

The Economic and Budget Outlook: An Update

August 1984

A Report to the
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CONGRESS OF THE UNITED STATES  CONGRESSIONAL BUDGET OFFICE

**THE ECONOMIC AND BUDGET OUTLOOK:
AN UPDATE**

The Congress of the United States
Congressional Budget Office

NOTES

Unless otherwise indicated, all years referred to in this report are calendar years.

Unemployment rates throughout the report are calculated on the basis of the civilian labor force.

Details in the text and tables of this report may not add to totals because of rounding.

ERRATUM

The Economic and Budget Outlook:
An Update

August 1984

The sixth line of the second paragraph on page 50 should read:

" . . . compared to an increase of 1.7 percent. . . ."

PREFACE

The Economic and Budget Outlook: An Update is one of a series of reports on the state of the economy and the budget issued periodically by the Congressional Budget Office (CBO). In accordance with CBO's mandate to provide objective analysis, the report contains no recommendations.

Chapter I and II of this report were prepared by the Fiscal Analysis Division under the direction of William J. Beeman and Jacob Dreyer, with the assistance of George R. Iden, Frederick Ribe, Frank S. Russek, Jr., Stephen H. Zeller, Robert A. Dennis, Peter M. Taylor, Christopher D. Kask, Stephan Thurman, James R. Barth (visiting economist), Victoria S. Farrell, John Hilley, John Sturrock, Lucia Foster, Bragi Valgeirsson, Stacy Miller, and Jeffrey Steger. Chapter III was prepared by CBO's Budget Analysis Division, under the direction of James L. Blum with the assistance of Paul Van de Water, and by the Tax Analysis Division under the direction of Rosemary D. Marcuss with the assistance of Kathleen M. O'Connell. Paul Houts and Francis S. Pierce edited the manuscript, assisted by Nancy H. Brooks. The manuscript was prepared for publication by Debra M. Blagburn, Mechita O. Crawford, Dorothy J. Kornegay, and Thelma L. Jones.

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SUMMARY

During the first half of 1984, a rapid expansion of the U.S. economy took place. The recovery had started from a very deep trough in the fourth quarter of 1982 and proceeded at an average pace during its first year. Now, in its second year, it has actually accelerated--an atypical pattern for post-war recoveries, which have tended to slow as they matured. Vigorous growth of output in the first half of the current year was accompanied by a rapid drop in the unemployment rate. Moreover, inflation has continued to decline gradually toward the lowest level experienced in more than a decade.

The unexpectedly rapid growth in output in the first six months of this year occurred despite very high and rising interest rates. The increase in interest rates since the beginning of the year can be explained primarily by sharply rising demand for credit by business firms and households that occurred in conjunction with the enormous borrowing requirements of the federal government. High interest rates, however, have not prevented a surge in business investment spending and a relatively healthy pace of residential construction activity--two sectors thought to be sensitive to interest rates. But net exports--an interest-rate-sensitive sector affected by interest rates indirectly through their impact on exchange rates--suffered further deterioration in 1984.

In light of the very favorable current economic picture, many forecasters, including the Congressional Budget Office (CBO), expect the near-term economic future to remain bright. The CBO forecast calls for a continued recovery with some deceleration in real growth in the remainder of this year from the very rapid pace of the first half, and a further moderation next year. Growth tends to slow during maturing expansions, and the firm anti-inflationary stance of the Federal Reserve is likely to contribute to slowing it to a more sustainable pace. This should result in a continuation of low rates of inflation through the next six quarters. At the same time, projected large public and private demands for credit and moderate money growth will also mean a persistence of historically high real interest rates and an internationally strong dollar.

THE CBO ECONOMIC PROJECTIONS

Similar to past practice, the updated CBO economic projections, upon which baseline budget estimates are based, consist of two parts: (1) a

forecast for the remainder of 1984 and for 1985 contingent on specific assumptions about policy and certain external events; and (2) longer-run projections through 1989 that are derived from historical growth trends. The two parts are, therefore, conceptually different mainly because the long-term projections are not conditional upon the policies in place, let alone the policies that may be adopted in the future.

The Forecast for 1984 and 1985

The economic forecast incorporates the following assumptions:

- o Budget outlays are estimated to be \$845 billion in fiscal year 1984 and \$929 billion in 1985. Revenues are estimated at \$673 billion in 1984 and \$751 billion in 1985. These estimates reflect growth in defense budget authority of 5 percent per year in real terms and the recently enacted tax changes included in the Deficit Reduction Act of 1984.
- o Growth in the monetary aggregates M1 and M2 is assumed to be 6.0 percent and 7.5 percent, respectively, during the second half of this year. During 1985 the growth of M1 and M2 is assumed to be 5.5 percent and 7.25 percent, respectively--that is, at the midpoints of the Federal Reserve target ranges announced on July 25.
- o The exchange rate of the dollar is assumed to remain at its present level; the price of crude oil to remain at \$29 per barrel; food prices to rise about 4 percent in 1984 and about 5 percent in 1985 on a year-over-year basis.

Under these assumptions, real economic growth is now forecast to be 6.6 percent over the four quarters of this year and 2.8 percent next year (see Summary Table 1). This represents more rapid growth this year and weaker growth in 1985 than CBO forecast last February, but a stronger recovery overall. The new forecast takes account of the evidence of substantial momentum in the economy, suggesting a continuation of strong economic performance over the next two quarters, and of high interest rates that are expected to damp down growth as 1985 progresses. CBO projects the three-month Treasury bill rate to average about 10 percent this year and to decline very moderately to an average of about 9.7 percent next year. It projects that the rate for AAA corporate bonds will drop by about one percentage point, from slightly above 13 percent in 1984 to an average of about 12 percent in 1985. The principal reason why interest rates should remain so high even as the economy cools down is the high level of Treasury borrowing and the concomitant rapid increase in the outstanding stock of

SUMMARY TABLE 1. THE CBO FORECAST FOR 1984 AND 1985

Economic Variables	Actual		Forecast	
	1982	1983	1984	1985
Fourth Quarter to Fourth Quarter (percent change)				
Nominal GNP	2.7	10.4	10.9	8.2
Real GNP	-1.5	6.3	6.6	2.8
GNP Implicit Price Deflator	4.3	3.8	4.1	5.3
Consumer Price Index, Urban Consumers	4.5	3.3	4.5	5.2

Calendar Year Average (percent)				
Civilian Unemployment Rate	9.7	9.6	7.3	6.7
3-Month Treasury Bill Rate	10.6	8.6	10.0	9.7
Corporate Bond Rate, Moody's AAA	13.8	12.0	13.1	12.4

Treasury debt. Inflation is expected to accelerate somewhat: CBO forecasts a 4.1 percent rise in the Gross National Product (GNP) implicit price deflator through this year and a 5.3 percent rise through 1985. The civilian unemployment rate is projected to fall from an average of 7.3 percent this year to 6.7 percent in 1985.

Projections for 1986-1989

The CBO projections for 1986-1989 assume moderate noncyclical growth at rates approximating average postwar economic performance. The

essential features of these projections can be summarized as follows:

- o Over the four-year period, real GNP grows on average at about 3.1 percent per year.
- o Nominal GNP growth fluctuates in a narrow range, averaging 8.1 percent per year.
- o The civilian unemployment rate drifts down slowly through 1988 and then levels off at 6.3 percent.
- o Inflation--as measured by the Consumer Price Index, Urban Consumers (CPIU)--remains virtually flat at 4.8 percent per year.
- o Inflation-adjusted interest rates are held constant at their levels at the end of 1985 and, because the inflation rate remains flat, so do nominal interest rates.

It should be noted that the 1986-1989 projected growth rate is chosen to be consistent with the assumption that the average growth rate for the seven years after the trough in late 1982 is exactly equal to the average growth rate of 4 percent per year experienced in the seven years following the troughs of the first six postwar recessions. This assumption is made despite the fact that the 1983-1984 recovery has proceeded thus far at an above-average pace. History suggests, however, that the rate of growth in the first six quarters of a recovery is not a good predictor of economic performance during the subsequent five-and-a-half years. Some initially rapid recoveries were followed quickly by below-average growth, while other rapid recoveries were followed by above-average growth over the subsequent five-and-a-half year period.

Sources of Uncertainty in the Forecast

Risks are inherent in any economic forecast, but the economic volatility of the past decade has made forecasting particularly difficult. Events could easily turn out much better or worse than indicated by CBO's current forecasts and projections.

Should inflation turn out to be lower than expected, or should real interest rates drop toward more historically normal levels, the expansion might not slow as soon or as substantially as forecast by CBO. On the other hand, sustained strong growth would bring the economy close to levels of capacity and labor-force utilization that have sometimes been associated

with accelerating inflation in the past. If this should occur in the face of a non-accommodating monetary policy, the subsequent slowdown in real growth could be more severe than anticipated. In addition, there is always the risk of inflationary shocks emanating from the agricultural or energy sectors. In the near future, however, the probability of sudden large changes in food or energy prices--in either direction--appears low.

The CBO forecast assumes that the United States will continue to rely heavily on foreign capital to help finance large federal deficits and growth in domestic capital formation. A curtailment of net capital inflows--either because of reduced confidence in the U.S. economy or enhanced opportunities in other countries--would precipitate a fall in the dollar's value and lead to increases in U.S. interest and inflation rates. While a depreciation of the dollar would improve the U.S. international trade position, higher interest rates and stronger inflationary pressures could disrupt the U.S. recovery. CBO's forecast does not anticipate such developments, but their possibility has to be recognized as one of the risks on the horizon.

While recently enacted legislation has improved the deficit outlook, federal borrowing will still remain extraordinarily high without further deficit reducing actions. Such large borrowing portends continued high real interest rates, which would hold domestic capital formation below the levels that could otherwise be attained. It also generates uncertainty about future tax, spending, and monetary policies and casts a shadow over what has so far been an impressive recovery.

The Budget Outlook

The budget outlook has improved since last February, when CBO projected the unified budget deficit to rise from \$189 billion in fiscal year 1984 to \$197 billion in 1985 and to \$308 billion in 1989. The Deficit Reduction Act of 1984 and new information about the economy have combined to alter the picture. CBO's revised baseline projections show budget deficits of \$172 billion in fiscal year 1984, \$178 billion in 1985, and \$263 billion in 1989 (see Summary Table 2). Last February's projections set the deficits in 1984, 1985, and 1989 at 5.3, 5.0, and 5.7 percent of GNP, respectively, in contrast to current projections of 4.8, 4.5, and 4.9 percent in those three years. (Detailed discussion of the two projections is contained in Chapter III.)

Over the six-year period from 1984 to 1989, the revised baseline deficits are cumulatively \$166 billion lower than those projected by CBO in February. Increased revenues and reduced outlays in each year account for

SUMMARY TABLE 2. BASELINE BUDGET DEFICIT PROJECTIONS,
FEBRUARY AND AUGUST (By fiscal year
on a unified budget basis)

Projections	1983	1984	1985	1986	1987	1988	1989
Billions of Dollars							
August Baseline Projections	195	172	178	195	216	238	263
February Baseline Projections	195	189	197	217	245	272	308

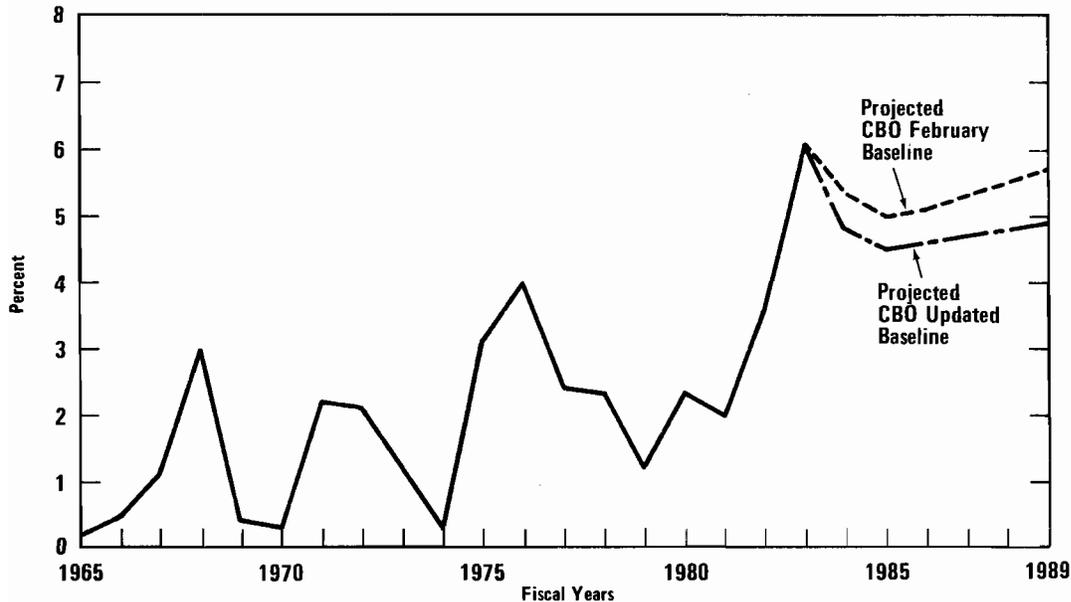
Percent of GNP							
August Baseline Projections	6.1	4.8	4.5	4.6	4.7	4.8	4.9
February Baseline Projections	6.1	5.3	5.0	5.1	5.3	5.5	5.7

the difference in the two projections, with revenue revisions contributing about two-thirds of it.

The deficit reduction from the legislation enacted in 1984 (including the savings in debt service that should result from it) more than accounts for the \$166 billion improvement from the February projections. Changes in economic assumptions contribute importantly to narrowing the deficit in 1984, but they have almost no net effect in 1985. After 1985, changes in economic assumptions actually add to projected deficits. The main reason for this pattern is that, with interest rates higher than those projected in February, the compounding effect on debt-service costs begins to overcome the beneficial effects on federal revenues and outlays of faster-than-projected growth in the fiscal years 1984-1985 period.

Even though deficit-to-GNP ratios in the 1984-1989 period are now projected to be lower, they will remain at exceedingly high levels by peacetime historical standards (see Summary Figure 1). As a consequence, the federal government's demands for credit will remain extremely large. Federal borrowing is projected to fall from its peak of 6.4 percent of GNP in 1983 to 4.8 percent in 1985 and then to start climbing again. This continuing, massive borrowing is mirrored in a rapid accumulation of federal debt, roughly four-fifths of which is held publicly. Publicly held federal debt is projected to increase from \$1.3 trillion in 1984 to \$2.5 trillion in 1989, or from 35.4 percent of GNP in 1984 to 46.0 percent in 1989--as compared to 37.3 percent and 49.0 percent, respectively, projected by CBO in February (see Summary Figure 2).

