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:

- A sharp reduction in the growth of nondefense spending, concentrated largely in grants to state and local governments and in transfer payments;

- A large increase in defense spending sufficient to boost the growth of such outlays, in real terms, to about 9 percent per year;

- A 30 percent reduction in the marginal tax rate on personal income, phased in over three years; and

- Increased depreciation allowances for businesses, phased in over several years.

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

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

- 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.

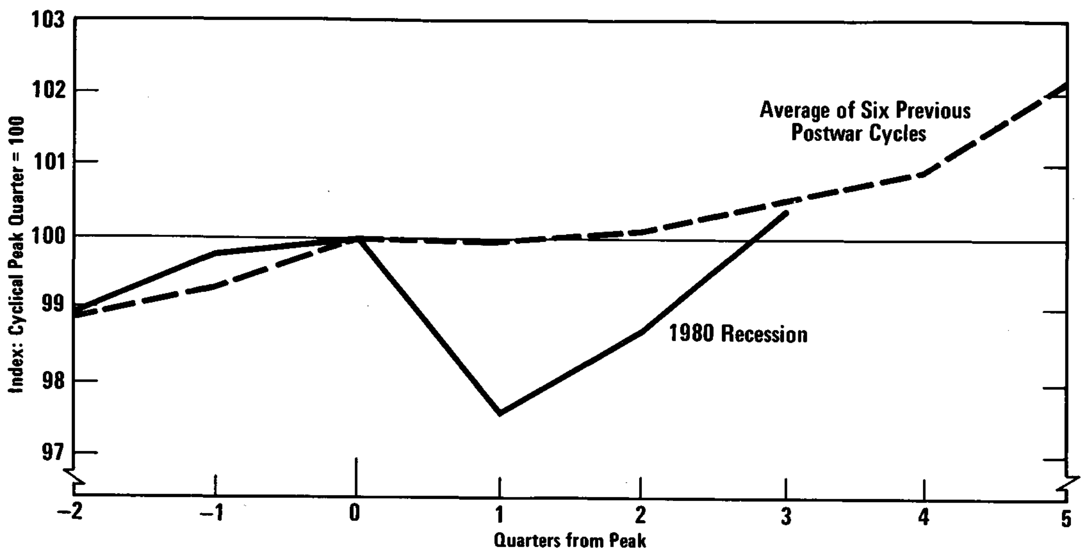
A substantial recovery in real final sales during the second half of 1980 did not, however, wholly make up for the decline. By year-end, housing, autos, business fixed investment, and related industries were still quite depressed. By contrast, over the year as a whole, there was substantial growth in 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.

