	8.0	7.4	6.5
CBO Five-Year Projection	11.3	9.5	9.0	8.3	7.7	7.2
Unemployment Rate (percent, annual average)						
Second Option	7.8	7.9	8.1	8.0	7.8	7.4
CBO Five-Year Projection	7.7	7.6	7.5	7.4	7.2	7.0
Three-Month Treasury Bills (percent, annual average)						
Second Option	12.6	13.5	11.0	9.8	9.2	8.7
CBO Five-Year Projection	12.7	13.8	11.6	10.3	9.8	9.6

NOTE: The CBO current policy forecast in Chapter IV reflects the recently revised GNP data for 1980. These revisions have not been incorporated here.

There are four possible, not mutually exclusive, explanations of why the CBO estimates derived from historical experience differ from the Administration's projection of the economy under its program:

TABLE 24. COMPARISON OF ADMINISTRATION PROJECTION AND CBO ALTERNATIVE INCORPORATING THE ADMINISTRATION'S BUDGET PROPOSALS (By calendar year)

	1981	1982	1983	1984	1985	1986
GNP (percent change, year over year)						
CBO Alternative a/	11.8	11.9	11.5	11.4	11.7	10.9
Administration	11.1	12.8	12.4	10.8	9.8	9.3
Real GNP (percent change, year over year)						
CBO Alternative a/	1.3	2.5	2.7	3.0	3.8	3.7
Administration	1.1	4.2	5.0	4.5	4.2	4.2
GNP Deflator (percent, change, year over year)						
CBO Alternative a/	10.3	9.2	8.6	8.1	7.5	7.0
Administration	9.9	8.3	7.0	6.0	5.4	4.9
CPI (percent change, year over year) b/						
CBO Alternative a/	11.3	9.5	8.9	8.2	7.7	7.1
Administration	11.1	8.3	6.2	5.5	4.7	4.2
Unemployment Rate (percent, annual average)						
CBO Alternative a/	7.8	7.9	7.8	7.7	7.5	7.2
Administration	7.8	7.2	6.6	6.4	6.0	5.6
Three-Month Treasury Bills (percent, annual average)						
CBO Alternative a/	12.6	13.7	11.5	10.2	9.7	9.3
Administration	11.1	8.9	7.8	7.0	6.0	5.6

NOTE: The CBO current policy forecast in Chapter IV reflects the recently revised GNP data for 1980. These revisions have not been incorporated here.

a/ The CBO alternative projection was derived by removing from the current-policy baseline all tax changes not already legislated, and then incorporating the effects of the fiscal policy changes proposed by the Administration.

b/ The Administration projects the CPI for urban wage earners and clerical workers (CPI-W), whereas CBO projects the CPI for all urban consumers (CPI-U).

- The economic baselines may differ. The Administration has not provided the Congress with its assessment of how the economy would behave absent its proposed fiscal policy changes, but its baseline projection may be more optimistic in its assumptions about world oil prices, weather, international economic relations, and so on, than is the CBO five-year baseline projection.

- The proposed fiscal policy changes, especially the tax reductions, may have a greater impact on total productive capacity than postwar experience suggests.

- The monetary policy assumed in the CBO estimates differs from that of the Administration's scenario. In addition, the latter assumes a quicker impact of tight money on inflation than indicated by previous episodes of restrictive monetary policy.

- The Administration is assuming unspecified, but apparently substantial, changes in government regulations, which could affect prices, resource allocation, and economic growth. The CBO estimates assumed no regulatory change.

The first explanation cannot be assessed until more information about the Administration's baseline is available. All that can be said now is that the differences are potentially quite large. More can be said about the last three possible reasons.

Fiscal Policy Changes and Total Productive Capacity

The Administration's policy could have a more favorable effect on the growth of real output and on inflation than indicated in the CBO alternative. This could happen if the tax cuts have a larger effect on total productive capacity than is suggested by historical experience. 5/ If such an effect occurs, it would come largely

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5/ Econometric models, which reflect economic history, by no means ignore the behavior of productive capacity--the "supply side." Supply is reflected in a number of ways: the supply of financial capital, the supply of physical capital, the supply of materials, and the supply of labor--both in numbers of workers and in their hours worked. Postwar experience indicates that tax changes have the strongest direct impact on

from a sharper increase in labor supply and/or a larger increase in saving and investment than has occurred in the past.

Labor Supply. A personal income tax cut could generate a large increase in labor supply if a substantial portion of the population responded to the increased take-home pay by working more hours. A cut in marginal tax rates, such as proposed in Roth-Kemp, might have this effect. But it is also possible that a number of workers could respond to their higher take-home pay by working less, since fewer hours would be needed to achieve a given level of real income. For many persons, of course, the ability to vary hours on the job is sharply circumscribed by institutional arrangements governing the workweek.

The net effect of these various influences is an empirical question. A CBO review of the literature in this area concluded that a 1 percent rise in disposable real wages might induce a net increase in labor supply of 0.1 to 0.3 percent. 6/ The evidence also indicates that most of the sensitivity of work-leisure choices is concentrated among second earners in households, especially married women.

A stylized exercise using those findings can illustrate the possible impact of the proposed tax cut on labor supply. If it is generously assumed that the average marginal tax rate is 30 percent, three 10 percent cuts would eventually reduce that rate

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5/ (Continued)

supply by changing the cost of investing in plant and equipment. Tax effects on other determinants of total supply--such as labor-force participation and allocative efficiency--have been included in large econometric models, but their estimated size is typically small.

6/ Congressional Budget Office, An Analysis of the Roth-Kemp Tax Cut Proposal (October 1978). In a more recent review of the literature, Don Fullerton concluded that a 0.15 percent net increase in labor supply from a 1 percent rise in the disposable wage was a generous estimate of the overall response. See Don Fullerton, "On the Possibility of an Inverse Relationship Between Tax Rates and Government Revenues," NBER Working Paper No. 467 (April 1980).

by about 8 percentage points. That change in after-tax earnings, combined with the more optimistic estimate of labor-supply elasticity (0.3), implies that the labor supply could grow by an additional two-thirds percentage point per year between 1981 and 1986 as a result of the tax reductions.

Saving and Investment. Another possible supply-side response to decreased marginal personal income tax rates would be an increase in saving and investment. Some empirical studies have found a positive relationship between saving and the after-tax rate of return. One study found a large effect on savings--a 1 percent increase in the return on capital leads to a 0.4 percent increase in saving. 7/ But even with such an optimistic estimate of saving response, and an immediate corresponding increase in fixed (rather than inventory) investment spending, a doubling in the after-tax rate of return would increase the capital stock by less than 1-1/2 percent in the first year. 8/

Three 10 percent tax cuts would not, by themselves, double the after-tax rate of return. Assuming a very generous average marginal rate of 40 percent on income from savings, the tax reductions would reduce that rate by about 11 percentage points. Assuming--again very generously--that current saving equals one-tenth of the capital stock and that all additional saving is channeled into productive investment, the capital stock could increase by roughly an additional one-half of a percentage point a year through 1986.

7/ Michael Boskin, "Taxation, Saving, and the Rate of Interest," Journal of Political Economy, vol. 86 (April 1978). Professor Boskin includes spending on housing and consumer durables in his measure of saving. Other studies have found the impact on saving to be much less than Boskin. See, for example, Philip Howrey and Saul Hymans, "The Measurement and Determination of Loanable Funds Saving," Brookings Papers on Economic Activity (1978:3).