Summary Figure 1.
Federal Deficit as a Percentage of GNP



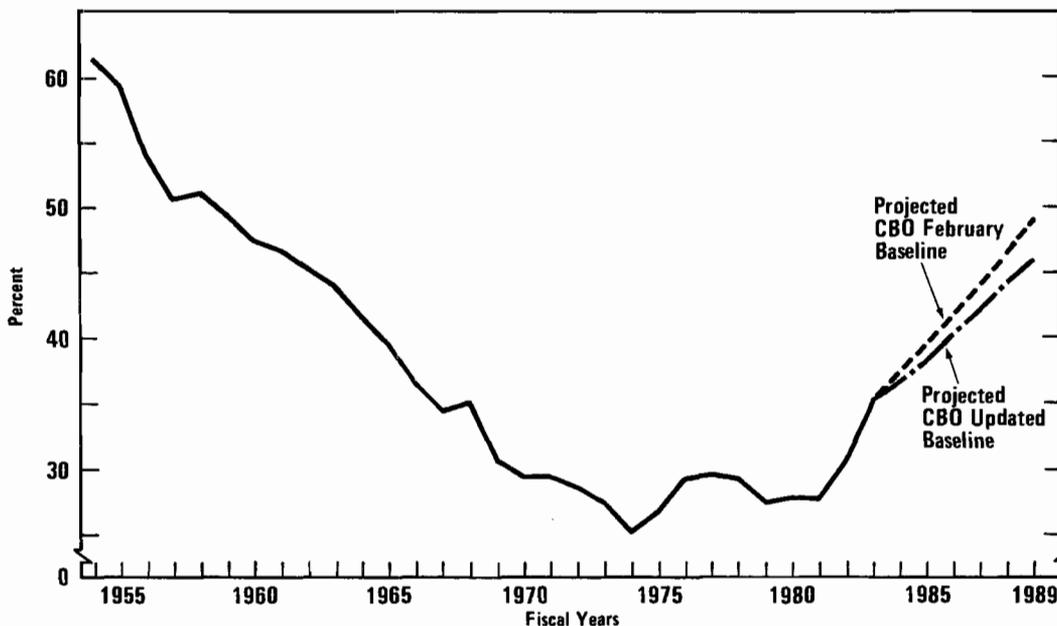
SOURCE: Congressional Budget Office.

This swift accumulation of debt (held both by the public and by various government accounts), along with the compounding effect of interest rates higher than previously projected, will result in a steep climb in net interest payments by the federal government. In CBO's current projections, federal net interest payments as a share of GNP exhibit a path similar to the one projected in February, rising from 3.1 percent this year to 4.0 percent in 1989 (see Summary Figure 3). Since total federal outlays are now projected to expand less rapidly, however, the proportion of interest payments in budget outlays is now projected to rise from 13.1 percent in 1984 to 16.4 percent in 1989.

Some Caveats

Baseline budget projections explicitly assume that spending and tax policies currently in place will remain unchanged throughout the projection period. Final action on the fiscal year 1985 budget resolution and appropriation bills will produce some changes in projected outlays and

Summary Figure 2.
Federal Debt Held by the Public as a Percentage of GNP



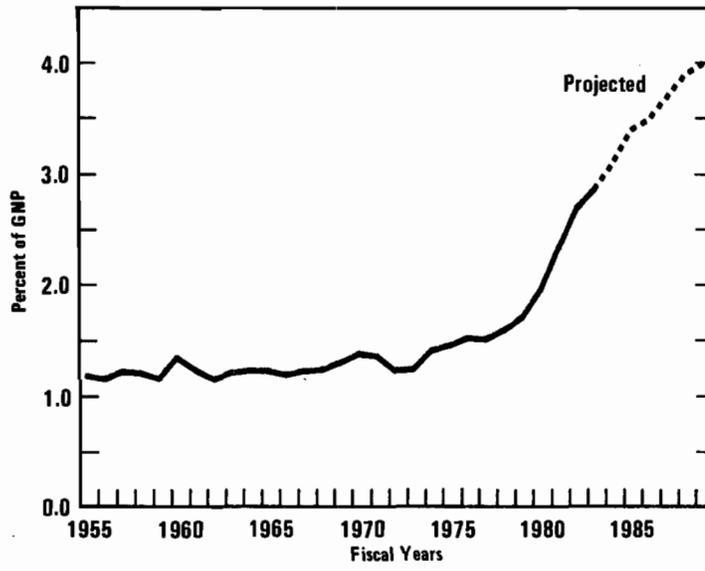
SOURCE: Congressional Budget Office.

deficits, but these policy changes are not likely to alter greatly the longer-term budget outlook.

In addition to further actions on the 1985 budget, the baseline projections will change if the economy performs differently than assumed. Relatively small changes in some of the key variables could have large budget effects. ^{1/} Thus, the uncertainties in the CBO economic forecast discussed earlier translate into corresponding uncertainties in the budget projections. For example, if interest rates rise one percentage point above the level projected by CBO (other things remaining the same), this would add \$4 billion to the baseline budget deficit for 1985 and \$26 for 1989. (For more details, see Chapter III.) Further legislative actions aimed at raising revenues or curtailing spending would not only reduce the string of budget deficits directly but, by influencing key economic variables (primarily interest rates), they could have a powerful secondary effect on the budget outcome and result in budget deficits substantially lower than those currently projected.

1. A detailed discussion of the sensitivity of the budget projections to economic circumstances can be found in Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1985-1989 (February 1984), Chapter IV.

Summary Figure 3.
Federal Net Interest
Payments



SOURCES: Office of Management
and Budget; Congres-
sional Budget Office.

CHAPTER I. THE ECONOMIC OUTLOOK

Rapid growth, falling unemployment, and low inflation characterized the economy in the first half of 1984. Economic growth actually accelerated during this period, an unusual development in the second year of a recovery: real growth in the first two quarters of this year was close to a 9 percent rate, compared to 6.3 percent over the four quarters of 1983. The civilian unemployment rate fell to 7.1 percent in June, the lowest level in four years, while inflation (as measured by growth in the GNP fixed-weight deflator) was only 4.2 percent at an annual rate during the first two quarters of 1984.

Rapid growth and low inflation in 1984 have been accompanied, however, by very high and rising interest rates. Short-term interest rates at midyear were about one percentage point higher than in December, and long-term rates were as much as two percentage points higher. This combination of rising nominal interest rates and decelerating inflation resulted in a sharp rise in real short-term interest rates.

THE ECONOMIC FORECAST THROUGH 1985

CBO's midyear forecast reflects developments in the economy that have taken place since CBO's previous forecast of last winter. It calls for continued rapid real growth in the remainder of this year--though not at such high rates as during the first half--with a gradual slowdown continuing through 1985. The key factors underlying the expected slowdown are the persistence of high interest rates and the assumption that money growth rates will slow in keeping with the Federal Reserve Board's announced policy. Interest rates are expected to remain high this year, and then to move down slowly during 1985, while inflation is projected to rise moderately next year, largely because the favorable impact of an appreciating dollar is expected to diminish.

The Forecast Assumptions

CBO's forecast for 1984-1985 is based on the following assumptions about government policies:

- o With respect to fiscal policy, unified budget outlays are estimated to be \$845 billion in fiscal year 1984 and \$929 billion in 1985.

Revenues are estimated at \$673 billion in 1984 and \$751 billion in 1985. (These estimates reflect recently enacted tax and spending changes included in the Deficit Reduction Act of 1984.) 1/

- o With respect to monetary policy, growth in the monetary aggregates M1 and M2 is assumed to be 6.0 percent and 7.5 percent, respectively, during the second half of this year--leaving M1 somewhat above the midpoint of the Federal Reserve's target range and M2 slightly lower than the midpoint for all of 1984. During 1985, M1 and M2 are assumed to grow 5.5 and 7.25 percent respectively--the midpoints of the tentative target ranges announced on July 25.

In addition, the short-run forecast incorporates the following assumptions about economic trends:

- o Food prices will rise about 4 percent this year, and 5 percent next year, on a year-over-year basis;
- o The world price of oil will hold at \$29 per barrel during the forecast period;
- o The value of the dollar in international exchange markets will remain at the present high level.

These assumptions are generally similar to those used in CBO's forecast last winter, with three significant differences: First, the impact of the Deficit Reduction Act of 1984 has been incorporated in the current budget assumptions. Second, because of developments in the first half of 1984, M1 growth is now slightly higher and M2 growth is slightly lower than were assumed previously for 1984. Finally, the dollar exchange rate, which CBO expected in its February forecast to start declining in the second half of 1984, is now assumed to remain unchanged.

The Forecast

CBO expects economic growth to slow over the next 18 months, mainly because of continued high interest rates (see Table I-1). Over the four quarters of this year, growth is now forecast to be 6.6 percent, slowing to 2.8 percent next year. Short-term interest rates, as measured by the three-month Treasury bill rate, average about 10 percent this year and

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1. For a detailed analysis of budget estimates, see Chapter III.

TABLE I-1. CBO FORECASTS FOR 1984 AND 1985

Economic Variable	Actual		Forecast	
	1982	1983	1984	1985
Fourth Quarter to Fourth Quarter (percent change)				
Nominal GNP	2.7	10.4	10.9	8.2
Real GNP	-1.5	6.3	6.6	2.8
GNP Implicit Price Deflator	4.3	3.8	4.1	5.3
Consumer Price Index				
Urban consumers	4.5	3.3	4.5	5.2
Urban wage and clerical workers	4.4	2.9	3.7	5.2
Calendar Year Average (percent)				
Civilian Unemployment Rate	9.7	9.6	7.3	6.7
3-Month Treasury Bill Rate	10.6	8.6	10.0	9.7
Corporate Bond Rate (Moody's AAA)	13.8	12.0	13.1	12.3

slightly less next year. Long-term interest rates, as measured by the AAA corporate bond rate, average around 13 percent this year and slightly above 12 percent next year. The price level, as reflected in the GNP implicit price deflator, is now forecast to rise 4.1 percent during the four quarters of this year and 5.3 percent next year. The civilian unemployment rate averages 7.3 percent in calendar year 1984 and 6.7 percent in 1985.

Substantial momentum in the economy should lead to continued robust performance over the near term for a number of reasons:

- o Investment, particularly in shorter-lived equipment, is being encouraged by the recent changes in tax laws, increases in capacity utilization, and strong gains in corporate profits;
- o Consumer spending is being buoyed by rapid gains in employment, real incomes, and recent tax reductions;
- o Growth in defense purchases continues to be strong;
- o Significant pent-up demands still remain for new housing and some consumer durable goods;
- o Inventories generally are lean. This suggests that there may be increases in production to maintain stocks, and that increases in final demands are likely to translate quickly into increased production and employment.

Nevertheless, while most indicators of economic activity remain strong, high interest rates are already beginning to retard growth in some sectors of the economy. Both single-family housing starts and sales of homes have weakened somewhat over the past few months, and the pace of nonresidential construction seems likely to slow later this year. Net exports may continue to deteriorate throughout the remainder of 1984, mainly because the high value of the dollar in foreign exchange markets has greatly reduced the competitiveness of U.S. export and import-competing industries.

Further, some factors that led to strong growth during the last 18 months are expected to slow the pace of growth over the next 18 months:

- o The farm sector should complete its recovery from last year's drought-affected harvest;
- o Auto sales, a strong source of growth earlier this year, are not expected to rise as rapidly next year; and
- o The rapid buildup of inventories is expected to slow later this year in the face of high interest rates and weakening final demands.

If there are no major financial shocks, the transition to slower growth next year should be smooth because no major imbalances--such as an "overhang" in inventories, or serious production bottlenecks--are likely to develop.

Inflation is expected to be somewhat higher next year, largely because the moderating influences of falling food prices and rising exchange rates should be greatly diminished in 1985. Because of strong final demands, profit margins are likely to continue expanding during the year. On the other hand, improved productivity growth is expected to contribute significantly to holding down unit labor costs. (An analysis of recent developments and of the likelihood of increased inflation over the next few years can be found in Chapter II.)

UNCERTAINTIES IN THE FORECAST

The major uncertainties in CBO's forecast center around the behavior of inflation and interest rates over the next 18 months. A key element is the outlook for inflation. Some analysts believe the current economic expansion is nearing a point where resource constraints will lead to intensified inflationary pressures. Estimates of the level of resource utilization that cause an acceleration of inflation are, however, inherently imprecise. Considerable slack still exists in the economy so that the moderate growth projected by CBO for next year need not in itself be inflationary.

A closely related element is the response of the monetary authority to a possibly higher rate of inflation in the coming months. The Federal Reserve has indicated that it would view a marked rise in inflation with great concern, and its own range of forecasts does not show inflation rising sharply next year. CBO's forecast sees the rise in inflation in 1985 as being moderate and accompanied by a marked slowdown in real growth. For that reason, a major tightening of monetary policy seems unlikely.

Even if there is no significant tightening in monetary policy, the tension between fiscal and monetary policy will persist and could combine with growing private demands for credit to bring about higher interest rates than forecast by CBO. On the other hand, the reasons for the very high prevailing real interest rates are not fully understood. If these unknown factors unwind quickly, there remains the distinct possibility that interest rates could fall quickly toward levels more in accord with historical experience.

One important consequence of the current mix of fiscal and monetary policy is the reliance on foreign capital inflows to finance domestic credit needs. Should these inflows slow down, the value of the dollar on world financial markets could decline--resulting in higher domestic inflation and perhaps higher interest rates (see box).

THE EFFECTS OF A SHARP DOLLAR DEPRECIATION

Most analysts agree that international capital flows, rather than international trade flows, currently dominate the determination of dollar exchange rates. Net capital inflows have sustained the dollar's strength despite record U.S. trade and current account deficits. Should these capital inflows cease, the dollar could drop dramatically on international exchange markets. Domestic inflation and interest rates could rise, and growth in real output could slow temporarily.

Foreign capital is attracted to this country (and domestic capital is discouraged from leaving it) for many reasons, the most important of which is thought to be higher U.S. interest rates favoring the dollar over other currencies. So far the net inflow of capital has been large enough to finance a substantial proportion of federal deficits and additions to private debt in the United States. Yet it is by no means certain that these large net inflows can be sustained at current interest-rate differentials. Some analysts fear that foreign investors may become reluctant to continue shifting ever larger shares of their portfolios into dollar assets. A diminishing inflow of financial capital would lower the international value of the dollar and could put upward pressure on U.S. interest rates as well. Added to the pressure on the dollar from the U.S. current account deficit, this could cause a large and precipitous drop in the dollar's external value. A sharp drop in the dollar could change the economic outlook considerably.