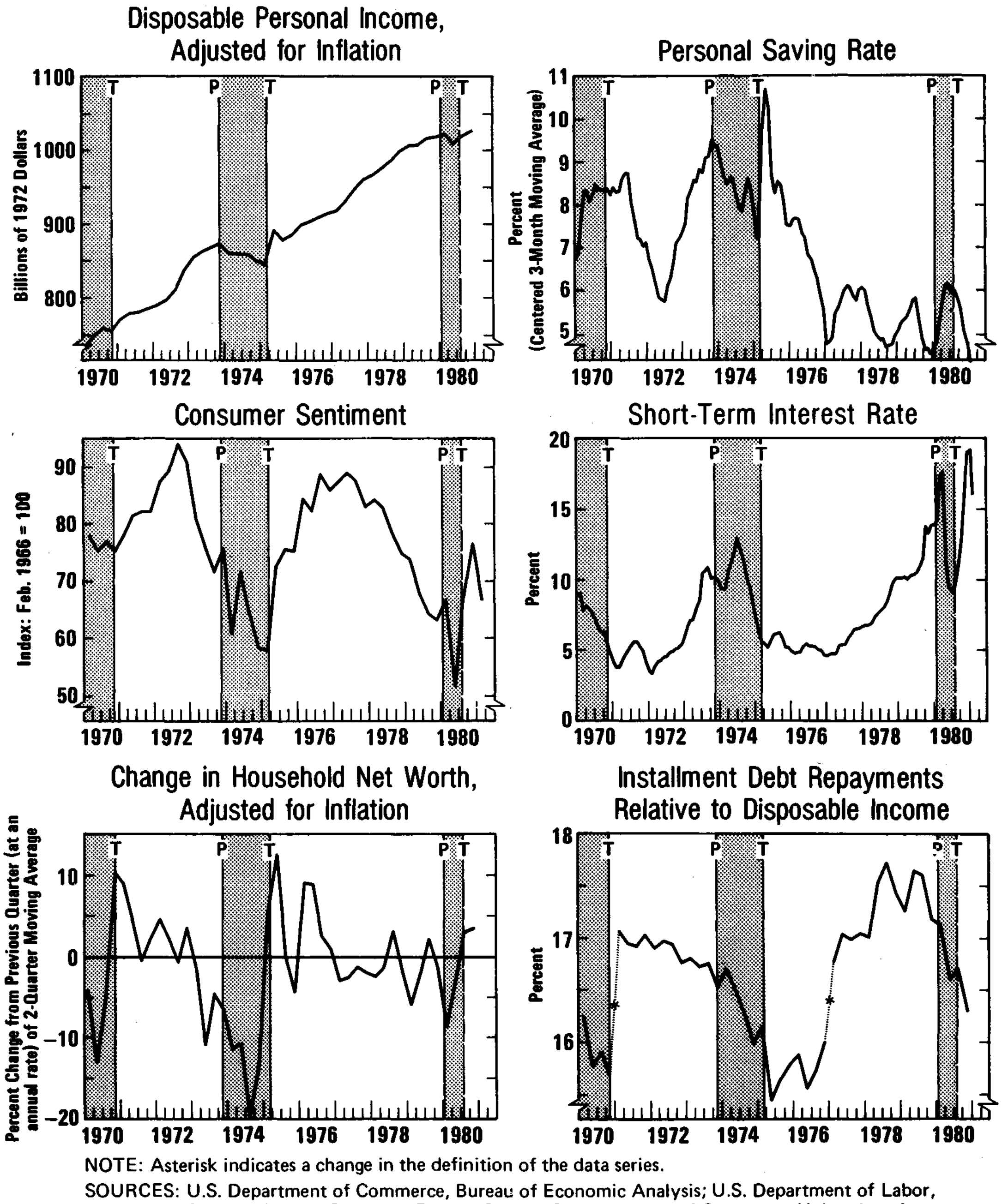
Determinants of Consumption Spending. The major determinants of consumption spending are disposable personal income, the availability and cost of credit, expectations about the future, and changes in household balance sheets. By most of these measures, consumers were in a precarious position at the beginning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

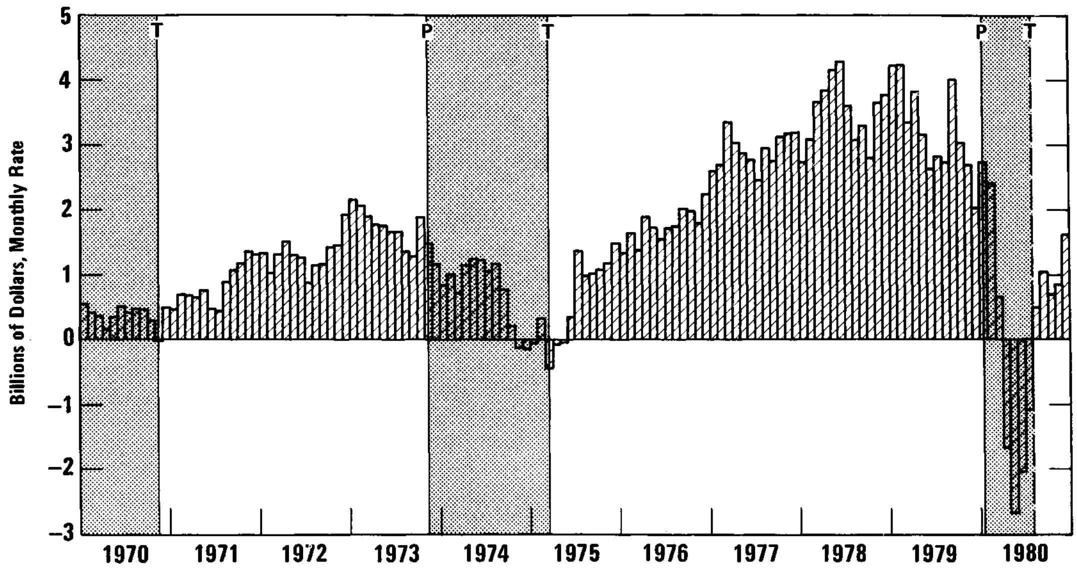


NOTE: Asterisk indicates a change in the definition of the data series.