8/ In 1979, given personal saving (flow-of-funds basis) of $121 billion, a 100 percent increase in after-tax return would have increased savings by about $48.4 billion, which was less than 1.5 percent of the capital stock including housing and consumer durables. Congressional Budget Office, The Productivity Problem: Alternatives for Action (January 1981).

Conceivably, that rate of accumulation could be pushed up even higher as a result of the distribution of the personal income tax cuts. More than four-fifths of the tax relief would go to households earning more than the median income. To the extent that high income groups save proportionately more of any added income, the saving response would be greater than the estimates indicate. Moreover, financial capital would be used more efficiently if the tax reductions induced a shift of savings from tax shelters to more productive outlets.

However large the eventual response, capital stock is not likely to increase quickly in response to tax changes. Major fixed capital projects typically require several years to plan, design, finance, and implement. The full impact of tax changes designed to promote capital formation would probably not be felt during the first few years after enactment.

The first few years, of course, are only the beginning. The effects of greater saving and investment are cumulative and become increasingly important in the longer run. If, for example, the stock of business fixed capital were to grow at a rate one percentage point higher than the average of the 1970s (which was about 3.5 percent per year), the increment to the capital stock would be about 45 percent of the existing capital stock--enough to increase labor productivity as much as 10 percent by the year 2000. Such a change would make an important contribution to the improvement of average living standards.

Overall Effect. The effect of lower tax rates on productive capacity and real output could be substantial. Using quite generous assumptions about the ways people respond to tax cuts, the reductions could raise the productive capacity of the economy by about 3 percent in 1986, which means that the average annual growth of real output could increase by about an additional one-half of a percentage point per year through 1986. 9/

Monetary Policy

The Administration's projection is based on the assumption of a steady reduction in money-supply growth during the forecast

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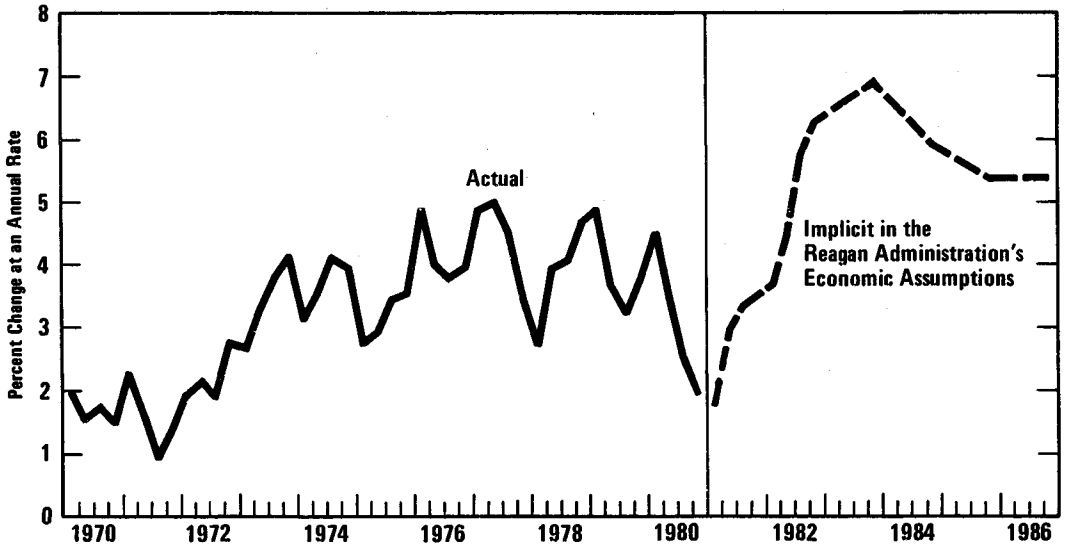
9/ Additional assumptions used to derive this estimate include constant returns to scale, market-clearing factor prices, and a homogeneous labor supply.

Figure 17.

Percent Change in the Velocity of M1B from Two Years Earlier



SOURCES: Federal Reserve System, Board of Governors; U.S. Department of Commerce, Bureau of Economic Analysis; Executive Office of the President, Office of Management and Budget.

period: "To that end, the economic scenario assumes that the growth rates of money and credit are steadily reduced from the 1980 levels to one-half of those levels by 1986." 10/

The monetary policy assumptions raise two major questions. The first concerns consistency. Is the assumption of halving the growth of money consistent with the rest of the Administration's projection, especially the near double-digit growth of nominal GNP through 1986? Second is the question of the impact on inflation and growth. Can the assumed monetary policy slow the momentum of inflation without causing lost production and jobs?

Consistency. Halving the growth of the money supply while increasing the rate of economic growth would require an increase in the rate at which money turns over--that is, its velocity. The two-year annual rate of growth of M1B velocity is shown in Figure 17. The chart is divided into two parts, showing actual performance from 1970 to 1980 and the Administration's assumptions

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10/ A Program for Economic Recovery (February 18, 1981), p. II-23.

from 1981 to 1986. As can be seen, the assumed growth rates in the velocity of money substantially exceed previous experience.

More troublesome, the rapid rise in money velocity is assumed to occur simultaneously with a substantial drop in interest rates. Since velocity growth is a rough measure of the demand for money relative to supply, the assumption is that the price of money--interest rates--will fall while the relative demand for money is strong.

Inflation. An important characteristic of monetary policy assumed in the Administration's projection is that it can induce a substantial slowdown in inflation without causing a reduction in output and employment. Such a favorable outcome would be a sharp break with the past. Inflation, once started, appears to develop substantial momentum. Because of that momentum, previous attempts to reduce inflation with tight money have initially resulted in higher unemployment and decreased output; only later does lower inflation result.

In a review of periods of restrictive monetary policies through the 1969-1970 recession, Milton Friedman concluded that "prices reacted decidedly later than production, and reacted with a lag varying from eleven to thirty-one months." 11/ Professor Friedman was examining the initial reaction of prices; others have estimated that the full impact of tight money on prices occurs with a lag of perhaps 5 to 10 years. The experience of the most recent recessions in 1973-1975 and in 1980 does not suggest that the costs in output and jobs were any smaller than in earlier downturns.

The stubborn momentum of inflation, even when product and labor markets are slack, is an historical fact that has been built into the large econometric models. The momentum of inflation may, however, be the result of widespread expectations that future government policies, most notably monetary policy, will continue to feed inflation. If so, a credible change in monetary policy could change expectations of future inflation, which in turn could reduce the upward bias of wage and price decisions, sharply slowing inflation without sacrificing output and employment.

11/ Milton Friedman, "Have Monetary Policies Failed?" American Economic Review (May 1972), p. 14.

Unfortunately, it is by no means certain that a tight monetary policy--however steadfast and credible--will translate wholly and quickly into reduced inflation. Previous Federal Reserve announcements of restrictive policies--as in the autumn of 1979--have not brought significant immediate reductions in inflation. More important, there may be other reasons for the stubborn momentum of inflation even during periods of slack product and labor markets. Particularly relevant in the 1970s was the ability of some individuals and groups to maintain their customary growth in real income in the face of adverse changes in relative prices--as when the doubling of world oil prices in 1979 was accompanied by an upward adjustment of many other prices and wages.

It must be recognized, however, that the policies proposed by the Administration are a sharp departure from the recent past. No one can be certain whether or not a restrictive monetary policy can reduce inflation more quickly, and with less cost, in this environment than in the past. The Administration's projected inflation rates are certainly possible. If they turn out to be correct, then the prospects for the entire policy package are favorable. But as yet there is little empirical basis for assuming such an outcome. 12/

Regulatory Change

The Administration's economic package includes the promise of substantial changes in the government regulation of prices, resource allocation, environment, health, and safety. Large econometric models typically assume that the regulatory environment remains unchanged. Consequently, the impact of such changes would have to be estimated independently of the models and factored into their projections.