In the foreign-trade sector, the short-run effect of dollar depreciation would be to temporarily increase the U.S. trade deficit, given the time it takes for trade flows to adjust to exchange rate changes. Within a year or so, however, the trade balance should begin to improve. A 10 percent depreciation of the dollar should improve the trade balance by roughly \$15 billion to \$20 billion in the second year (as compared to an estimated merchandise trade deficit of about \$100 billion dollars in 1984).

Depreciation of the dollar would mean higher import prices, as well as higher prices for import-competing goods. A rough rule of thumb is that a 10 percent reduction in the value of the dollar would increase the overall price level (as measured by the GNP implicit price deflator) by about 1 percent within two years.

A sharp drop in the dollar's value could have additional effects on the economy in general and on financial markets in particular, depending on how the inflationary effects were handled by the Federal Reserve. If the central bank left its monetary targets unchanged, domestic interest rates would probably rise.

The effect on international capital flows would depend on the reactions of investors abroad. If the dollar declined sufficiently to ease expectations of further decline, this might actually enhance the desire to hold dollar assets. In contrast, if investors expected the dollar to decline further, they would continue to move out of dollar assets. This would cause net capital inflows to diminish and could lead to additional upward pressure on U.S. interest rates.

Other threats to continued expansion include the possibility of a large increase in world oil prices, a prolonged auto strike, or difficulties arising from the debt situation of the developing countries. At the moment, the probability of a major oil price shock or a prolonged auto strike does not seem high. Indeed, recent oil spot prices suggest that a decline in world oil prices is more likely than a rise. A loss of confidence in U.S. money-center banks, however, might create instability in capital markets; the resulting uncertainty could reduce investment and real growth. The difficulties being experienced by some export and import-competing industries could lead to increased protectionist pressures, which would reduce world trade and retard economic growth both here and abroad.

Not all of the uncertainties are on one side of the ledger. For example, the dollar could rise still further on world exchange markets, and food or oil prices could decline. Moreover, many analysts see a period of lowered wage norms and falling inflationary expectations ahead that could result in very good inflation performance next year. If inflation should be lower than expected, real growth in 1985 could be higher than projected.

ECONOMIC ASSUMPTIONS FOR THE 1986-1989 PERIOD

In addition to its 1984-1985 forecast, CBO has prepared medium-term projections for the 1986-1989 period. These projections assume moderate noncyclical growth that mirrors previous postwar recoveries. Specifically, CBO projects that growth of real GNP from the fourth quarter of 1982--the recession trough--to the fourth quarter of 1989 will average 4 percent per year, the average of the first six seven-year recovery periods in the postwar era. Actual growth will most likely be either higher and lower than the projections at some point in the period.

These projections are not meant to represent a set of goals for policymakers. Moreover, because they are based on historical experience, they may not be precisely consistent with today's fiscal and monetary policies. Indeed, the large and persistent deficits implied by CBO's estimates of current policy (see Chapter III) could pose a substantial threat to investment and long-run economic growth.

In order to offset the stronger growth in CBO's updated forecast and still remain consistent with the average historical pattern, the 1986-1989 path shows slightly less growth than did CBO's projections of last winter. It may be argued that the recent strong real growth in the economy suggests a profile of growth above the postwar average of 4 percent over the entire projection period. But as GNP nears its full-capacity potential in the outyears, little room will be left for any significant additional growth.

Moreover, historical experience provides little guidance on the persistence of strong growth in the later stages of a recovery. The recovery that began in the fourth quarter of 1949, for example, which averaged a strong 4.7 percent per year over the ensuing seven-year period, slowed markedly to below average growth after the first two years of the expansion. Indeed, after a recession in 1954, the economic growth averaged only 3 percent for the next seven years. On the other hand, the recovery from the 1961 trough resulted in above average growth for the next five years and an average rate of growth of 5 percent. In the 1970s, the recovery from the 1970 trough was broken by the recession in 1974-1975, while the seven-year period since 1975 includes the short recession in 1980 and that of 1981-1982.

Moderate real growth in the outyears, averaging 3.1 percent, is consistent with an unemployment rate that dips to 6.3 percent toward the end of the period. The CBO projection shows inflation stabilizing at 4.8 percent in the 1987-1989 period, in part because unemployment is assumed to decline to a range in which most economists believe wage growth will show no further deceleration.

CBO's projections also assume that no further price shocks will occur: that food prices will grow at the rate of inflation, and fuel prices will remain flat through 1986 and thereafter rise at the inflation rate. In addition, they assume that the labor force will continue to grow at a decreasing rate as the "baby boom" cohorts mature, and this demographic change is presumed to be accompanied by faster growth in labor productivity, compared with the 1970s. Thus while the labor force would grow at an average rate of less than 1.5 percent per year for the 1986-1989 period (down from the 2.7 percent experienced during the 1970s), trend productivity would rise at approximately a 1.7 percent annual rate over this period, compared to estimates of trend productivity growth ranging from 1.0 to 1.5 percent in the 1970s. This improvement in productivity would result in part from an increase in worker quality as the population ages, as well as from a further increase in the ratio of capital to other factors of production.^{2/} The assumption about productivity growth is especially uncertain, however, because its decline during the 1970s has never been adequately explained.

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2. Some of the reasons for the increase in capital relative to other factors of production are: the slowdown in labor force growth, which raises the capital-to-labor ratio; strong economic growth and the recent business tax law changes, which spur investment growth; and a lessening need to divert investment toward environmental and energy-efficiency goals as a larger proportion of the capital stock meets these needs.

The projections, which include estimates for income shares of GNP, are shown in Table I-2 and Figure I-1. The essential features of the projections are:

- o Nominal GNP will grow at a slightly decreasing rate after 1985, averaging 8.1 percent per year in the projection period.
- o The civilian unemployment rate will decline very gradually until 1988 and then level off at 6.3 percent.
- o Inflation will fall slightly from its peak in 1985 to 4.8 percent in 1987, but will decline no further because of the high levels of economic activity.
- o Interest rates will be flat in the outyears, at levels projected for the end of 1985.
- o The share of wages and salaries in GNP will decline slightly over the period, to 48.6 percent, while that of corporate profits will rise to 8.1 percent in 1986 and then will remain essentially unchanged. The share of other taxable income--largely interest income--will remain near 20 percent over the projection period.

These new economic projections differ from CBO's February projections in several important respects (see Table I-3). The level of real GNP is substantially higher in the 1984-1985 period, in part because of the July revisions in the Commerce Department's estimates (which showed real GNP \$1.6 billion higher for the first quarter of 1984 in 1972 dollars), but largely because of the strong growth that took place during the first half of this year. The new projection for real GNP in 1989 is the same as February's projection implying faster growth in 1984 but slower growth toward the end of the projection period. The civilian unemployment rate in the revised forecast is about half a percentage point lower in the first three years of the projection period and about 0.3 percent lower in the final three years than was last February's projection. The price level is slightly lower in the revised forecast, largely because of the lower inflation now forecast for this year, with the result that nominal GNP falls below last winter's projection. Finally, interest rates in the new projection are substantially higher throughout the projection period than those projected last February.

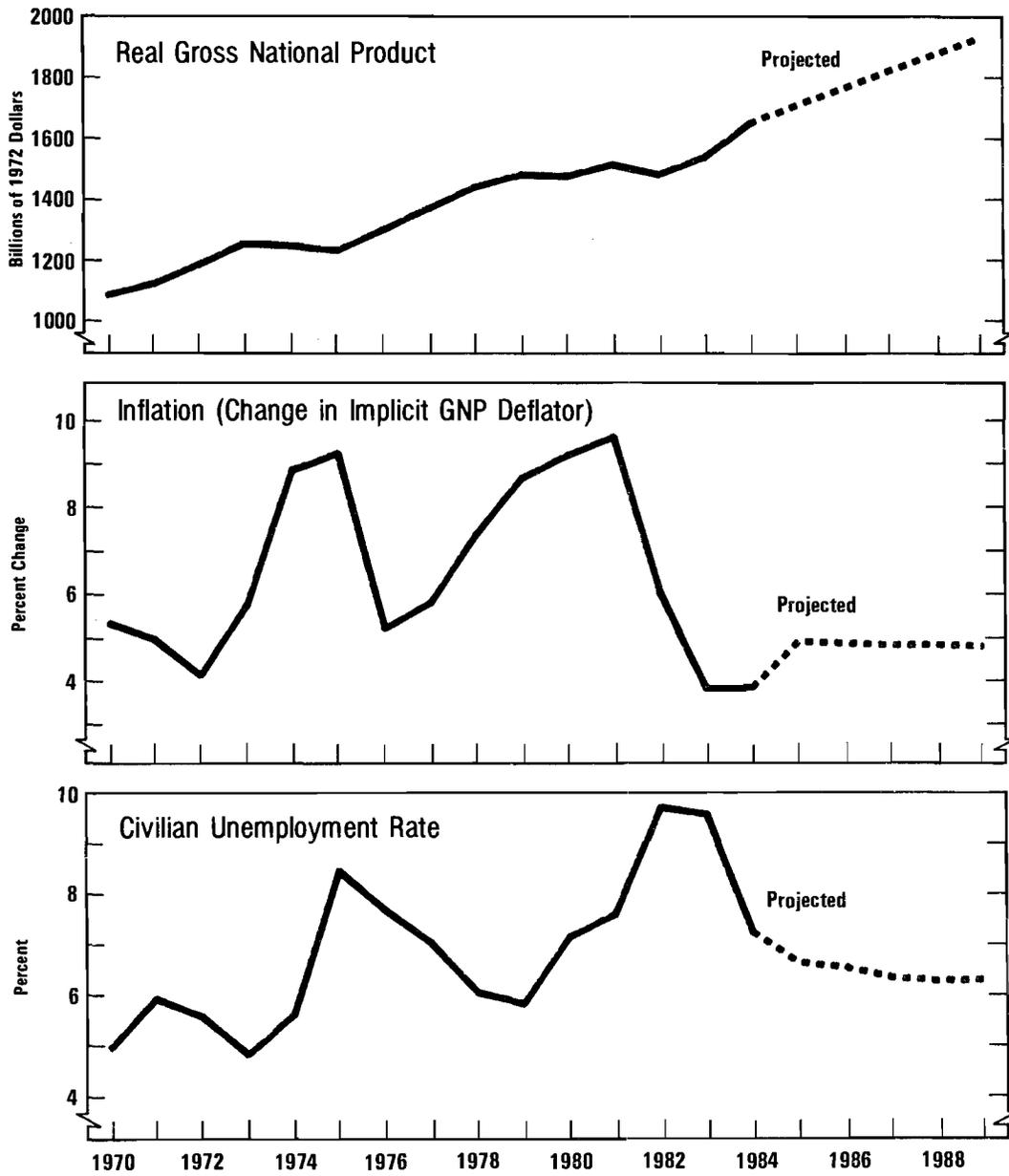
TABLE I-2. MEDIUM-TERM PROJECTIONS FOR CALENDAR YEARS 1986-1989

Economic Variable	Actual	Forecast		Projected			
	1983	1984	1985	1986	1987	1988	1989
GNP (billions of current dollars)	3305	3683	4004	4329	4687	5064	5466
GNP (percent change, year over year)	7.7	11.5	8.7	8.1	8.3	8.0	7.9
Real GNP (percent change, year over year)	3.7	7.3	3.6	3.1	3.3	3.1	3.0
GNP Implicit Price Deflator (percent change, year over year)	3.8	3.9	4.9	4.9	4.8	4.8	4.8
CPI-U (percent change, year over year)	3.2	4.4	5.0	4.9	4.8	4.8	4.8
Civilian Unemployment Rate (percent)	9.6	7.3	6.7	6.6	6.4	6.3	6.3
3-Month Treasury Bill Rate	8.6	10.0	9.7	8.9	8.9	8.9	8.9
Corporate Bond Rate (Moody's AAA)	12.0	13.1	12.3	11.5	11.5	11.5	11.5
Corporate Profits <u>a/</u> (percent of GNP)	6.8	7.9	7.9	8.1	8.1	8.0	8.1
Wage and Salary Disbursements (percent of GNP)	50.2	49.2	49.1	49.0	48.9	48.7	48.6
Other Taxable Income <u>b/</u> (percent of GNP)	19.0	19.7	20.0	20.1	20.1	20.1	20.0

a. Corporate profits with inventory valuation and capital consumption adjustments, on a national income and product accounts basis. To arrive at "book" profits, the basis for tax estimates, these adjustments are removed.

b. Other taxable income consists of personal interest income, including interest on the public debt, rent, dividends, and income of unincorporated businesses.

Figure I-1.
CBO Economic Projections



SOURCES: U.S. Department of Commerce, Bureau of Economic Analysis;
U.S. Department of Labor, Bureau of Labor Statistics; Congressional Budget Office

TABLE I-3. CHANGES IN ECONOMIC ASSUMPTIONS SINCE FEBRUARY (By calendar year)

	1984	1985	1986	1987	1988	1989
GNP (billions of current dollars)	3,683	4,004	4,329	4,687	5,064	5,466
Change from February	32	9	-10	-17	-20	-15
Real GNP (billions of 1972 dollars)	1,647	1,706	1,759	1,817	1,872	1,928
Change from February	30	23	17	14	7	0
GNP Implicit Price Deflator (index level, 1972=100)	224	235	246	258	271	284
Change from February	-2	-2	-3	-3	-2	0
CPI-W (index level, 1967=100)	307	323	339	355	372	390
Change from February	-4	-4	-4	-4	-3	-1
Civilian Unemployment Rate (percent)	7.3	6.7	6.6	6.4	6.3	6.3
Change from February	-.5	-.6	-.4	-.4	-.3	-.2
3-Month Treasury Bill Rate (percent)	10.0	9.7	8.9	8.9	8.9	8.9
Change from February	1.1	1.1	.5	.7	.9	1.1
Taxable Personal Income (billions of current dollars)	2,539	2,766	2,988	3,231	3,485	3,751
Change from February	36	27	8	-2	-13	-21
Wages and Salaries	1,814	1,967	2,120	2,290	2,467	2,656
Change from February	4	-3	-15	-14	-16	-13
Nonwage Income	725	799	868	941	1,017	1,095
Change from February	32	30	22	12	2	-8
Economic Profits (billions of current dollars)	290	316	349	380	408	445
Change from February	24	10	5	-8	-6	-1

CHAPTER II. THE CURRENT SITUATION

INTRODUCTION

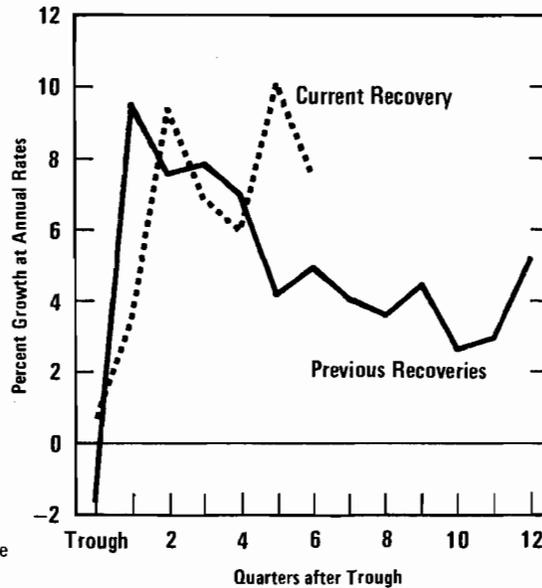
The pace of economic activity picked up sharply in the first half of the year (see Figure II-1). Moreover, it did so in the face of high and rising real interest rates. What accounts for the economy's rapid growth under these circumstances?