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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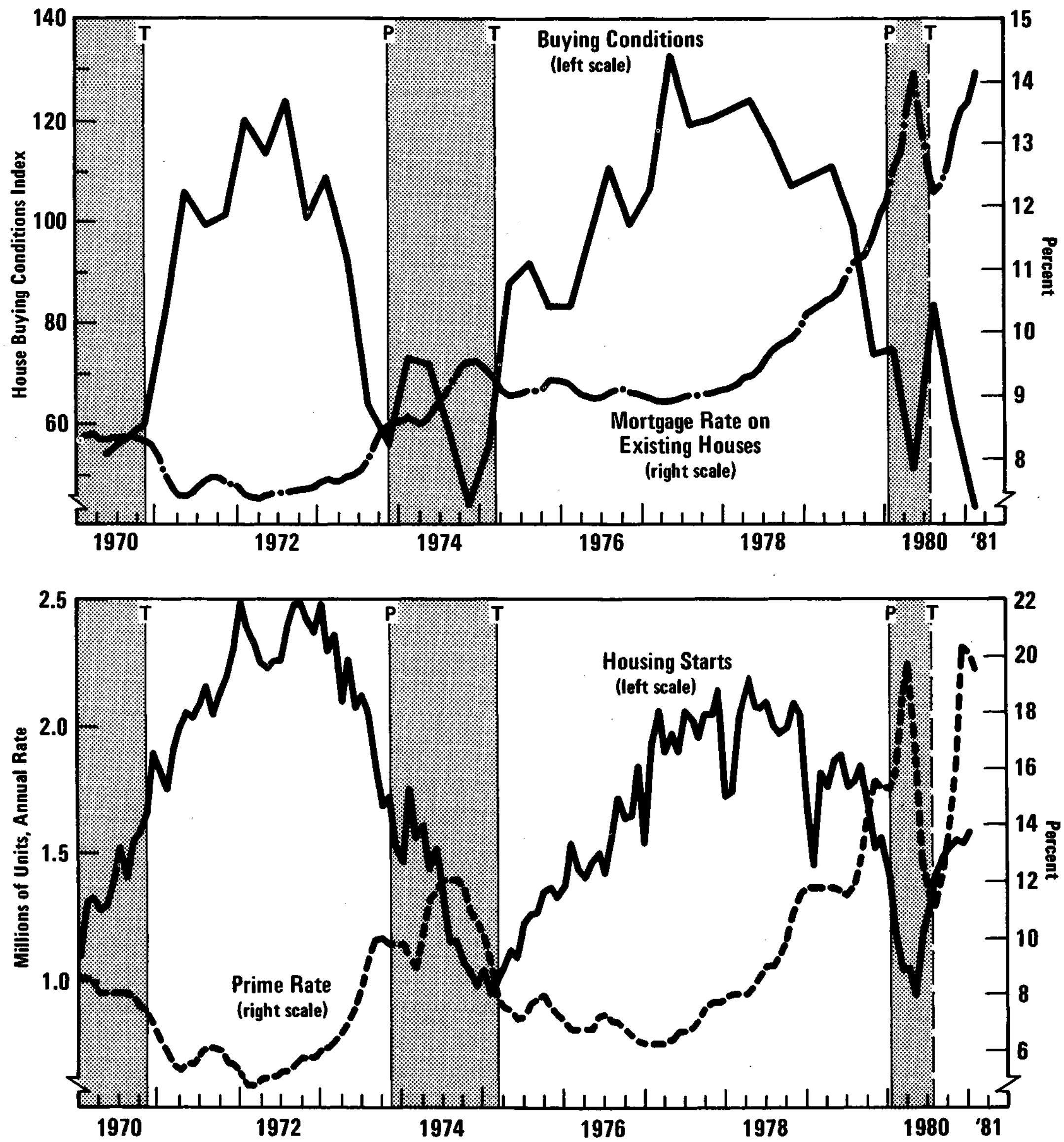
Figure 4.
Borrowing Costs and Housing Activity



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.

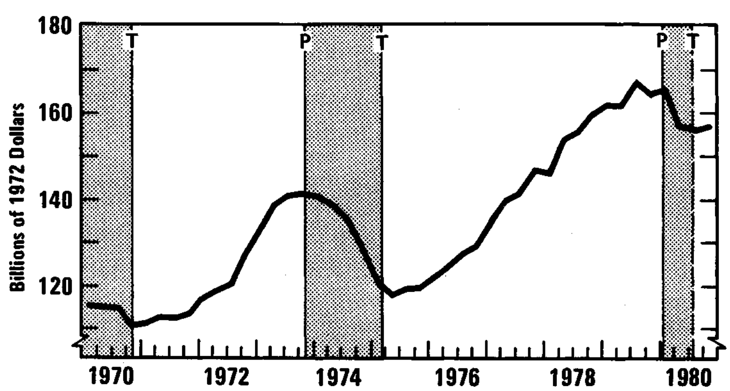
materials, and labor during construction. High borrowing costs, in combination with the expectation that tight credit will weaken new home demand, make it especially risky to build in anticipation of future sales. Consequently, the level of construction activity tends to be cut back, perhaps after a 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.