Clearly, the economic impact of regulatory change can be large. CBO estimated, for example, that trucking deregulation could lower the Consumer Price Index by 0.3 to 0.5 percentage

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12/ For a recent review of the evidence, see Robert J. Gordon, "Why Stopping Inflation May Be Costly: Evidence from Fourteen Historical Episodes," National Bureau of Economic Research Conference on Inflation (Washington, D.C., February 27, 1981).

point by 1985. 13/ The recent deregulation of airlines and current steps to deregulate railroads are expected to lower prices by significant amounts. Furthermore, although decontrol of domestic crude oil prices is expected to increase the CPI, this change, like the others just mentioned, will improve resource allocation, increasing the overall productive capacity of the economy.

It is not possible at this time to estimate the impact of the Administration's regulatory changes, since they have not yet been specified. As they are spelled out, their effects should be estimated and the projections adjusted accordingly.

Other Factors Influencing the Estimates

This chapter has enumerated a number of reasons why the outcome of the Administration's economic policies could be more favorable than indicated by postwar experience. On the other hand, there are at least three factors that could make the next five years, even with enactment of the Administration's policies, significantly worse than history suggests.

First, world commodity prices--especially for oil and food--may rise more rapidly than assumed. Poor weather, political unrest in the Middle East, or other adverse events could combine with the sticky adjustment of domestic prices and some accommodation by the Federal Reserve to push inflation significantly higher than projected. The CBO estimates simply assume that there will be no such adverse price "shocks" through 1986--an assumption that caused projections made in the 1970s persistently to underestimate future inflation.

Second, the CBO estimates have made no allowance for a variety of secondary effects resulting from the proposed spending cuts. To the extent that state and local governments would raise taxes to offset lost federal funds, or that persons losing benefits would make claims on welfare entitlement programs, or that exports would be lost as a result of cuts in Export-Import Bank funding, and so on, the budget cuts would have a more negative effect on the

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13/ Congressional Budget Office, Inflation Impact Analysis for S.2245, March 27, 1980.

economic outlook. Moreover, to the extent that the budget cuts would reduce government capital spending, overall capital formation--and consequently the future growth of productivity--could be less than projected by CBO.

Third, the CBO estimates have made no allowance for the possibility that phasing in the 10-5-3 depreciation proposal may initially have an inhibiting effect on investment. Phasing in of accelerated depreciation could result in some postponement of investment as businesses wait for the arrival of larger tax benefits. If this were to happen on a large scale, the short-run benefits would be reduced. Once the program was fully phased in, however, there could be a surge of investment, reflecting purchases that had been previously postponed. 14/

CONCLUSION

Underlying the current problems of the U.S. economy is the fact that productivity growth slowed to a crawl in the 1970s. The first fiscal policy option examined--the one incorporating the Administration's program--attacks the problem of slow productivity growth by attempting to move resources from consumption to investment. It attempts to increase private saving by means of substantial tax reductions for households and speeded-up depreciation write-offs for business. It would limit the rise of public dissaving (deficits) associated with the tax cuts by reducing the growth in federal spending, especially in programs encouraging consumption. To the extent that current marginal tax rates curtail work effort, saving, and investment or distort the efficient allocation of resources, productive capacity would be further enhanced.

Moving resources from current consumption to productive investment will raise productivity growth. But three things should be kept in mind. First, a substantial increase in investment, accumulated over a number of years, is necessary to change the capital stock--or labor productivity--substantially.

Second, the program is not costless. Increased investment means reduced consumption. Some people will be hurt by the

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14/ See Congressional Budget Office, Entering the 1980s: Fiscal Policy Choices (January 1980), pp. 74-80.

cuts in government spending. Others will not gain much from the proposed tax cuts--but would benefit more from alternative types of tax cuts.

Third, the Administration's proposed personal tax cut is a virtually irreversible commitment to large reductions over the next three years. There is a danger that, if it achieves the tax cuts but not the proposed spending cuts, the result could be increased inflation.

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CHAPTER VI. PROFITS AND BUSINESS INVESTMENT

The profitability of American business has been declining. Profits, or the economic return to capital and to business risk-taking, are a major factor determining business investment and willingness to innovate--which in turn are significant determinants of economic growth. In the decade of the 1970s, the (after-tax) economic return on capital was considerably lower and more uncertain than during the earlier postwar period. The decline in profitability was particularly sharp in industries such as autos and steel and in regulated industries, but it was evident in most durable goods manufacturing. By contrast, profitability rose in the energy sector and in American-owned business abroad. 1/

This chapter analyzes long-term trends in the after-tax returns on capital. It discusses the role of capital spending and innovation in productivity growth. Finally, the chapter briefly explores possible ways of stimulating economic growth, including measures that would deal with the structural adjustments occurring in the economy, of which the diverse profit trends and unemployment rates are symptomatic.

LONG-TERM TRENDS IN PROFITABILITY

An investor trying to decide on the best use of his funds is most likely to be guided by the return he can expect after taxes and by the amount of uncertainty involved. He will weigh many considerations, including the demand for the product, the availability and cost of funds, and government regulatory and tax policies. For the researcher, some good indicators of the incentives to invest in different industries are rates of capacity

1/ Inflation has made it especially difficult to determine just what has happened to the return on capital, particularly the after-tax return. There is little agreement among economists as to which measure of return on capital is most appropriate. Not all indicators point to a decline in profitability.

utilization, the returns on existing capital, and the share of profits in national income. 2/

Income Shares and the Return on Capital

Income Shares. For the economy as a whole, economic profits (profits adjusted to reflect the replacement cost of depreciated capital and inventories but excluding capital gains) as a share of national income have tended to decline since World War II, although wide fluctuations are evident (see Figure 18 and Table 25). The profit share is highly cyclical, falling sharply in recessions and advancing rapidly during periods of prosperity. Thus, the profit share increased substantially from the early to mid-1960s (a period of prosperity), but fell sharply afterward until the early 1970s. No further decline in the profit share has been evident during the 1970s. 3/

A better understanding of long-run trends in profitability can be gained by focusing on the domestic nonfinancial corporate sector. The picture is similar (Figure 18 and Table 26). The mid-1960s stand out as a period in which the profit share was especially high, and the 1970s as one in which the profit share was especially low. As shown in Table 26, the interest component of the return to capital increased during the 1970s, in part because inflation pushed interest rates higher. In addition, firms relied

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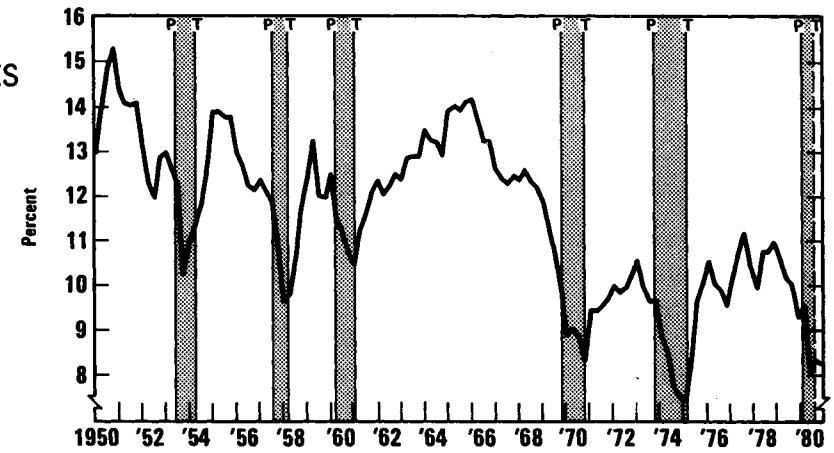
2/ Studies of profits and the return on capital have tended to focus on the share of profits and interest in total factor incomes. One reason is that certain problems associated with the measurement of capital can be avoided by analyzing factor shares of income.