- o The federal deficit has given the economy a fiscal stimulus of near record proportions in peacetime;
- o The falling dollar price of oil and rising dollar exchange rates have improved real growth in incomes and wealth;
- o Gross investment has grown very rapidly, in part because of a backlog of investment demand from the two recessions of the 1980s, but also because of growth in demand for computers and other new technology, while the reduction in business taxes has alleviated the impact of high interest rates on investment;
- o Deregulation of financial institutions and the introduction of new financial instruments such as money-market certificates and adjustable-rate mortgages appear to have softened the impact of fluctuations in interest rates on the housing market.

Historically, residential construction was one of the first sectors to respond to tight credit conditions and high interest rates. But this has not happened recently: residential investment grew rapidly despite high interest rates (even though its share of GNP remains lower than in earlier cycles). Instead, the effects of the high interest rates have been concentrated mainly in the international sector. Rising U.S. interest rates reduced U.S. lending abroad and increased foreign capital inflows, pushing dollar exchange rates to record highs. Along with the slow recovery of the economies of U.S. trading partners, this has led to a deterioration in net exports. The negative effects of the high interest rates, to which the enormous federal deficit contributes, have therefore been concentrated largely in trade-sensitive industries--that is, export and import-competing industries.

Recent changes in financial regulations and tax laws appear to have changed the response of the economy to interest rates. Mortgage lenders

Figure II-1.
Real GNP Growth
in Postwar Recoveries



SOURCES: U.S. Department of
Commerce, Bureau of
Economic Analysis;
Congressional Budget Office

are better able to compete for funds with other sectors of the capital market than they were in earlier periods of high interest rates, while business tax changes have partly offset the effect of high interest rates on business investment. These changes reduce the short-run impact of interest rates on output and employment, and also divert some of that impact from domestic demands to the trade sector.

Nevertheless, the high interest rates mean that the overall cost of investment in nonresidential and residential construction is very high. This may prevent continued growth in investment after the backlog developed during the recession has been worked through.

The low inflation rate in 1984 has enabled the Federal Reserve to accommodate rapid growth in domestic real demands without exceeding its targets for money growth. Inflation has been moderate by recent standards: the GNP deflator increased at a 3.8 percent rate for the first half of 1984, well down from the 7.0 percent average rate in the past five years. But it remains considerably above earlier experience: the average rate of inflation from 1951 to 1969 was 2.3 percent.

The pages that follow begin with an overview of recent developments in output and the components of aggregate demand. A discussion of financial developments, the labor market, and inflation follows. The last section examines recent developments in fiscal policy from the point of

view of their impact on aggregate demand in the economy. For more detail on the budget, see Chapter III.

GNP AND ITS COMPONENTS

With the recent surge in economic activity, output growth in the current recovery now outstrips all but one postwar recovery (that starting in 1949).

GNP grew in the first half of 1984 at a much higher rate--8.8 percent --than is usual at the beginning of the second year of recovery. Indeed, in all but one postwar recovery, growth has slowed in the second year. The exception was the recovery of 1971-1972, when stimulative monetary policy was combined with wage and price controls that temporarily dampened inflation.

GNP growth moderated from 10.1 percent in the first quarter to 7.5 percent in the second. But the quarterly pattern was influenced by unusually strong growth in auto and farm production in the first quarter, followed by low auto production in the second. Indeed, outside these areas, output growth accelerated in the second quarter. 1/

The recovery in the private sector has been characterized by unusual strength in spending for producers' durable equipment and a sharp rise in housing early in the recovery. Net exports have fallen sharply. Inventories, which usually account for a large proportion of GNP changes, have lagged until recently but this year accounted for most of the GNP acceleration (see memo entry in Table II-1).

Consumption

Consumer spending remained relatively strong throughout the recession. Since then, it has maintained its normal large cyclical role in the recovery, accounting for about half of the growth in GNP. Gains have been strongest in durable goods.

-
1. Auto manufacturers decided to close some plants for model changeovers in the second quarter, usually the peak auto production period, instead of the third quarter. Thus auto production, which rose strongly in the first quarter, fell in the second and, on a seasonally adjusted basis, is expected to rise strongly in the third quarter when fewer plant closings than usual are projected.

TABLE II-1. RECESSON AND RECOVERY: CHANGES IN THE COMPONENTS OF REAL GROSS NATIONAL PRODUCT (In billions of 1972 dollars, at annual rates)

	Recession (1981:3 to 1982:4)	Recovery (1982:4 to 1984:2)	1982:4 to 1983:2	1983:2 to 1983:4	1983:4 to 1984:2
Gross National Product	-43.3	161.4	46.0	48.0	67.5
Inventory Change	-42.1	46.1	18.5	13.3	14.3
Final Sales	-1.2	115.3	27.5	34.5	53.3
Consumption	20.6	85.4	29.9	26.2	29.3
Business equipment	-13.5	35.2	7.5	15.9	11.8
Business structures	-3.2	5.8	-3.8	3.3	6.3
Residential	-2.0	21.2	12.6	4.4	4.2
Defense	7.4	7.9	2.9	1.5	3.5
Federal nondefense, excluding CCC	5.7	-8.9	-10.6	-5.6	7.3
State and local	-0.9	0.1	-0.1	0.6	-0.4
State and local	0.1	2.9	-0.6	0.6	2.9
Net Exports	-16.5	-34.1	-10.5	-11.6	-12.0
Exports	-22.6	12.1	0.3	4.0	7.8
Imports	-6.1	46.2	10.8	15.7	19.7

MEMO:					
Inventory Change Plus CCC Purchases <u>a/</u>	-35.5	37.1	8.0	7.1	22.0
Final Sales Excluding CCC Purchases	-7.8	124.3	38.0	40.7	45.6

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

- a. Commodity Credit Corporation (CCC) purchases of stocks of farm products are treated conventionally in the National Income and Product Accounts as a component of federal nondefense purchases and of final sales, although they are in many ways similar to inventory-building by farmers.

The expansion of consumer spending was driven by gains in real disposable income (up 7.8 percent from the second quarter of 1983 to the second quarter of 1984). Tax changes since 1981 have reduced the 1984 federal income tax burden of households by about \$100 billion, and have lowered the effective federal tax rate from 14.1 percent in calendar 1980 to 12.3 percent in the first half of this year, the lowest effective rate since the beginning of 1976. 2/ Moreover, the rapid growth of employment has driven up real wage and salary income, even though in real terms wage-rate increases have been low compared with previous recoveries. Finally, interest income has been higher in this recovery than in the past--a result of both high interest rates and the deregulation of financial institutions, which has given small savers access to higher rates. 3/

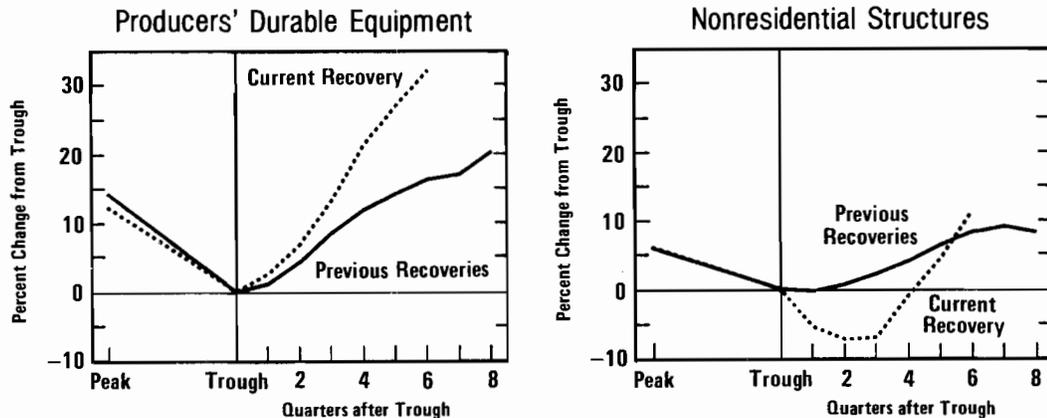
Consumer spending has also been buoyed by increases in household wealth during 1983, which were largely the result of lower nominal interest rates than in the previous year, and accompanying higher stock market prices in the first half of the year. The recent sharp rise in consumer debt, increases in interest rates, and weakness of the stock market may tend to inhibit growth in consumption, but this must be balanced against continued rapid growth in employment and real incomes.

Business Fixed Investment

Real business fixed investment grew unusually rapidly in the first half of 1984. Although investment in structures fell early in the recovery, it grew at a 26 percent annual rate in the first two quarters of 1984 (see Figure II-2). Commercial and, to a lesser extent, industrial building led this latest advance. Investment in producers' durable equipment (PDE), following unusually strong growth during the first year of recovery, registered an 18.5 percent annual rate of growth through the first half of the year. So far, investment in equipment has grown nearly twice as fast as it would during an average upturn.

-
2. The federal income tax cuts have been partially offset by increases of about \$10 billion resulting from the Surface Transportation Act of 1982 and the Social Security Amendments of 1983, as well as by increases in state and local taxes.
 3. Increased flows of interest payments represent income that would, before deregulation, have gone into bank profits rather than directly into household income. In addition, there is no offsetting private cost (such as would reduce profits or proprietors' income) in the case of the growing share of interest income that originates from the federal government.

Figure II-2.
Real Business Fixed Investment



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

NOTE: The peaks and troughs are for N.B.E.R. reference cycles.

Moreover, the outlook indicates continued, though more moderate, strength in investment spending:

- o Business surveys report that planned investment is strong. The McGraw-Hill survey, conducted in May, reports that firms plan to increase investment in 1984 by 19 percent in current dollars over 1983. The Department of Commerce survey, conducted in April and May, reports a planned increase of 14.8 percent.
- o Real net new capital appropriations of large manufacturing firms are up sharply. The first-quarter figures are 14 percent above the fourth quarter of 1983 and 42 percent above the first quarter of 1983. Excluding the petroleum industry, which responds sharply to movements in the prices of oil and natural gas, net new capital appropriations are up 58 percent over the first quarter of 1983.
- o Contracts and orders for plant and equipment, nondefense capital goods orders, and construction contracts for commercial and industrial buildings all show continued strength, despite some monthly variations.

A number of reasons have been advanced to explain the strong showing of investment, but they do not appear to explain it entirely. First, tax

THE USER COST OF CAPITAL

The user cost of capital is a measure of the overall cost of investment that takes account of interest rates as well as tax provisions, depreciation, and other factors.

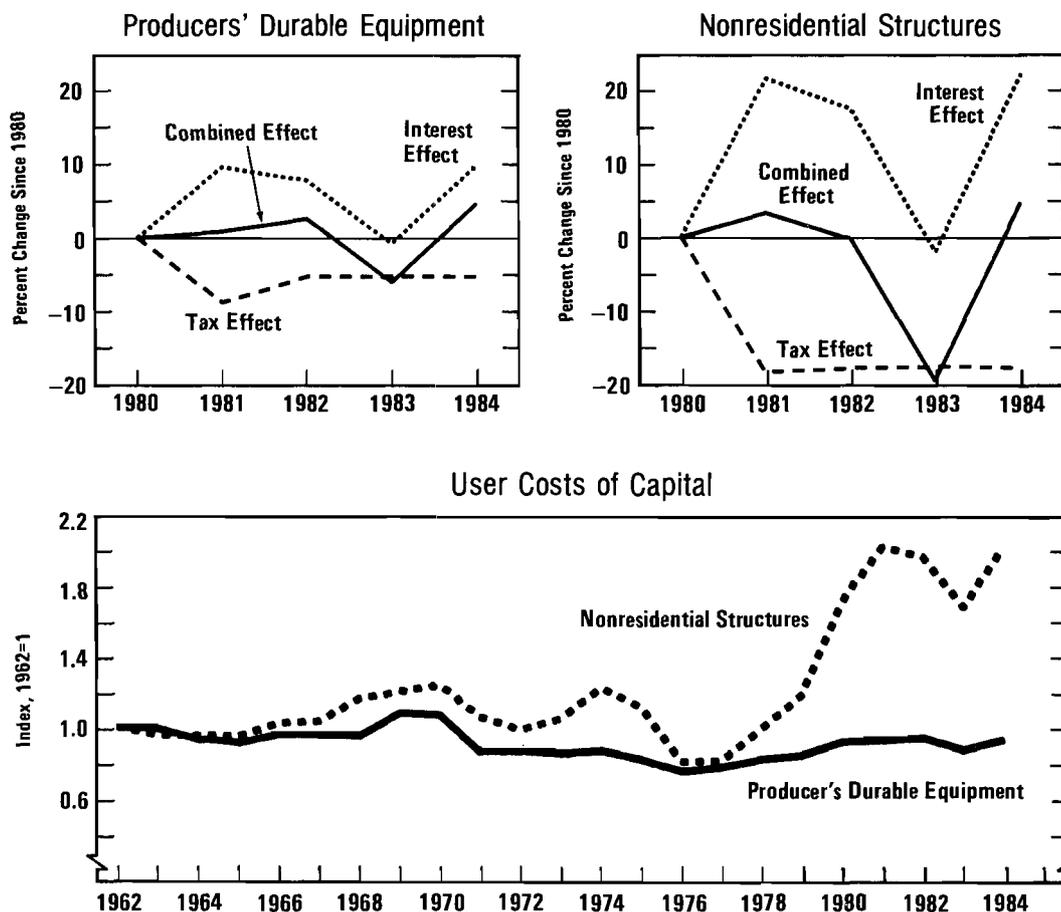
During the past few years, user costs have been affected by large changes in interest rates (see Figure II-3). These have had an especially strong effect on the costs for structures and housing: because these assets have such long lives, interest rates affect their user costs much more strongly than those for equipment. Partly as a result, user costs for long-lived assets since the late 1970s have been higher than they were earlier, while those for equipment have not been significantly different from their earlier levels.

User costs for both structures and equipment have also been affected by the tax changes in the Economic Recovery Tax Act of 1981 and the Tax Equity and Fiscal Responsibility Act of 1982. Taken together, they worked to reduce user costs beginning in 1981, by increasing sharply the value of tax allowances for depreciation for all business capital and increasing investment tax credits for equipment. These cost-reducing effects, however, were offset in 1981 by sharp increases in interest rates, and were not reflected in user costs until interest rates came back down in late 1982 and 1983. Recent increases in rates, moreover, have again increased user costs for both equipment and structures above their 1980 levels.