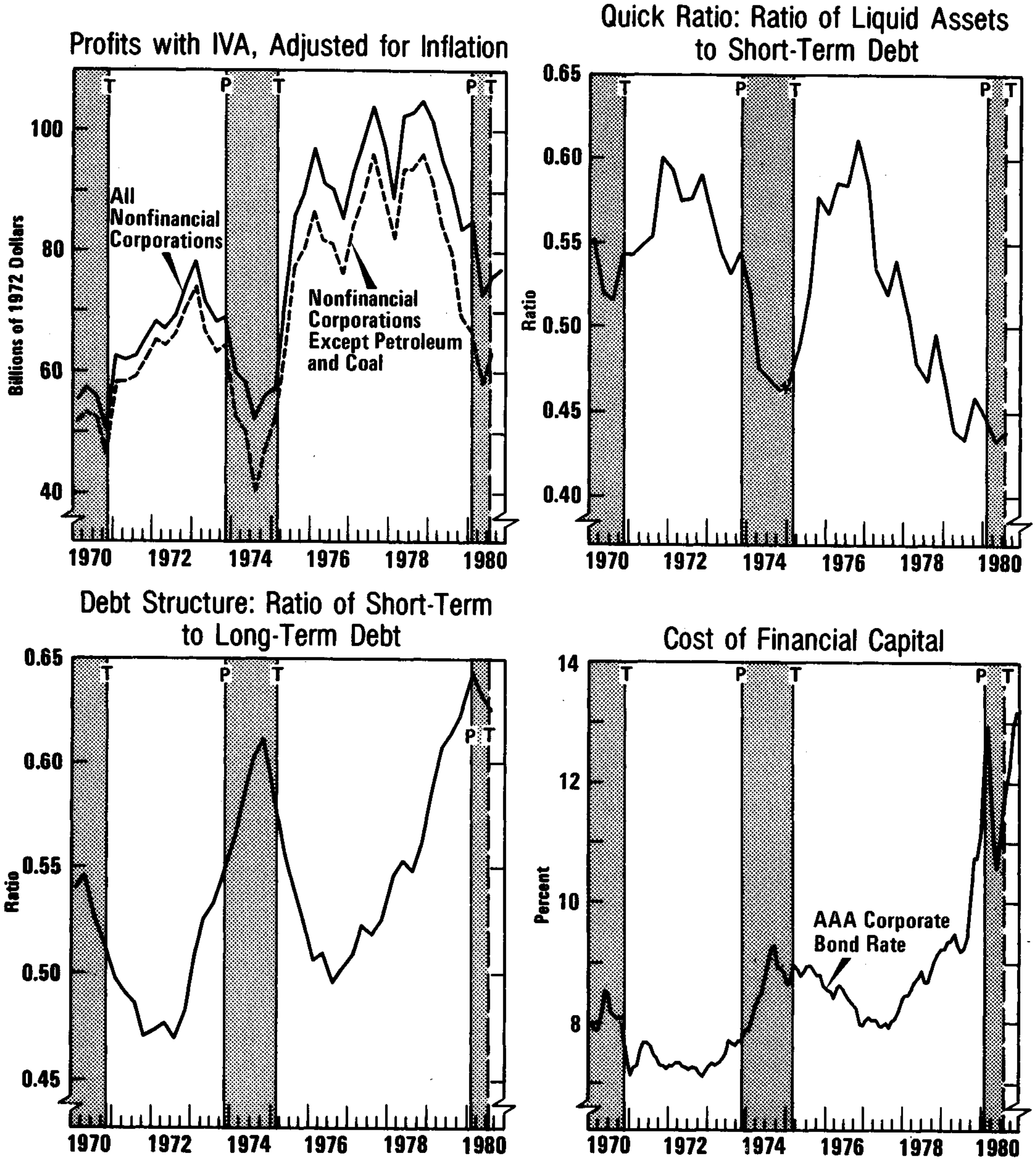
Business fixed investment remained sluggish in the third quarter, after the overall recovery had begun, but began expanding again in the final quarter of 1980. And this upward momentum has apparently been maintained early into 1981. Shipments of nondefense capital goods (not adjusted for inflation) in 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.