3/ One of the long-run factors that has tended to decrease the profit share (and increase the labor share) has been the increase in the size of the government sector. In the National Income Accounts, all of the income originating in the government sector is considered labor income, and no economic return on government capital is included. The relative decline in agriculture also helped to increase both the labor share of national income and the profit share, because the proprietor form of business organization is prevalent in farming. Such income includes a return both on capital invested and on the labor of the proprietor and his family.

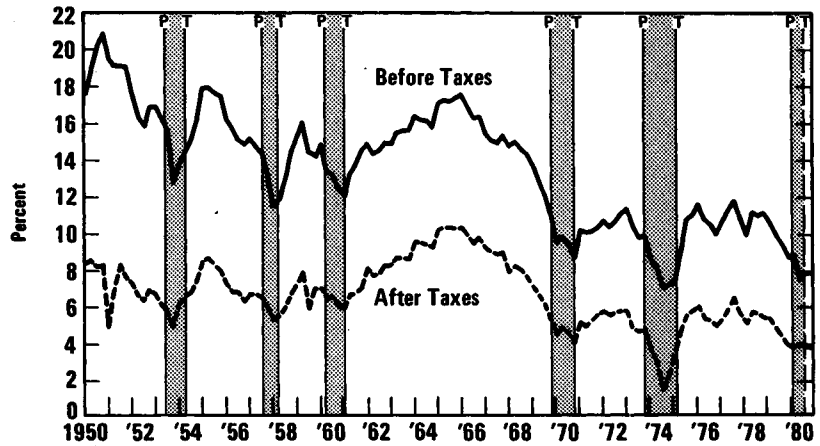
Figure 18.

Economic Profits

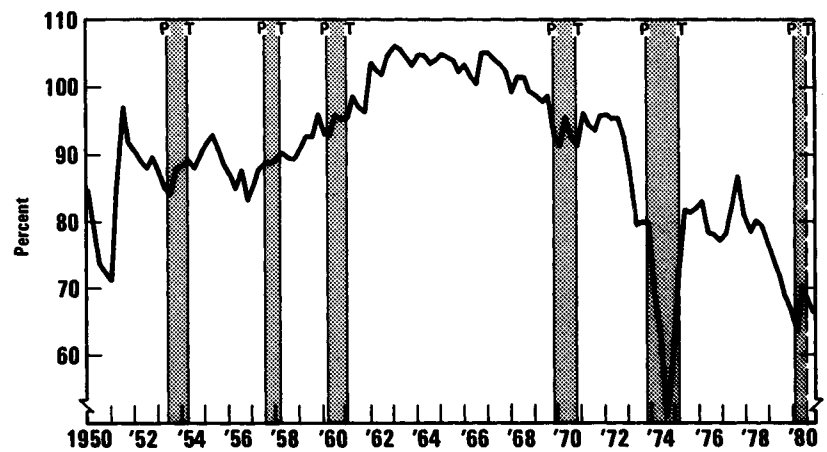
Total Economic Profits as a Share of National Income



Economic Profits of Nonfinancial Corporations Relative to Their Gross Domestic Product



Economic Profits of Nonfinancial Corporations Relative to Their Book Profits



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

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TABLE 25. THE DISTRIBUTION OF NATIONAL INCOME, 1950-1979

	Percent of National Income (Annual Average)		
	1950-1959	1960-1969	1970-1979
Corporate Profits before Income Taxes a/	12.6	12.4	9.7
After corporate income taxes b/	6.1	7.1	5.2
Compensation of Employees	68.6	70.8	74.8
Net Interest	1.8	3.6	6.1
Proprietors' Income	13.8	10.0	7.5
Indirect Business Taxes	3.3	3.1	1.9
Total	100.0	100.0	100.0

a/ Economic profits are reported profits adjusted for inventory valuation and capital consumption. Economic profits, as measured in the National Income Accounts, exclude capital gains or losses.

b/ Economic profits less federal, state, and local income taxes.

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

more on debt as a means of financing investment. Taken together, the share of interest and before-tax profits in national income fell to 13.1 percent in the 1970s, from 16.6 percent for the 1960s and 16.9 percent for the 1950s. 4/

4/ CBO's analysis suggests that some, but not all, of the decline in profit shares during the 1970s was associated with the business cycle, specifically lower capacity utilization.

TABLE 26. THE DISTRIBUTION OF GROSS DOMESTIC PRODUCT OF NONFINANCIAL CORPORATIONS, 1950-1979

	Percent of Gross Domestic Product (Annual Average)		
	1950-1959	1960-1969	1970-1979
Corporate Profits before Income Taxes a/	16.1	14.9	10.0
After corporate income taxes b/	7.0	8.3	5.0
Compensation of Employees	64.8	64.2	66.3
Net Interest	0.8	1.7	3.1
Depreciation	9.1	8.8	9.9
Indirect Business Taxes	9.2	10.4	10.7
Total	100.0	100.0	100.0

a/ Economic profits are reported book profits adjusted for inventory valuation and capital consumption; they exclude capital gains or losses.

b/ Economic profits less federal, state, and local income taxes.

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

Return on Capital. The return on business capital--economic profits plus net interest as a percent of the estimated value of the capital stock--has fallen, especially since the 1960s (Table 27). The average return in the 1970s (9.6 percent) was considerably

TABLE 27. RATE OF RETURN ON DEPRECIABLE ASSETS AND RATE OF RETURN ON STOCKHOLDERS' EQUITY OF NONFINANCIAL CORPORATIONS, 1955-1979

	Average Annual Percent		
	1955-1959	1960-1969	1970-1979
Rate of Return on Depreciable Assets a/	11.9	13.5	9.6
Rate of Return on Stockholders' Equity b/	5.1	7.1	6.6

a/ Profits before taxes plus capital consumption and inventory valuation adjustments plus net interest paid, as a percent of depreciable assets valued at current replacement cost. Data for the inventory component of depreciable assets do not reflect national income and product accounts benchmark revisions.

b/ After-tax profits corrected for inflation effects, including capital gains on reduced value of net debt due to inflation, divided by net worth (physical capital component valued at current replacement cost). Data do not reflect national income and product accounts benchmark revisions.

SOURCE: Economic Report of the President (January 1981), Table B-86.

below the average for the 1960s (13.5 percent) and somewhat below the average for 1955-59 (11.9 percent). 5/

5/ Some analysts question whether or not the decline in the return on capital in the 1970s was part of a long-run phenomenon or merely cyclical. The evidence suggests that profit rates were lower during the 1970s even after adjusting for the business cycle. But tests to determine whether there was a longer-run trend of falling profit rates have not been statistically conclusive. See Martin Feldstein and Lawrence Summers, "Is the Rate of Profit Falling?" Brookings Papers on Economic Activity, 1977:1, pp. 211-228.

Another and more narrow measure of profitability is the rate of return on stockholders' equity, adjusted for the effects of inflation. That measure, shown in the bottom row of Table 27, declined only slightly in the 1970s compared with the 1960s. The principal reason is that the numerator for that series includes the capital gains from the reduction in the real value of net corporate liabilities. But the gain to stockholders from those reductions was roughly offset by losses to creditors.