For a more complete discussion of the user cost concept and of the behavior of the user cost of various capital assets, see Congressional Budget Office Staff Memorandum, The Effects of Changes in Interest Rates on Different Sectors of the Economy (June 1984).

provisions enacted in 1981, as modified in 1982, were favorable to investment. Other things equal, these provisions would have stimulated investment. But these favorable tax effects were largely offset by movements in interest rates (see box). Second, it is said that firms are taking advantage of innovations in technology--especially in computers and electronic

Figure II-3.
Sources of Change in User Costs of Capital



SOURCE: Congressional Budget Office.

NOTE: Changes in the user cost of capital shown above are the result of changes in interest rates and federal tax laws. Values for 1984 were computed on the basis of the first two quarters. The tax life for structures in 1984 was assumed to be 15 rather than 18 years because most structures put in place in 1984 are expected to qualify for the shorter tax life permitted by law.

devices--to make existing capacity more efficient. But while computers claim a large and growing share of investment in equipment, other forms of investment are also strong. Finally, investment usually responds promptly to movements in output relative to capacity--a process known as the accelerator effect. But, although output advanced sharply in the recovery,

capacity utilization fell to its lowest postwar rate during the recession and still remains a little below normal operating levels. Thus, relatively few firms should have needed to invest in new capacity to meet the demand for their output.

Longer-Term Outlook. Over the longer run, the prospects for business investment depend critically on the course of interest rates. If interest rates continue their recent rise, not only will user costs of capital (see box) rise but demand for other kinds of output will also be reduced, inducing a downward accelerator effect on investment. If interest rates follow CBO's projected path, the prospects for investment are somewhat brighter. Current law and CBO projections of interest and inflation rates imply that the user cost of capital equipment should be slightly below its average level since 1962. The outlook for structures is less bright; the incentive to invest in structures has been weakened by the Deficit Reduction Act of 1984, which extended tax depreciation lives from 15 to 18 years. Further, because structures are long-lived, their user cost is relatively sensitive to interest rates. Thus, CBO projections imply that their user cost will be roughly 60 percent higher than the average level since 1962. This would continue the historical trend toward a greater proportion of equipment, and short-lived assets generally, in the investment mix.

Residential Investment

Investment in housing, which led the general recovery in GNP, now shows signs of slowing at a relatively low level. Throughout the upturn, real residential investment has grown at an unusually high rate, and since the beginning of the year has increased at an annual rate of 15 percent (see Figure II-4). This represents a rebound from very low levels, however. Housing investment was only 2.4 percent of GNP in the first quarter of 1982--easily the lowest postwar share. At present, housing investment is 3.8 percent of GNP. This is still below the 1965-1983 average value of 4.0 percent, which suggests that if housing investment is peaking, it will continue to contribute less than its average share to GNP.

Housing recovered in spite of historically high interest rates. Financial innovations discussed in the accompanying box help explain why a supply of mortgage funds was available in the face of high interest rates. At the same time, new kinds of mortgages made the demand for mortgage funds stronger than it might otherwise have been. The principal innovation is the adjustable-rate mortgage (ARM), whose interest rate fluctuates with market interest rates, rather than remaining fixed over the life of the mortgage. ARMs have grown rapidly in importance and today account for 65 percent of new mortgages issued. The typical ARM also has a "buy-down" provision

SUPPLY OF MORTGAGE FUNDS

Deregulation has acted to reduce the impact of high interest rates on housing. Before this deregulation, high rates tended to dry up mortgage supplies. This phenomenon, known as disintermediation, was the result of two facts:

- o Most mortgage money came from thrift institutions, particularly savings and loan associations;
- o The thrifts could not match movements in market interest rates with corresponding movements in the rates they paid on deposits, since they faced regulated ceilings on their deposit rates.

When market interest rates rose, deposit inflows to thrifts were reduced, thus curtailing mortgage lending. See Congressional Budget Office, The Housing Finance System and Federal Policy (October 1983).

Regulatory changes have removed many of these constraints on housing finance, for instance:

- o In July 1978, depository institutions were allowed to issue six-month money-market certificates whose rate closely matched the current yield on six-month Treasury bills;
- o In December 1982, thrifts could offer Money Market Deposit Accounts, which are basically equivalent to money-market mutual funds;
- o Effective October 1, 1983, all interest-rate ceilings and minimum deposit restrictions were eliminated for newly issued, renewed, or enlarged savings accounts that remain on deposit more than 31 days.

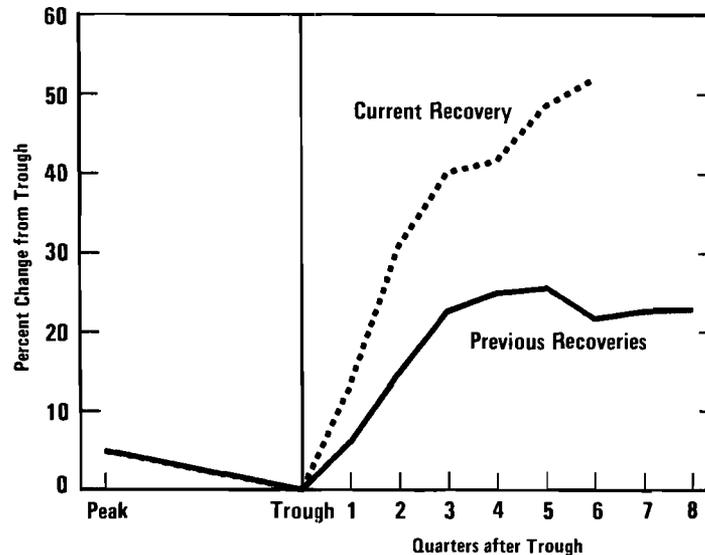
In addition, other financial institutions (banks and secondary markets) have also become more significant sources of mortgage money, reducing the importance of thrift deposits. These changes have reduced disintermediation. Before 1978, when money-market certificates became available, deposit flows to thrifts declined whenever rates rose significantly above the regulated deposit rate ceiling (5.25 percent at that time). This effect was significantly reduced with the advent of the certificates. Net flows of other deposits continued to show a close relationship to interest rates after 1978 (Figure II-5).

The current strength of the housing market despite very high interest rates contrasts sharply with the way it used to collapse when interest rates rose, and suggests that deregulation has done much to stabilize credit flows to housing.

Figure II-4
Real Residential
Investment

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

NOTE: The peaks and troughs
are for N.B.E.R. reference
cycles.



that artificially fixes the rate paid over the first few years at a below-market level--currently about 2 to 2.5 percentage points below the rate on new fixed-rate mortgages. These provisions enable many new homebuyers to qualify for mortgages who would otherwise have had to wait for a fall in interest rates before they could qualify for a fixed-rate mortgage.

While the innovations discussed above will probably reduce the cyclical volatility of housing, they will not eliminate it altogether. In the past, housing has typically peaked in the second year of a recovery, and there are some indications that this may now be occurring:

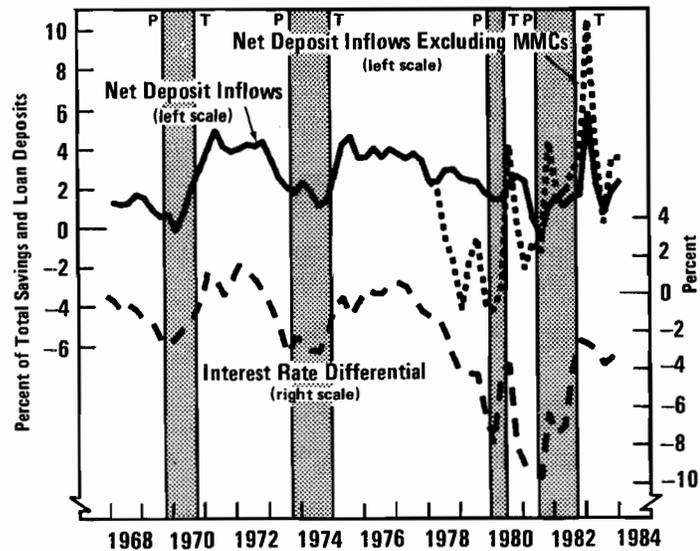
- o Housing starts in the second quarter of 1984 declined from the first quarter;
- o Sales of new homes were weak for four months in a row, and the inventory of unsold homes in June stood at 6.8 months, its highest value in nearly two years;
- o The conventional fixed-rate mortgage commitment rate reported for July was 15 percent, up more than a full percentage point in the last five months.

Longer-Term Outlook. Although short-run housing investment should be less sensitive to fluctuations in interest rates than in the past, the long-

Figure II-5.
 Net Deposit Flows
 to Savings and
 Loan Associations

SOURCE: Federal Home Loan
 Bank Board, Federal
 Reserve Board.

NOTE: The interest rate differ-
 ential is the maximum
 passbook savings rate
 less the 91 day treasury
 bill rate.



run level of housing investment will still largely depend on the level of interest rates. Because housing is so long-lived, its user cost is especially sensitive to interest rates. The 1981 tax law, as amended in 1984, only partially moderated this interest-rate effect for the user cost of rental housing. Moreover, for owner-occupiers, personal tax cuts reduced the value of mortgage interest and property tax deductions, while lower inflation has reduced the anticipated capital gain from holding housing. For these reasons, user cost measures for housing are likely to be significantly higher than in the 1960s and 1970s.

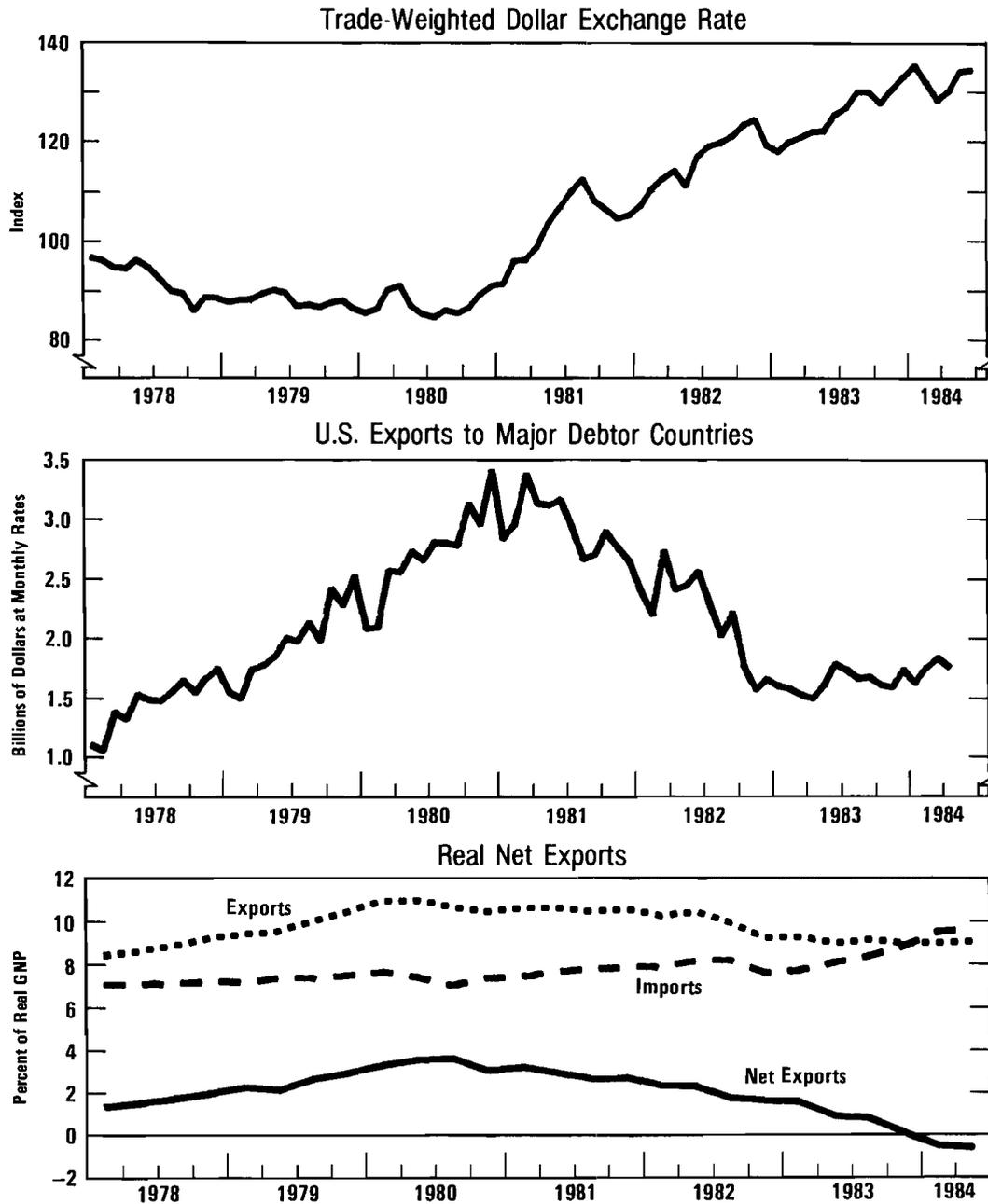
Just as user costs suggest a relatively bleak outlook for housing, so do demographic trends over the next few years. The baby boom generation has passed through the initial stage of household formation, and as a result the growth in the number of potential homebuyers will decline in the future.

Exports

In the six quarters following the trough of the recession, real exports of goods and services have increased by 8.9 percent, slightly below the 9.8 percent rate typical for this stage of previous postwar recoveries. U.S. export performance has been largely determined by three factors:

- o High dollar exchange rates have made it harder for U.S. exporters to sell their goods (see Figure II-6). The trade-weighted

Figure II-6.
 U.S. International Economic Performance



SOURCES: Federal Reserve Board; International Monetary Fund; U.S. Department of Commerce, Bureau of Economic Analysis.

NOTE: Major debtor countries: Mexico, Brazil, Venezuela, Argentina, Poland, Yugoslavia, Chile, Peru, and Philippines.

real exchange rate of the dollar--a trade-weighted average of bilateral exchange rates adjusted for differences in inflation rates--has risen by about 30 percent since mid-1980.

- o The international debt crisis has forced several developing countries to undertake austerity measures. These measures have been partly responsible for the fact that in the first four months of 1984 U.S. exports to major debt-burdened countries were 38 percent below the average levels of 1980 and 1981 (see Figure II-6).
- o U.S. exports have also been damped by the slow pace of economic activity in the developing world and in Europe. In 1983, the European economies grew at only a 1.1 percent rate. Developing economies grew at an 0.8 percent rate, far below the 5 to 6 percent growth rates experienced in the 1960s and 1970s.

Stronger growth among U.S. trading partners should improve the prospects for U.S. exports. The European economies are likely to grow at a 2 percent annual rate for the remainder of 1984 and in 1985, while Japan and Canada should enjoy approximately 4 percent annual growth rates. ^{4/} Developing countries are expected to register a significant increase in growth, moving from 0.8 percent in 1983 to 3.8 percent in 1984 and 1985. ^{5/} Unfortunately, the outlook for debt-burdened developing countries--a major market for U.S. exports--remains dim. Although a mild recovery in demand for U.S. exports seems to be underway, little possibility exists that, in the foreseeable future, exports to these nations will approach the levels of the early 1980s.

Imports

Even as real exports of goods and services increased by \$12.1 billion in the six quarters following the trough of the recession, real imports surged by \$46 billion, resulting in a decline in net exports of \$34 billion (see Figure II-6). While imports normally grow approximately twice as fast as GNP in the early stages of recovery, this time they grew four times as fast. The reasons for the record increase in imports were the much more rapid rate of growth in the U.S. economy than in the rest of the world and the strong

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4. Organization for Economic Cooperation and Development, OECD Economic Outlook (July 1984).
 5. International Monetary Fund, World Economic Outlook (April 1984).

dollar. With the dollar exchange rate making imports attractive relative to domestically produced goods, a large portion of the increase in U.S. demand induced by the recovery has spilled over into the foreign sector. A sizeable improvement in the net export balance cannot be expected until the dollar declines and growth rates converge.

Inventory Change

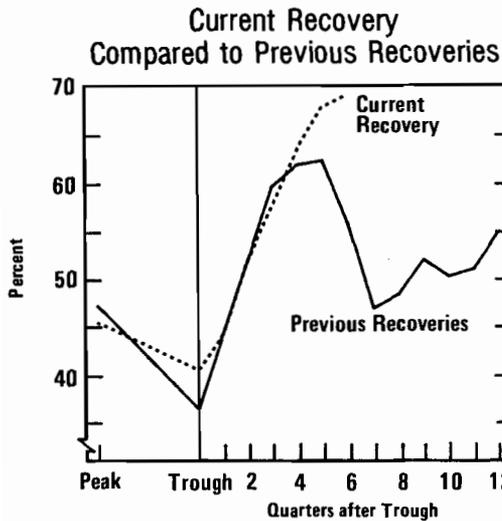
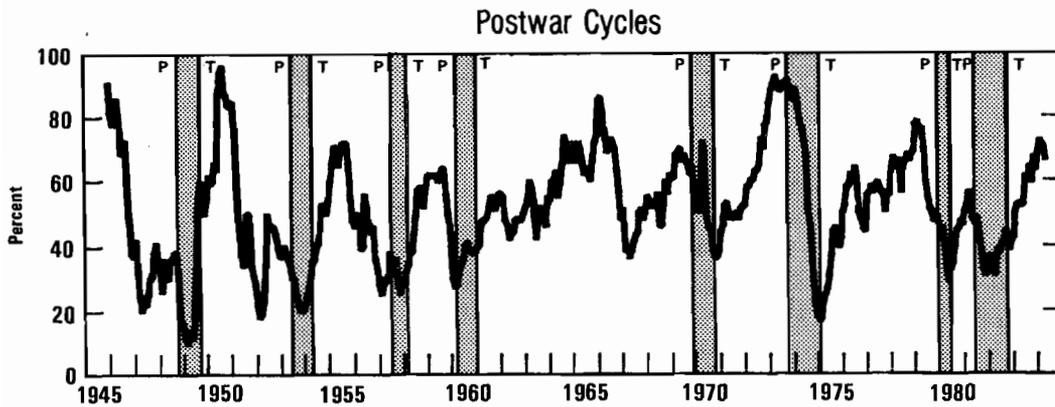
Inventory accumulation began more slowly in the current recovery than in past recoveries. Inventory-sales ratios are still low, and for this reason increases in final sales are likely to be matched quickly by increases in output. In most business cycles, much of the cyclical movement in GNP is attributable to swings in inventory accumulation. So far in this recovery, inventory-sales ratios have followed a roughly normal pattern in the wholesale and retail trade sector, but are well below normal in manufacturing. The unusually low level of manufacturing inventories has already contributed to an increase in delivery delays, which have reached record levels for this stage in the business cycle (see Figure II-7). While manufacturers are probably holding down their inventories in response to the extraordinarily high current level of real interest rates, it seems unlikely that they will be able to cut their inventory-sales ratios much further, even if real rates rise again.

Until recently, the growth of inventories (after adjusting for the transfer of food inventories between the public and private sectors under the Commodity Credit Corporation (CCC) program) lagged behind the growth of final sales. Inventory accumulation accelerated dramatically in the first half of 1984, accounting for nearly all of the acceleration in GNP. But inventory-sales ratios continued to fall, particularly in manufacturing.

GOVERNMENT PURCHASES

Federal Government. Federal purchases of goods and services increased by 47.7 percent in real terms (annual rate) in the second quarter of 1984, following a continuous decline of 10.1 percent during the first five quarters of the recovery. Almost all of this growth, however, reflected purchases of agricultural commodities by the CCC under the farm price support program. Excluding CCC purchases, the annual growth rate of total federal purchases was 7.8 percent in the second quarter of 1984, 5.0 percent during the first half of the year, and 4.2 percent over the four quarters of 1983. Federal defense purchases rose by 8.3 percent in the first half of 1984, while nondefense purchases (excluding CCC) declined somewhat. Relative to the trough, the level of defense purchases has increased by 9.6

Figure II-7.
Vendor Performance



SOURCE: Purchasing Management Association of Chicago.

NOTE: Vendor performance is the percent of purchasing managers reporting slow deliveries. P and T lines represent business peak and trough dates.

percent, while that of nondefense purchases (excluding CCC) has shown no change, on average.

State and Local Government. Purchases of goods and services by these governmental units have grown by only 1.6 percent in real terms since the trough, with all this growth concentrated in the first half of 1984. In comparison, the average increase in state and local purchases during the first six quarters of previous postwar recoveries has been 4.5 percent. Most of the growth in purchases during the first half of this year has been for new

construction, which registered an increase of 20.2 percent (annual rate) that raised this category of spending to its highest level during the recovery.

Recent data revisions by the Commerce Department show much smaller surpluses for the state and local government sector than previously estimated. These surpluses are now estimated to total \$53.9 billion in the first quarter of 1984, compared to the unrevised estimate of \$60.5 billion. Although these balances amount to one-third of the federal deficit, more than \$40 billion represent an accumulation of pension and other trust fund reserves that reduce the need for private retirement savings. To the extent that private saving is reduced, the size of these surpluses overstates their net contribution to gross national saving. Finally, state and local trust fund surpluses have grown steadily throughout the postwar period, and thus do not represent a new source of financing for the federal deficit.

FINANCIAL MARKETS

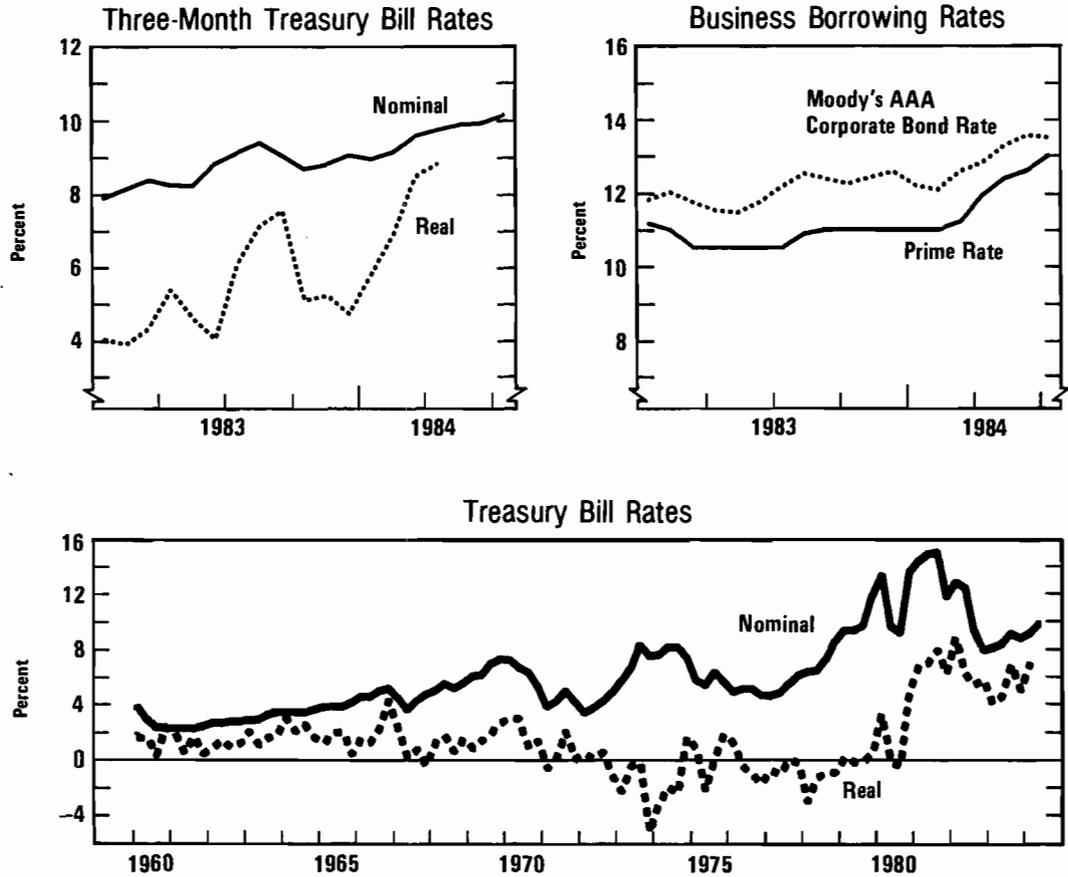
The discussion so far has helped explain why investment has been strong in spite of historically high and rising real interest rates (see Figure II-8), but these interest-rate levels themselves remain to be explained. As this section will show, a major reason for recent increases in rates seems to be the strong growth in credit demands.

Credit Flows

Interest rates can be pushed upward if the demand for credit is strong relative to the supply. Credit demands in the United States have recently been quite high by historical standards, while the domestic sources of saving that are available to finance these borrowing demands are relatively low. As Figure II-9 shows, private credit supplies--primarily those of households and corporations--have fallen sharply since the recovery began. This is chiefly because net corporate borrowing has grown strongly, while household saving has remained at moderate levels relative to GNP by historical standards. ^{6/} Corporate borrowing has grown in spite of high corporate cash

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6. The household savings underlying the private credit flows shown in the figure are closely related to the familiar personal saving rate. As the discussion earlier in this chapter has suggested, personal saving has been low during the recovery as a counterpart to the fact that consumption has been quite strong. Even before the recovery began, however, personal and household saving rates were at low to moderate levels by historical standards.

Figure II-8.
Selected Interest Rates

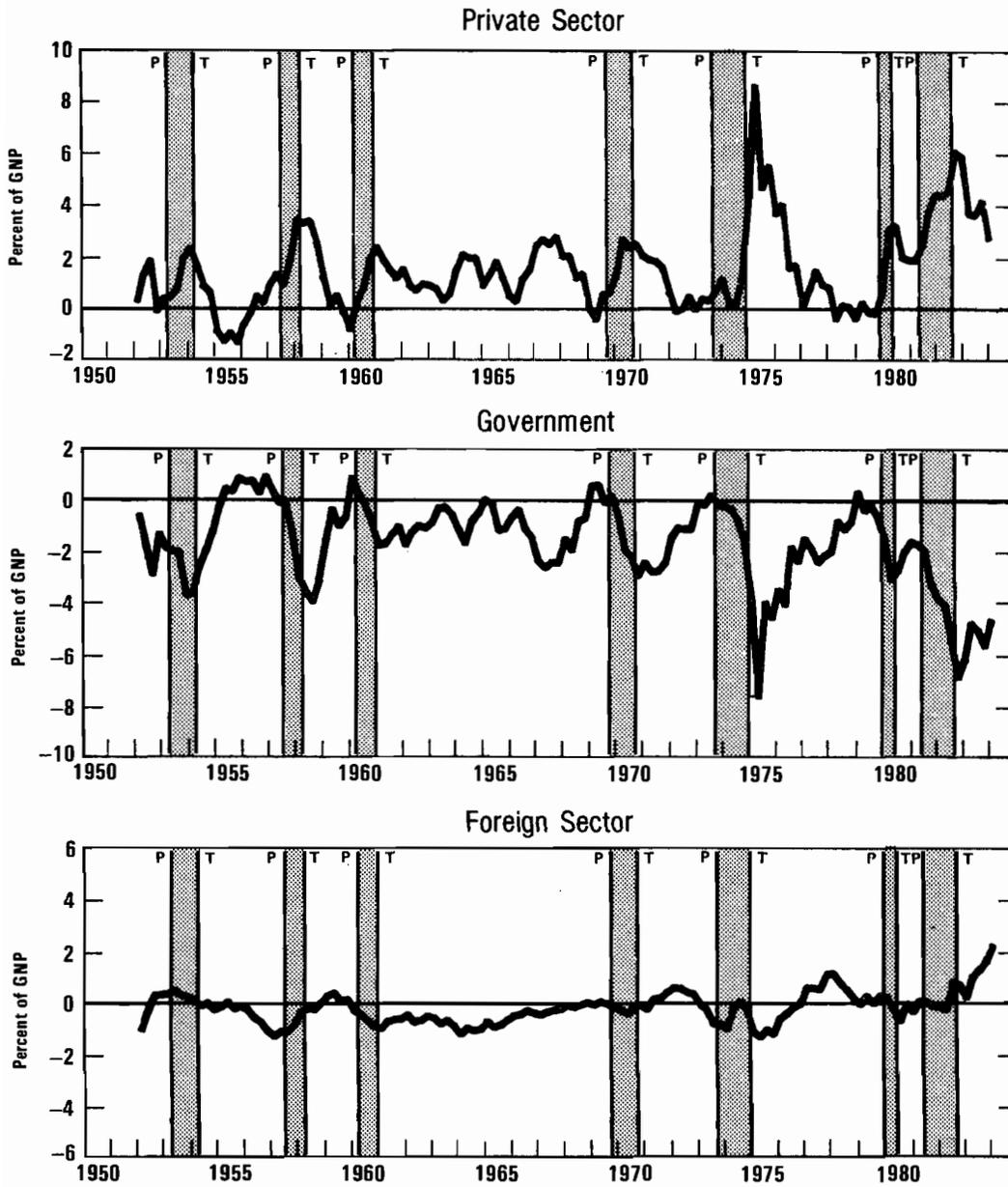


SOURCES: Federal Reserve Board; Moody's Investors Services; Congressional Budget Office.