Inflation, Return on Capital, and Taxes

Inflation has greatly complicated the measurement of the returns on capital and of the tax rate on the income from capital. This section describes briefly the way in which inflation affects capital income, and why it leads to some differences of opinion among investigators as to trends in the after-tax return on capital.

Why does inflation greatly complicate the analysis of trends in the return to capital? For one thing, it causes the reported or "book" profits to exceed "economic profits," which are profits based on the replacement cost of fixed capital and inventories but excluding capital gains (Figure 18). In addition, inflation shrinks the real value of corporate liabilities. Finally, as inflation gets incorporated in expectations, interest rates tend to rise to compensate lenders.

The tax system does not distinguish between nominal income and income adjusted for inflation. Nominal interest (including the inflation component) is tax deductible for borrowers, but taxable for lenders. In addition, accrued changes in the value of assets are not considered in the tax system unless realized. Among the implications are:

- Depreciation of business capital is understated for tax purposes, and inventory profits tend to be overstated (many businesses do not use the LIFO method of accounting although they are permitted to do so);

- The effect of inflation on the return to capital depends on the tax situation of the business and of the lender;

- Businesses are encouraged to use debt financing because interest payments that are increased because of inflation are deductible while increases in stock dividends are not; and

- After-tax returns on plant and equipment tend to decline relative to other assets, such as owner-occupied housing, because depreciation is understated.

Unanticipated inflation provides a gain to borrowers and a loss to creditors. But to the extent that inflation is anticipated, its effects tend to become incorporated in higher nominal interest rates. In principle, interest rates could adjust to take into account both inflation and the tax treatment of interest. For example, if inflation is at a 10 percent rate and the marginal tax rate on borrowers and lenders is 40 percent, interest rates would need to increase by 16.7 percentage points for lenders and borrowers to be in the same after-tax situation. Available research indicates that interest rates have tended to increase approximately point for point with inflation--but not enough to compensate lenders for the taxation of nominal interest. 6/ The increase in interest rates in the last year may, however, have incorporated both expected inflation and the tax treatment of interest.

Differences of opinion about the after-tax profitability of capital are concerned primarily with whether to include the gain to debtors from unanticipated inflation, which enables them to repay loans with depreciated dollars. To do so would reduce the estimated tax rate on the income from capital. Consequently, some investigators argue that the appropriate measure of after-tax corporate profits should include the impact of inflation on corporate balance sheets, especially the decline in the real value of corporate debt resulting from inflation. Using that approach, the profit rate after income taxes was not lower in the 1970s compared with most of the postwar period, although it was lower than during

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6/ Vito Tanzi, "Inflationary Expectations, Economic Activity, Taxes and Interest Rates," American Economic Review (March 1980), pp. 12-21; and Martin Feldstein and Lawrence Summers, "Inflation, Tax Rules, and the Long-Term Interest Rate," Brookings Papers on Economic Activity, 1978:1, pp. 61-99.

the mid-1960s. 7/ Much of the gain to debtors during this period was, however, a once-over gain associated with the (unexpected) increase in inflation.

Other investigators believe that in assessing the profitability of capital the after-tax return to all investors in the business sector should be the focus--including the after-tax return to shareholders and creditors. This perspective encompasses the tax burden of the owners of corporate shares and debt instruments, including federal, state, and local taxes. Viewed in this way, the tax rate on income from capital was comparatively high during the 1950s, declined during the early and mid-1960s, and then increased until the mid-1970s. 8/ It should be noted that, as indicated in Table 27, the before-tax return on capital was also comparatively low during the 1970s.

Another approach to the same problem is to focus on the "cost of capital," which includes economic depreciation and the cost of funds, in addition to tax considerations. It appears that, on balance, fully anticipated inflation tends to increase the cost of capital and to lower the return on capital. That is, losses due to historical depreciation tend to outweigh the gain from being

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7/ Burton G. Malkiel and George M. von Furstenberg, "Financial Analysis in An Inflationary Environment," Journal of Finance (May 1977), pp. 575-92; and John B. Shoven, "Inflation and Income Taxation," in Michael J. Boskin, ed., Federal Tax Reform: Myths and Realities (Institute for Contemporary Studies, 1978), pp. 171-88.

8/ Martin Feldstein and Lawrence Summers, "Inflation and the Taxation of Capital Income in the Corporate Sector," National Tax Journal (December 1979), pp. 445-70. Some of the assumptions made in this paper have been challenged by another researcher, Jane Gravelle, who obtained a lower estimate of the recent tax burden. By her calculations, the federal tax burden did not increase in the late 1970s because of legislated tax reductions. Nevertheless, her data suggest that when state and local taxes are included, the total tax burden did increase. See Jane Gravelle, "Inflation and the Taxation of Capital Income in the Corporate Sector: A Comment," Congressional Research Service, The Library of Congress (Processed, 1981).

able to deduct nominal interest costs, when inflation becomes fully anticipated. 9/

Despite disagreements as to the correct measure of profits, the evidence suggests that the overall return on business capital (economic profits plus interest) was substantially lower during the 1970s than in the earlier postwar period. 10/

Profits by Industry and Sector

The distribution of profits by industry and sector of the economy for the period 1950-1979 is shown in Table 28. Several trends are evident:

- o A decline in the profit share of durable goods manufacturing;
- o A decline in the share of profits in the regulated sector;
- o An increase in the share of profits of American business abroad, especially in the last few years;
- o An increase in the share of profits in the energy sector; and
- o An increase in Federal Reserve "profits." 11/

9/ Martin Feldstein, "Inflation, Capital Taxation and Monetary Policy," presented to the National Bureau of Economic Research Conference on Inflation, Washington, D.C., October 10, 1980.

10/ The "correct" measure of profits depends in large part on the purpose at hand. The purpose of this chapter is to consider whether the return on capital is sufficient to attract high levels of investment. For this particular purpose, the overall return on capital to stockholders and creditors seems the most appropriate measure. The historical return to stockholders exaggerates the return to capital by including the gains to borrowers from inflation (particularly from unanticipated inflation), but not the losses incurred by lenders.

11/ The net income of the Federal Reserve is treated as corporate profits in the National Income Accounts.

TABLE 28. PERCENTAGE DISTRIBUTION OF CORPORATE PROFITS WITH INVENTORY VALUATION ADJUSTMENT, ALL INDUSTRIES

	1950 to 1959	1960 to 1969	1970 to 1979
Total Before-Tax Profits with Inventory Valuation Adjustment	100.0	100.0	100.0
Domestic Industries	94.9	93.8	89.0
Financial	10.8	12.2	14.6
Federal Reserve	1.0	2.2	4.4
Other	9.8	10.0	10.2
Nonfinancial	84.1	81.6	74.4
Manufacturing	52.8	48.6	42.4
Nondurables	24.5	22.4	23.3
Food	4.2	4.1	3.9
Chemicals	6.0	6.0	5.1
Petroleum	6.1	4.2	6.6
Other	8.2	8.1	7.6
Durables	28.2	26.2	19.1
Primary Metals	5.6	3.3	1.9
Fabricated Metals	2.5	2.4	2.2
Nonelectrical Machinery	4.4	4.6	4.1
Electrical Machinery	3.1	3.0	2.3
Motor Vehicles	5.8	6.6	3.8
Other	6.8	6.4	4.8
Wholesale and Retail Trade	10.8	10.9	13.9
Regulated Industries	12.3	14.5	9.3
Other Nonfinancial	8.3	7.6	8.8
Rest of the World	5.0	6.2	11.0

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

A similar picture emerges when profits are measured against the gross product in each industry: The profit share has fallen markedly in durable goods manufacturing, notably in the industries that include autos and steel, and increased in petroleum manufacturing (see Tables 29 and 30).