NOTE: Real interest rates are calculated by subtracting from the nominal interest rate the rate of inflation in the succeeding quarter. This value, the "ex post real rate," is a proxy for the unobserved real rate, which is the nominal rate less expected inflation over the life of the instrument. The inflation rate used is that of the consumption deflator. July figures are averages of figures for the first four weeks.

flows. This is chiefly because of the strong growth of business fixed investment discussed earlier, together with extraordinary borrowing occasioned by a spurt of corporate mergers.

Figure II-9.
Net Credit Supplies by Sector



SOURCE: Federal Reserve Board; U.S. Department of Commerce.
NOTE: P and T lines indicate business cycle peak and trough dates.

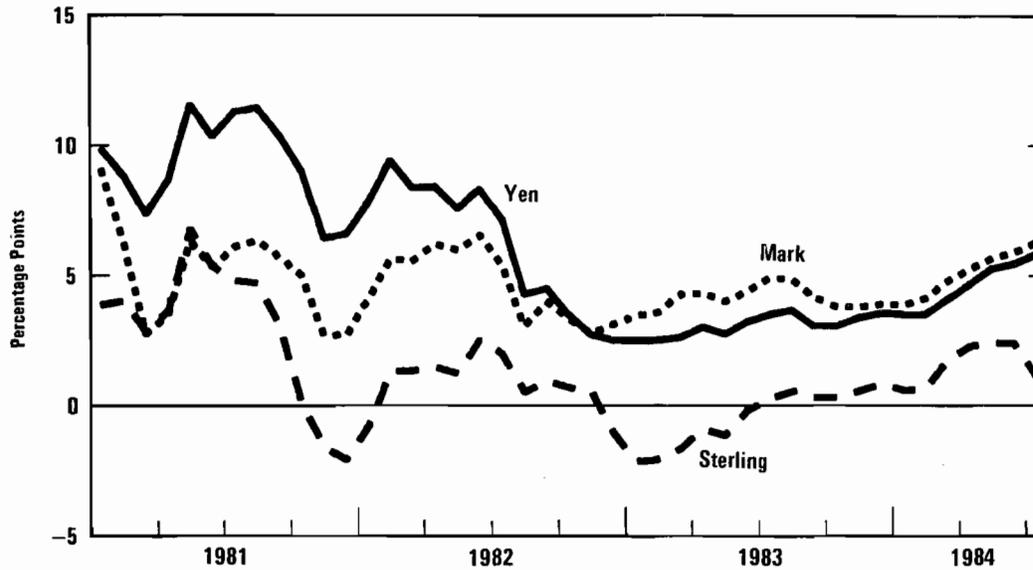
Government--the other major factor in determining domestic credit flows--has been a heavy demander of funds during the recession and recovery, as the middle panel of Figure II-9 shows. This chiefly represents the historically large federal deficit. The operating surplus of state and local governments (reflected in the figure) offsets only about 9 percent of the federal deficit. 7/

The extraordinary growth of federal borrowing is reflected in a continuous rise since 1981 and through CBO's projection period in the ratio of the publicly held federal debt to GNP. CBO projects that this ratio, which had fallen almost continuously during the 1950s, 1960s, and early 1970s, will reach levels by 1989 that were last exceeded only in the years between World War II and the early 1960s, when the stock of wartime debt was being reduced.

The result of all these factors is that in the first quarter of 1984 (the most recent date for which figures are available), net domestic private saving was sufficient to finance only slightly more than half of government credit demands. Such a shortfall in domestic saving places upward pressure on interest rates until the gap is filled by increased net domestic saving and/or by net foreign capital inflows. In the present case, the financing gap has been filled largely by foreign capital inflows of unprecedented size, as shown in the bottom panel of Figure II-9. These have risen from \$11 billion in 1982 to \$41 billion in 1983 on a balance-of-payments accounting basis, and are expected to reach \$80 billion in 1984. 8/

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7. Under some accounting systems--such as the National Income Accounts--the state and local government surplus includes not only the operating balance shown above, but also these governments' contributions to pension funds (which are reflected in household rather than government saving in Figure II-9.) When state and local government contributions to pension funds are included, the state and local government surplus was sufficient to offset about 30 percent of the federal deficit in 1983. This was less than in the past, however, since state and local surpluses did not increase proportionately when the federal deficit exploded recently. Thus the higher current level of the federal deficit reflects a net reduction in government saving even when the offsetting state and local surplus is taken into account.
 8. It is not the level of interest rates but the differential between U.S. interest rates and those in other countries that attracts foreign investment (see Figure II-10). U.S. borrowers have had to outbid borrowers in other countries for these funds, and to overcome the tendency for interest rates in those countries to drift upward, partly in response to U.S. rate increases.

Figure II-10.
Eurocurrency Interest Rate Differentials



SOURCE: Bank of America, San Francisco.

NOTE: Mark, Yen, and Sterling indicate Eurodollar-Euromark, Eurodollar-Euroyen, and Eurodollar-Eurosterling interest rate differentials respectively. Differentials are based on three-month Eurocurrency bid rates.

The Outlook for Credit Demands

CBO expects net domestic credit demands to ease for the remainder of 1984 and during 1985. It projects that the federal deficit will decline relative to GNP, and the growth of business borrowing will slow from current rates. Some improvement in the personal saving rate is also expected during the next several quarters as consumer spending slows temporarily in response to slower growth in household net worth.

The outlook for foreign capital inflows remains crucial to the prospects for U.S. interest rates. Although the CBO forecast assumes these inflows will continue to be very large, two arguments are often made that suggest they could soon decline:

- o Some analysts believe that the dollar may soon decline in value as a result of record U.S. current account deficits. Since investors in dollar assets are influenced by their expectations of future

changes in the exchange rate, as well as the interest differential between the U.S. and other countries, the expectation of a decline in the dollar could make them hesitant to continue accumulating dollar instruments without a rise in their yields.

- o In 1982 and 1983 capital inflows were facilitated by the relatively weak demands for credit by U.S. trading partners. As their economies strengthen in 1984 and 1985, private credit demands abroad will grow, bringing greater competition for the existing supply of funds and, perhaps, narrowing interest rate differentials.

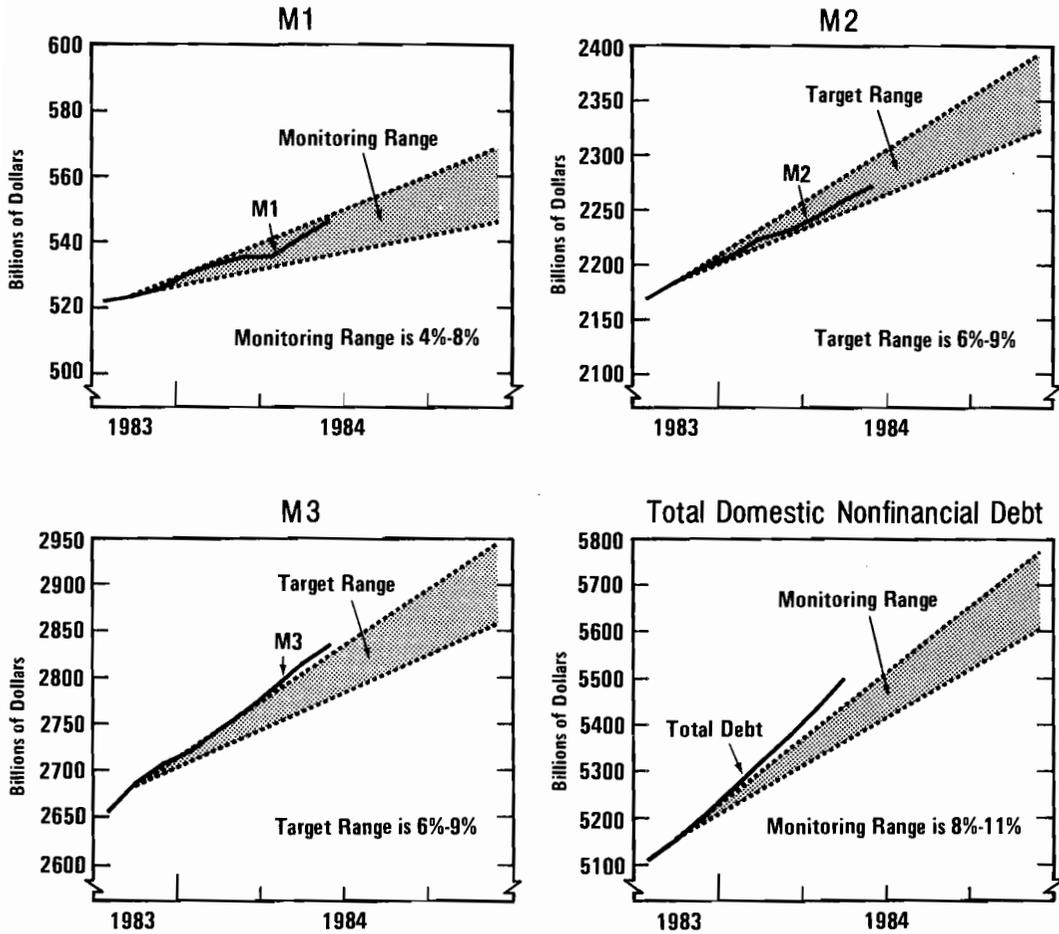
Some analysts argue that even if investors did not expect exchange rates to change, continued increases in the differential between U.S. interest rates and those abroad would be needed to induce them to keep putting an ever larger share of their funds into U.S. assets. Many observers also argue that foreign capital will continue to be attracted to the U.S. because of its political and economic stability. It is difficult to gauge the importance of these factors, however.

Monetary Policy

The behavior of the major monetary and credit aggregates during the spring was mixed (see Figure II-11). M1, which many analysts believe to be the most important indicator of monetary policy, stayed within the Federal Reserve's monitoring range of 4 percent to 8 percent growth, rising at an average annual rate of 6.8 percent over the first two quarters of 1984. (M1 consists of cash in circulation, travelers' checks, and all checkable deposits.) Measured M1 growth was especially volatile during April, a development that observers attribute to faulty seasonal-adjustment statistics. Growth in the "velocity" of M1--a key indicator of its interactions with the broader economy, defined as the ratio of GNP to M1--appeared to return to its historical pattern after a period of negative growth during 1982 and 1983 that is unprecedented since World War II (see Figure II-12).

Among the other major financial aggregates, M2, which has played a more important role than M1 in Federal Reserve deliberations so far in 1984, grew at an average annual rate of 7.1 percent between November and June, keeping it in the bottom half of the central bank's target range of 6 percent to 9 percent. M3 and domestic nonfinancial debt grew, however, at rates above their respective guideline ranges of 6 percent to 9 percent and 8 percent to 11 percent. (M2 and M3 are broader measures, consisting of M1 plus successively larger numbers of interest-bearing accounts and liquid financial assets.) The Federal Reserve attributed the growth of M3 to aggressive marketing of certificates of deposit by thrift institutions seeking

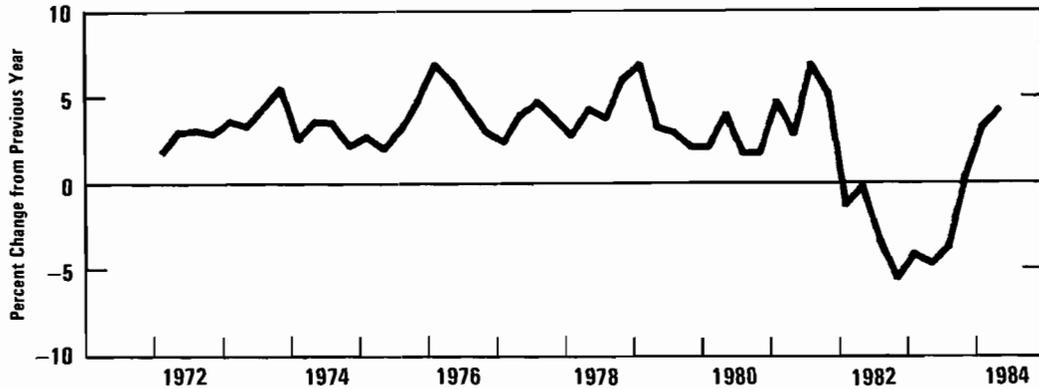
Figure II-11.
 Monetary Growth and Targets in 1984



SOURCE: Federal Reserve Board.

to fund the strong growth in mortgage borrowing that was discussed earlier in this chapter. The central bank cited the growth in debt-financed mergers, or "leveraged buyouts," as one extraordinary factor that could help to account for the strong growth in domestic debt. Another factor was, of course, the very large federal deficit.

Figure II-12.
M1 Velocity



SOURCE: Federal Reserve Board.

NOTE: Velocity is the ratio of GNP to M1.

Trouble Spots in Financial Markets. During the spring Federal Reserve policy had to contend with several unusual problems in financial markets. Rumors of the insolvency of Continental Illinois Bank, until recently the nation's eighth largest bank, prompted outflows of deposits that the Federal Reserve and other bank regulators found necessary to offset with large loans. The central bank's reserve lending to Continental could have significantly increased the total supplies of bank reserves and money, but open-market operations succeeded in reducing nonborrowed reserves elsewhere in the banking system by enough to offset the increase in borrowed reserves.

Strong pressures on the central bank to expand the money supply also came from the continuing foreign-exchange shortages of many third-world governments that are heavily indebted to U.S. banks. Increases in U.S. interest rates are quickly reflected in these countries' borrowing costs, and heighten the likelihood of interruption of debt service payments. An interruption could subject some large U.S. banks that have large foreign loan portfolios to deposit withdrawals similar to those that recently beset Continental Illinois.

Rising interest rates also threaten the financial positions of some domestic corporations, farms, financial institutions, and homeowners. All depend to some degree on short-term borrowing or other forms of debt, such as adjustable-rate mortgages, that increase their financing costs when rates go up. The possibility of financial instability in these sectors represents an

important uncertainty in the CBO forecast. Nevertheless, serious problems are not anticipated as long as interest rates remain within the forecast range.

Federal Reserve Targets for 1985

In its midyear policy report, the central bank announced tentative 1985 target ranges for the monetary and credit aggregates. In keeping with its long-run objective of gradually reducing rates of growth in both money and nominal GNP, it reduced the upper limits of the target ranges for both M1 and M2. The reduction of a full percentage point for M1 put its guideline range at 4 percent to 7 percent, while the reduction of one-half a percentage point in the upper limit for M2 put its range at 6 percent to 8.5 percent. Since both M3 and domestic nonfinancial debt were above the target range during 1984, the tentative 1985 growth guidelines for these aggregates were left at their 1984 levels of 6 percent to 9 percent and 8 percent to 11 percent, respectively.