TABLE 29. SHARE OF GROSS PRODUCT NOT DEVOTED TO EMPLOYEE COMPENSATION, BY MAJOR SECTORS

	1950 to 1959	1960 to 1969	1970 to 1978
Agriculture, Forestries, Fisheries	84.6	81.2	82.0
Mining	63.3	64.3	62.6
Construction	29.3	26.2	24.6
Manufacturing	32.8	31.9	28.4
Nondurables	37.2	36.9	35.1
Durables	29.4	28.4	23.8
Transportation	32.0	31.5	29.0
Communication	46.6	54.8	49.6
Electric, Gas, Sanitation	63.3	68.1	66.9
Wholesale Trade	46.6	45.6	45.9
Retail Trade	44.7	40.6	39.0
Finance, Insurance, Real Estate	80.8	80.0	77.0
Services	39.0	36.4	30.0
Total	43.0	41.3	38.5

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

Causes of the Decline in Profitability

The decline in the return on capital has not been limited to the United States, but seems to have occurred in all or most industrial countries. 12/ In the United States, as noted above, the decline in profits has been especially severe in regulated industries and in certain durable goods manufacturing industries, such as autos and steel. Aside from the effects of taxes, several

12/ T.P. Hill, Profits and Rates of Return, OECD (1979), pp. 113-31.

TABLE 30. SHARE OF GROSS PRODUCT NOT DEVOTED TO EMPLOYEE COMPENSATION, MANUFACTURING INDUSTRIES

	1950 to 1959	1960 to 1969	1970 to 1978
Food and Kindred Products	42.8	41.5	39.7
Tobacco Manufactures	86.0	84.9	80.8
Textile Mill Products	20.3	24.7	21.5
Apparel and Other Textile Products	13.8	13.4	14.0
Lumber and Wood Products	30.6	32.0	38.3
Furniture and Fixtures	20.1	20.1	15.6
Paper and Allied Products	39.4	33.5	31.9
Printing and Publishing	23.2	23.7	24.4
Chemicals and Allied Products	47.3	44.2	39.2
Petroleum and Coal Products	45.3	57.9	62.6
Rubber and Miscellaneous Plastics	30.7	29.6	25.7
Leather and Leather Products	14.3	14.1	12.5
Stone, Glass, and Clay Products	34.6	30.7	25.0
Primary Metals	34.8	31.4	24.4
Fabricated Metals	21.4	20.8	20.6
Nonelectrical Machinery	27.5	26.6	23.3
Electrical Machinery	26.5	22.6	22.2
Motor Vehicles and Equipment	46.2	51.7	34.8
Other Transportation Equipment	15.2	12.7	5.9
Instruments and Related Products	21.8	27.0	19.5
Misc. Manufacturing Industries	25.2	23.0	25.5
Total Manufacturing	32.8	31.9	28.4

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

factors may have contributed to the decline in the after-tax return on capital in the United States. 13/ Among them are:

13/ Nordhaus, writing in the mid-1970s, attributed the decline in the profit rate that began after about 1965 to a reduction in the cost of capital caused by a lessened perception of risk and tax reductions in the 1960s. According to this analysis the lower cost of capital contributed to a rapid growth in the

- o Continued gains in real wages that exceeded productivity growth in the economy;

- o Other increases in costs such as higher energy costs and the costs of complying with government regulations;

- o Intensified foreign competition; and

- o Persistent economic slack, which especially affects cyclical industries in durable goods manufacturing.

Wages. There is little evidence to suggest that real wage gains in the aggregate have been "excessive," in the sense of squeezing profits. But labor cost data suggest that an important dichotomy has developed in the labor market between high-wage industries and lower-wage industries. In the high-wage industries, labor compensation per hour, in real terms, has continued to increase at about the same rate throughout the postwar period. In the lower-wage industries, there has been a marked slowing in line with the slowdown in productivity growth (see Table 31). Specifically, workers in high-wage industries such as automobiles, primary metals, rubber, petroleum, transportation, and utilities have generally received significantly higher rates of wage increase than workers in lower-wage industries. One reason is that the former have been able to adjust their pay to keep up with rising consumer prices, thus maintaining their accustomed growth in real incomes. By contrast, workers in lower-wage industries have been unable to keep up with inflation. 14/

13/ (Continued)

stock of capital which, in turn, depressed the return on capital. See William D. Nordhaus, "The Falling Share of Profits," Brookings Papers on Economic Activity, 1974:1, pp. 169-208. More recently, Jeffrey Sachs has emphasized institutional factors, particularly the behavior of unions. See Jeffrey D. Sachs, "Wages, Profits, and Macroeconomic Adjustment: A Comparative Study," Brookings Papers on Economic Activity, 1979:2, pp. 269-319.

14/ For a more detailed discussion, see CBO, Inflation and Growth: The Economic Policy Dilemma (July 1978), pp. 35-40. CBO's analysis indicates that percentage wage gains have been larger in large establishments and among unionized workers.

TABLE 31. ANNUAL GROWTH RATES IN REAL COMPENSATION PER EMPLOYEE HOUR IN MANUFACTURING INDUSTRIES

	1950 to 1965	1965 to 1973	1973 to 1978
Food and Kindred Products	2.7	2.3	2.2
Tobacco Manufactures	3.7	3.9	5.3
Textile Mill Products	1.3	2.3	1.4
Apparel and Other Textile Products	1.0	1.9	0.4
Lumber and Wood Products	2.4	3.3	2.8
Furniture and Fixtures	1.9	2.0	0.7
Paper and Allied Products	2.7	2.7	2.9
Printing and Publishing	1.8	1.8	0.3
Chemicals and Allied Products	2.9	2.3	2.2
Petroleum and Coal Products	2.9	1.1	3.0
Rubber and Miscellaneous Plastics	2.1	1.5	1.6
Leather and Leather Products	1.6	1.5	0.9
Stone, Glass, and Clay Products	2.7	2.7	2.1
Primary Metals	2.9	2.8	4.0
Fabricated Metals	2.4	2.0	2.2
Nonelectrical Machinery	2.7	2.1	2.0
Electrical Machinery	2.8	1.9	1.8
Motor Vehicles and Equipment	3.2	3.5	3.2
Other Transportation Equipment	3.5	2.2	1.6
Instruments and Related Products	2.8	1.7	1.1
Misc. Manufacturing Industries	2.1	2.2	0.6
Total Manufacturing	2.7	2.3	2.2

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

Many high-wage workers may not be aware of their success in keeping up with inflation. They may feel that their pay has increased very little, or declined, even though their employers have experienced rising labor costs. One reason for this difference in perception is that growth in compensation per hour (employers' labor cost) has far outstripped gains in wages and salaries per hour. The difference between compensation and pay includes employers' payroll taxes plus fringe benefits such as the

employers' share of health and pension benefits. 15/ Government policies have contributed to the rapid growth in these labor costs. Not only have government policies led to increases in payroll taxes. In addition, the tax system encourages a shift in compensation toward a greater emphasis on fringe benefits to the extent that they are deductible for employers and nontaxable or taxable at reduced rates for employees.

The momentum of real wage gains in high-wage industries in the face of reduced productivity growth and declining profit rates has had at least two consequences. First, it has tended to reduce the competitiveness of some U.S. industries in international markets. This, in turn, has contributed to pressure on the Congress to limit foreign competition across a broad range of products including steel, autos, textiles, shoes, and television sets--to name only a few of the more important ones. 16/

Second, the momentum in real wages may have contributed to productivity slowdown in two ways: first, by shifting employment from high-productivity sectors such as durable goods manufacturing to lower-productivity sectors such as services, and second, by squeezing profits and thereby slowing the modernization of plant and equipment.

Energy. Sharp increases in energy costs may also have contributed to the decline in the return on capital. The jump in

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15/ Payroll taxes and fringe benefits grew from an average of 8.6 percent of manufacturers' total labor compensation cost in the 1950-1965 period to 12.6 percent in 1966-1973, and to 16.8 percent in 1974-1978. The share of such benefits was highest in several of the highest-paid industries, suggesting that as workers reach higher tax brackets the compensation package shifts in favor of pension and other "fringe benefits" that receive preferential treatment in the federal income tax system. The cost of medical care--an important component of employers' labor costs--has also increased rapidly since the mid-1960s.

16/ To be sure, other factors besides wage momentum have played important roles in the declining international competitiveness of U.S. basic industries. For one thing, industrial capacity has grown rapidly in such countries as Mexico, South Korea, Brazil, and Hong Kong.

energy costs caused some capital to become prematurely obsolete. Rising energy costs also caused consumers to shift their purchases away from energy-intensive products.

Government Regulations. Business firms have had to devote substantial capital investment to meeting social objectives such as cleaner air and water. Such investments may yield significant returns to society, but they bring little or no financial return to private investors.

Economic Slack. Substantial economic slack also tended to depress the return on capital during the 1970s. Historically, corporate profits have been very sensitive to overall business conditions. The recession of 1974-1975 was the most severe of the postwar period. In addition, there were relatively few years during the decade when measures of capacity utilization were at high levels.

CAPITAL ACCUMULATION, INNOVATION, AND PRODUCTIVITY GROWTH

The decline in profitability appears to be a major reason for declining productivity growth in recent years. It has had a damping effect on the accumulation of capital and on innovation--two major determinants of productivity growth. An increase in the amount of physical capital--such as tools, machinery, and other work-facilitating equipment--per worker is associated with an increase in output per hour worked. Also important in determining productivity are the quality and composition of the capital stock--that is, the degree to which the capital stock embodies the best technology and is allocated to its most productive uses. Finally, innovation, or the development and spread of new products and new techniques of production, is believed to be crucial to the process of productivity growth.

Physical Capital Formation. The relationship between capital investment, or capital formation, and gains in productivity has been the subject of considerable study. Estimates differ as to the contribution made by capital to productivity growth, but all investigators give it a significant role. 17/ It is also apparent

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17/ For a more detailed discussion, see CBO, The Productivity Problem: Alternatives for Action (January 1981), pp. 29-35.

that the estimated contribution of capital has declined substantially in recent years, although there is some disagreement about the extent of the decline and when it began.

The slowdown in the growth of capital per worker is illustrated by the data in Table 32. Over the most recent period, 1974-1979, the net capital stock grew 3.0 percent per year, compared with 4.0 percent or more in earlier postwar periods. At the same time, employment and hours accelerated in the 1974-1979 period so that the capital/labor ratio was about unchanged. In earlier periods, the capital/labor ratio grew roughly 3 percent per year. Moreover, in the recent decade a larger share of capital spending was devoted to meeting government regulations (such as for pollution abatement and occupational health and safety) and energy efficiency. Also, the run-up in energy prices is believed to have rendered a substantial part of the capital stock economically obsolete. As a result, the estimates of the net capital stock understate the extent of the slowdown in productivity-enhancing capital accumulation. 18/

Real business fixed investment in relation to real gross national product (GNP) was historically relatively high in the 1974 to 1979 period, while the growth rate in the net capital stock was not. 19/ There are two reasons for this: First, real GNP grew more slowly from 1974 to 1979, compared with its longer-run growth rate in earlier periods. Second, depreciation made up a larger share of gross investment in recent years, partly because the mix of capital shifted toward shorter-lived equipment and away from longer-lived structures. Therefore, to restore the growth rate in the net capital stock or in the capital/labor ratio would require

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18/ The contribution of capital formation to productivity growth is generally calculated as the percentage change in the capital-labor ratio weighted by the share of output or income attributable to capital. Quantitative estimates of the contribution can differ because of alternative approaches to the measurement of capital, labor, and output.

19/ The data in Table 32 reflect the recent revisions by the Commerce Department in the National Income Accounts. Those revisions substantially raised the estimates of business fixed investment and of saving, but they did not alter the fundamental conclusion reached by researchers that a slowdown in capital accumulation and a decline in saving rates occurred.

TABLE 32. THE INVESTMENT SHARE AND GROWTH IN THE CAPITAL-LABOR RATIO

Period	Real Business Fixed Investment as a Percent of Real GNP (annual average)	Percent Change, Annual Rate (end of year to end of year)				
		Net Capital Stock a/	Employment b/	Hours b/	Capital-employment ratio	Capital-hours ratio
1949 to 1959	9.1	4.0	1.1	0.7	2.9	3.2
1959 to 1969	9.8	4.6	1.6	1.2	3.0	3.3
1969 to 1974	10.5	4.2	1.2	0.5	2.9	3.7
1974 to 1979	10.3	3.0	3.1	2.8	-.1	0.2

a/ Net fixed nonresidential business capital, 1972 dollars, end of year.

b/ For private business, all persons. End of year calculated as average of year's fourth quarter and of following year's first quarter.

SOURCE: Economic Report of the President, January 1981, p. 71.

TABLE 33. GROWTH IN REAL SPENDING FOR RESEARCH AND DEVELOPMENT BY SOURCE OF FUNDS (Annual percentage growth in 1972 dollars)

Period	Total R&D	Private Industry R&D	Federal Government R&D
1953-1965	9.9	7.2	11.7
1965-1973	1.0	4.5	-1.5
1973-1978	1.8	3.3	0.4
1978-1979	3.4 a/	4.5 a/	2.3 a/

a/ Preliminary.

SOURCE: National Science Foundation, National Patterns of Science and Technology Resources 1980, NSF 80-308 (1980), Table 5.

an even higher ratio of business fixed investment to GNP than during the 1974-1979 period (or a faster rate of growth in GNP if the ratio of investment to real GNP does not increase).

Innovation. The rate of innovation is difficult to measure, but some indicators, such as investment in research and development, and the number of patents granted, indicate that it has been slowing (see Table 33). Also, the spread of new technology is intimately tied to the pace of capital accumulation.

Concern about lagging productivity growth has given rise to many proposals for stimulating business investment and innovation. Several of these are discussed in the following pages. 20/

POLICY STRATEGIES TO STIMULATE INVESTMENT

The review of profit behavior in this chapter suggests that one way to increase profits and investment would be through the

20/ For a more detailed discussion, see CBO, The Productivity Problem: Alternatives for Action (January 1981), chapters 2, 3, 5, and 8.

use of stimulative monetary and fiscal policies. Indeed, some economists argue that this would be the most effective way to stimulate investment given the current low levels of capacity utilization. But stimulative policies would add to the present high rate of inflation. Therefore, this section explores several alternatives.

Tax Incentives for Business Investment

Business tax cuts would help to raise the after-tax return on investment and innovation, thereby stimulating economic growth. Investment incentives, such as more rapid depreciation, increases in the investment tax credit, and tax credits for increases in research and development, probably would be more effective per dollar of tax reduction than would reductions in the corporate income tax rate. To be most effective, such incentives should not interfere with a major function of profits--allocating investment to its more productive uses.

The Accelerated Cost Recovery System. The Administration's business tax proposal calls for increasing the write-off of capital expenditures, and for a simplified depreciation system. Under the proposal, which is a modification of the 10-5-3 proposal introduced in the last Congress (H.R. 4646), equipment could be written off in either three years (autos, light trucks, and equipment used for research and development) or five years (other types of machinery and equipment). Certain classes of structures, such as factory buildings, retail stores, and warehouses used by owners, would qualify for 10-year depreciation levels, while other nonresidential structures would be assigned 15-year lives. Residential structures would be depreciated over 18 years. In addition, the proposal would also liberalize the investment tax credit by allowing 6 percent on three-year equipment and the full 10 percent for five-year equipment. 21/

21/ Currently, equipment with useful lives of at least seven years is eligible for a 10 percent credit, while equipment with useful lives of at least five but less than seven years is limited to a 6-2/3 percent credit, and equipment with useful lives of three to five years is restricted to a 3-1/3 percent credit. Shorter-lived equipment is not eligible for a credit.

The investment proposals would be effective retroactively to January 1, 1981. The 5-, 10-, and 15-year depreciation categories would be phased in over a five-year period. 22/

The static revenue losses from the Administration's business tax cut proposals (without feedback effects from the economy) are estimated by CBO to increase from $2.5 billion in fiscal 1981 to $40.5 billion in fiscal 1985.

From an economic standpoint, the Administration's business tax cut proposal raises at least two issues. First, it would sever to a substantial degree any connection between the tax life of an asset and its actual economic or productive life. Proponents of this type of change argue that not much is known about the actual economic lives of assets anyway. On the other hand, opponents argue that such a departure would seriously distort investment decisions. 23/ For example, it could result in actual tax subsidies (negative taxes) on the income from some kinds of capital, and thus affect the allocation of resources among different kinds of investment.

A second issue is whether the announcement of a schedule for future reductions in depreciation lives would cause businesses to postpone investments to a substantial extent. The phasing-in would limit the revenue loss in early years. But knowledge that more liberal treatment of depreciation would be available in later years could cause postponement of some investment projects.

The Simplified Cost Recovery System. Another proposal to reduce the impact of inflation on capital cost recovery by increasing the size of depreciation deductions is the Senate Finance

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22/ For a more detailed description of the Administration's Accelerated Cost Recovery System, see American's New Beginning: A Program for Economic Recovery, The White House (February 18, 1981), Part IV, pp. 26-40.

23/ See, for example, Alan J. Auerbach and Dale W. Jorgenson, "The First Year Capital Recovery System," prepared for hearings of the Ways and Means Committee, U.S. House of Representatives, November 14, 1979.

Committee's Tax Reduction Act of 1980. 24/ Under that proposal, known as the Simplified Cost Recovery System, equipment investment would be assigned to one of four depreciation categories corresponding to useful lives of two, four, seven, and ten years. Owner-occupied commercial and industrial buildings could be depreciated over a 15-year period, and most other types of structures over a 20-year period. Most property now eligible for the Accelerated Depreciation Range (ADR) system would be assigned to a useful life category that is at least 40 percent shorter, except that no recovery period would be shorter than two years. In addition, the bill would modify the investment tax credit. A 2-1/2 percent credit would be provided for the two-year class, a 6 percent credit for the four-year class, and a 10 percent credit for both the seven-year and the ten-year classes. CBO estimates that the static loss in federal receipts would increase from $4.3 billion in fiscal 1981 to $19.7 billion in fiscal 1985, under this proposal.

In an effort to measure the economic impact of the Senate Finance Committee's proposal, CBO applied it to three large-scale econometric models in 1980 (see Table 34). The wide disparity in results indicates the uncertainty attached to such estimates. However, they do give a rough indication of possible effects. The level of productivity averaged from 0.3 to 0.6 percent higher from 1981 to 1985, compared with the baseline. 25/ Estimates by CBO suggest that the depreciation proposal would increase after-tax corporate profits as a share of national income by approximately 0.9 percentage point by 1985. The measure would thus partially restore the after-tax profit share and return on capital to pre-1970 levels.

Limitations of Depreciation Proposals. Liberalizing depreciation rules, taken by itself, has several limitations. First, unless depreciation rates are tied to prices (either by an index or through a measure such as the First Year Capital Recovery System), the effect on incentives to invest would remain sensitive

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24/ This bill was introduced as H.R. 5829. Its approach also resembles that of H.R. 4646.

25/ For a more detailed discussion, see The Productivity Problem, pp. 36-43. In each simulation, monetary policy was assumed to be conducted in a manner that held nonborrowed reserves constant, thus allowing interest rates to change.

TABLE 34. IMPACTS OF THE SIMPLIFIED COST RECOVERY SYSTEM, 1981 TO 1985: ESTIMATES FROM THREE ECONOMETRIC MODELS (Average annual change)

Area of Impact	Range of Three Models a/
Business Fixed Investment (increase in billions of 1972 dollars)	2.7 to 11.5
Level of Real GNP (percent change from baseline)	0.5 to 0.8
Level of Productivity (percent change from baseline)	0.3 to 0.6

a/ The three econometric models are Data Resources, Inc., Chase Econometrics, Inc., and Wharton Econometric Forecasting Associates, Inc.

SOURCE: Congressional Budget Office.

to the rate of inflation. Second, liberalizing depreciation would not alter current features of the tax system that favor borrowers over lenders and that encourage businesses to become more highly leveraged with debt. Third, it would not deal with the particular problems of such basic industries as autos, steel, and rubber--industries that were once the industrial backbone of America.

Structural Policies

Other policies that have been proposed to restore prosperity to U.S. basic industries include:

- Import restrictions;
- Incomes policies; and
- Adjustment assistance.

Import Restrictions. Restrictions on imports might help to shore up industries that are faced with strong foreign competition in domestic markets. Such restrictions would entail heavy costs. They would invite other countries to retaliate against U.S. exports that are currently highly competitive abroad. Such restrictions would require U.S. consumers to pay more for the protected goods. And they would tend to encourage the continuation of inflationary wage settlements in the protected industries, weakening the discipline of the marketplace that could eventually provide a brake on inflationary settlements.

Incomes Policies. The government might undertake to encourage (or coerce) a less inflationary pattern of wage and price determination in basic industries. Incomes policies have been tried both in the United States and in other countries, but without notable success, particularly over extended periods. A recent proposal has been to tie wage settlements to the income tax, offering tax reductions as an incentive to wage and price restraint. 26/

Adjustment Assistance. Public policies can, in principle, help to facilitate the adjustment of labor and capital. For example, government-subsidized loans can encourage investment in declining or economically depressed areas. Employment policies can emphasize retraining workers as opposed to simply providing unemployment insurance benefits for those displaced by import competition and other basic economic changes. On the other hand, such policies can have adverse effects on the working of the markets for labor and capital. It is the marketplace that ultimately guides business and labor in their economic decisions. 27/

26/ For background discussions of incomes policies as an approach to reducing inflation, see the following CBO reports: Incomes Policies in the United States: Historical Review and Some Issues (May 1977); Inflation and Growth: The Economic Policy Dilemma (July 1978), p. 63; and The Fiscal Policy Response to Inflation (January 1979), Appendix A.

27/ For a more detailed discussion of "industry policies," see CBO, The Productivity Problem, (January 1981), Chapter 8.

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