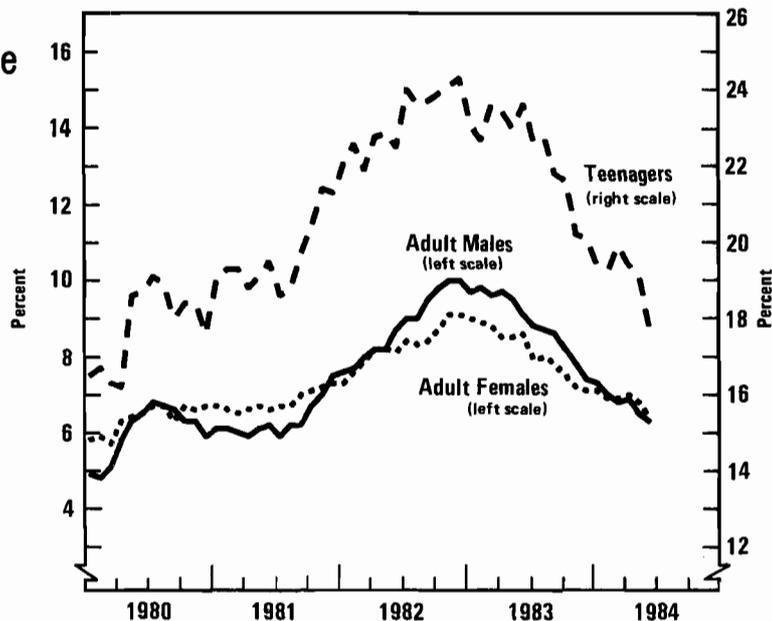
Because the growth of M1 velocity had been especially irregular during 1982 and 1983, the Federal Reserve gave less emphasis to M1 than to other aggregates in its policy planning for 1984. Since M1 velocity growth now appears more normal, however, the central bank has decided to give the same weight to M1 growth that it gives to the other money aggregates.

LABOR MARKETS

The unemployment rate declined sharply in the past half year from 8.2 percent of the civilian labor force in December 1983 to 7.1 percent in June 1984. Indeed, the reported decline in unemployment since the recession trough has been substantially greater than would be indicated by the increase in output. Labor force growth has been somewhat slower than expected, while employment reported in the household survey has grown very fast. ^{9/}

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9. These data should be regarded with caution, since there is a large and unusual discrepancy between the employment growth reported by households, from which unemployment is calculated, and the much lower employment growth reported by businesses. If the business survey is wrong, as many suggest, then the recent growth in productivity has been overstated. If the household survey is wrong, the decline in unemployment is overstated. The leading explanation for the discrepancy is that the establishment survey has missed more new firms than it usually does in recovery periods.

Figure II-13.
Unemployment Rate
Comparisons



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

The pattern of unemployment has been somewhat unusual. The hardest-hit sectors in the two recessions of the 1980s were in heavy manufacturing, such as autos and steel. Consequently, the variation in unemployment rates among states is much higher in the current recovery than in previous ones. Some of the heavy manufacturing states still have unemployment rates above 10 percent, while states in which service industries and high-tech manufacturing have grown most have unemployment rates as low as 4 percent or 5 percent.

Unemployment remains high among blacks and teenagers (see Figure II-13). Some 14.8 percent of adult blacks and 17.6 percent of the teenage labor force (all races) were unemployed at midyear--well down from the recession peaks of 19.4 percent and 24.1 percent respectively, but still very high compared with the current rate of 6.3 percent for adults of all races.

INFLATION

The low rate of inflation in the first two quarters of 1984--3.8 percent as measured by the GNP deflator--was below what most forecasters expected at the beginning of the year. Forecasters overestimated inflation for two main reasons:

- o Many had expected the dollar exchange rate to fall, which would have put upward pressure on price levels; and
- o Most had interpreted the low rates of inflation at the end of 1983 as transitory movements around a somewhat higher trend.

The low inflation rate appears to have been real and probably long-lasting rather than transitory (see Figure II-14). The stripped CPIU increased at a 4.0 percent annual rate between December 1983 and June 1984; over the preceding six months it had increased at a 4.6 percent rate.^{10/} Most likely these rates are still being held down by the increase in dollar exchange rates in 1983. The lag between exchange-rate increases and lower domestic price levels, though difficult to estimate, is probably between two and six quarters; thus a substantial portion of the 1983 exchange-rate increases may not yet have been fully reflected in prices by the beginning of the year.

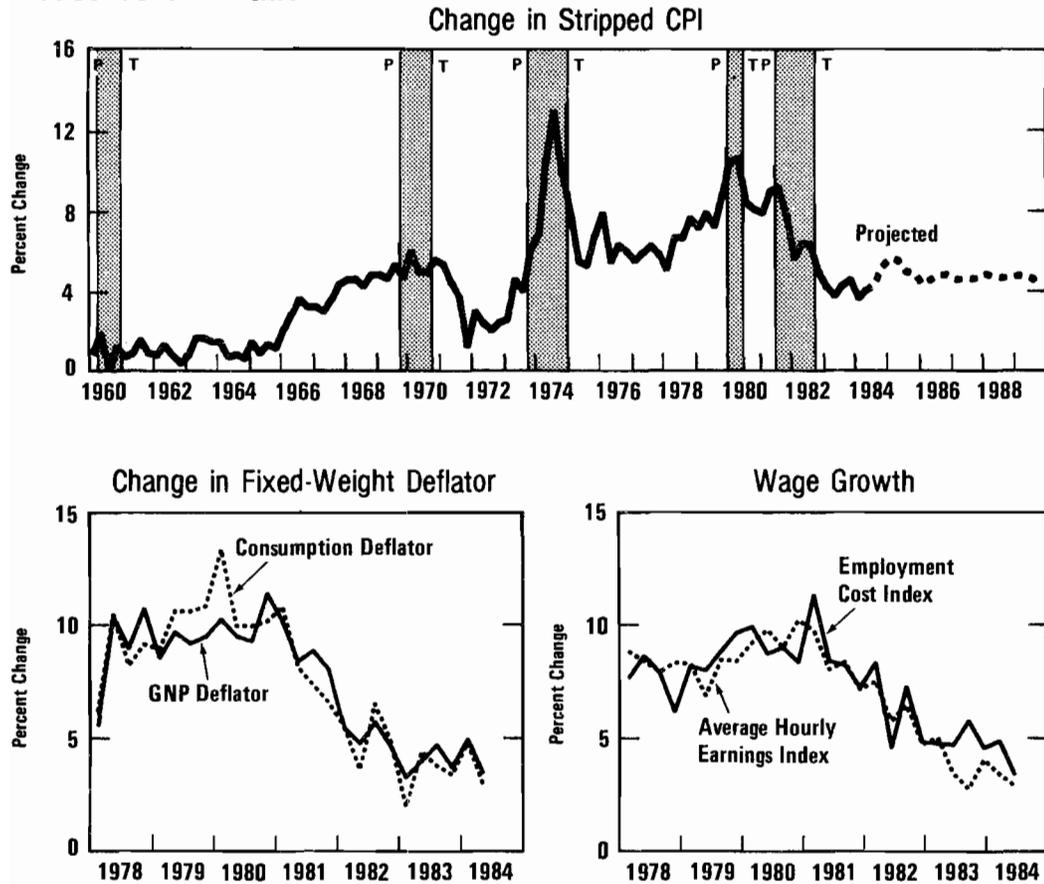
With no further upward trend in exchange rates and rapidly falling unemployment, inflation is likely to increase moderately next year from its current rate. Some forecasters expect a severe increase (to 8 percent or 10 percent), the result of high money growth rates or of a high level of employment or capacity utilization. But a further improvement cannot be ruled out, especially if the dollar remains strong or oil prices fall.

Major Factors Underlying Inflation

Unemployment and Capacity Utilization. When the recovery began, the unemployment rate was at levels that had not been experienced since the Depression. Despite its recent rapid decline, it is still above 6.5 percent, the level at which many analysts would begin to expect inflation

10. The stripped CPIU is a measure of inflation constructed to exclude the direct impact of price changes that reflect special factors, particularly "supply shocks" administered by the oil cartel or by poor harvests, rather than underlying inflation trends. The figures used by CBO exclude changes in oil prices, food prices, and the price of used cars (and the price index of homeownership before 1983, when the index was revised) from the Consumer Price Index for all urban consumers (the CPIU).

Figure II-14.
Measures of Inflation



SOURCES: U.S. Department of Labor, Bureau of Labor Statistics; U.S. Department of Commerce, Bureau of Economic Analysis; Congressional Budget Office.

NOTE: Employment Cost Index for wages and salaries is not seasonally adjusted. P and T lines indicate business cycle peak and trough dates.

to increase as a result of excess demand in the labor market. ^{11/} Recently, in fact, wage settlements in major collective bargaining agreements have been very low, and overall compensation measured by the Employment Cost Index has decelerated (see last panel of Figure II-14). The unemployment rate in CBO's projection falls somewhat below 6.5 percent after 1987, but not by enough to suggest any substantial acceleration in inflation.

Capacity utilization--currently at 81.8 percent in manufacturing--is quite close to those rates at which, in the past, inflation has begun to accelerate, causing concern among some analysts. But the relationship between capacity utilization and inflation in the past has been quite weak, and may derive merely from the fact that capacity utilization is usually high when unemployment rates are low.

Moreover, the capacity utilization rate for manufacturing published by the Federal Reserve Board may be overstated. The independent measures of capacity utilization calculated by the Census Bureau for the end of 1982 and by the Bureau of Economic Analysis of the Commerce Department for the end of 1983 each showed noticeably lower capacity utilization rates than the Federal Reserve measure for those periods. Thus, the pressure of demand on capacity in the manufacturing sector may be less than is indicated by the Federal Reserve series. ^{12/}

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11. The unemployment rate that holds the inflation rate steady, with no tendency to increase or decrease, is often called the non-accelerating inflation unemployment rate, or NAIRU. If the unemployment rate is above the NAIRU there is enough slack in the labor market to reduce the inflation rate (though other factors, such as commodity price increases, may increase inflation). Estimates of the NAIRU vary, but a range of 6 to 6.5 percent is consistent with much of the available evidence. Since the current unemployment rate is still above the NAIRU, the slack in the labor market ought to be exerting downward pressure on the inflation rate.
 12. Some analysts have argued the opposite, namely that the Federal Reserve is underestimating the rate of obsolescence of the capital stock and therefore underestimating the capacity utilization rate. But in order to make this claim, one must assume that the surveys of businesses that underlie the capacity utilization measure make the same mistake--that is, that businessmen are unaware of the extent of depreciation or obsolescence of their own plant and equipment. It is not clear why this should be so.

Exchange Rates. One factor that could produce a substantial change in inflation would be a rapid movement of the dollar exchange rate. This is a serious possibility, even though the current CBO forecast assumes no large changes in the value of the dollar. A fall in the exchange rate of, say, 10 percent might be expected to add between 0.5 percent and 1.5 percent to the level of consumer prices, and less to the GNP deflator. If this happened in a single year, it would add between 0.5 and 1.5 percentage points to the inflation rate for the year. On the other hand, a further appreciation of the dollar, which would tend to hold down prices, cannot be ruled out. The outlook for the dollar is extremely uncertain: it depends on the balance between the supply of dollars arising from the current account deficit, and the willingness of foreigners to hold them.

Money Growth. A major source of concern is the rapid growth of the money supply, particularly during 1983. The narrow money stock, or M1, which many analysts believe is most closely related to inflation, grew 13 percent from the third quarter of 1982 to the third quarter of 1983, a substantial increase from the 6 percent growth in the preceding year. Since then, money growth has fallen back to about a 7 percent annual rate. Assuming velocity growth of about 2 percent to 3 percent, this is consistent with nominal GNP growth in the 9 percent to 10 percent range, and implies an inflation rate in the range of 4 percent to 7 percent if the recovery in real output continues.

According to some analysts, rapid increases in money growth translate fairly directly into rapid inflation with a lag of one to two years, so that 1983 money growth might imply a sharp increase in inflation at the end of 1984 or in 1985. The same logic would call for a subsequent reduction of inflation based on the slower money growth experienced so far this year, provided that money growth from now on remains within the Federal Reserve Board's target range.

Another theory is that money growth contributes to inflation mainly through the inflationary factors already discussed, that is:

- o By fueling stronger growth in demand for goods and services; and
- o By putting downward pressure on the exchange rate.

Unfortunately, any interpretation of recent money movements is clouded by recent changes in monetary institutions. These changes appear to have altered the normal relationship between money, economic activity, and inflation. If these changes have reduced the velocity of money, the probability of a sharp inflation upturn (for monetary reasons) is correspondingly diminished.

Other Factors. A disruption of oil supplies from the Middle East could set off a new round of inflation. Oil price increases have precipitated each of the two large increases in inflation since 1970. Moreover, because the United States now spends a larger share of income on oil than at the beginning of the 1970s, it is now even more vulnerable to oil price increases than in the earlier episodes.

Despite the current war in the Middle East, however, there appears to be little likelihood of a repetition of the oil price rise that followed the 1978 revolution in Iran. Since 1978-1979, Western governments have significantly increased their strategic oil stocks to between 1.2 and 1.3 billion barrels. In addition, unlike 1978, there is significant excess capacity in the Organization of Petroleum Exporting Countries (OPEC). Current OPEC output is in the range of 17 to 18 million barrels per day, while OPEC capacity is over 30 million barrels per day. Oil companies also have large inventories both afloat and on shore, and their minimum operating requirements have been reduced.

The current situation thus suggests stable or even falling oil prices, but a severe escalation of the Persian Gulf war could drive prices upward. Most of OPEC's excess capacity is in the Persian Gulf. Destruction of a single port--Ras Tanura in Saudi Arabia--would seal in most Saudi capacity. Furthermore, the Western governments have not agreed on a strategy to deal with an oil shortfall. But clearly, international oil markets do not anticipate a severe disruption of supplies. Although oil prices rose somewhat earlier this year, they have since fallen.

Commodity prices are often thought to be a sensitive indicator of world inflationary pressures, even though basic commodities have only a small weight in the cost of goods and services sold. Their prices increased quite rapidly early in the recovery, and some thought this was signal of higher inflation. But the major factor determining commodity prices is the growth of the whole world economy, and the recovery in the rest of the world is lagging behind the U.S. recovery. Consequently, commodity prices fell recently.

The Inflation Outlook

Rising inflation, in the absence of external shocks, is not an inevitable consequence of economic recovery and growth (see box). But some analysts see signs that inflation may rise in the near future despite the fact that it has recently been flat and despite lower wage increases, declining oil prices, and a strong dollar. The leading index of inflation, compiled by the Center

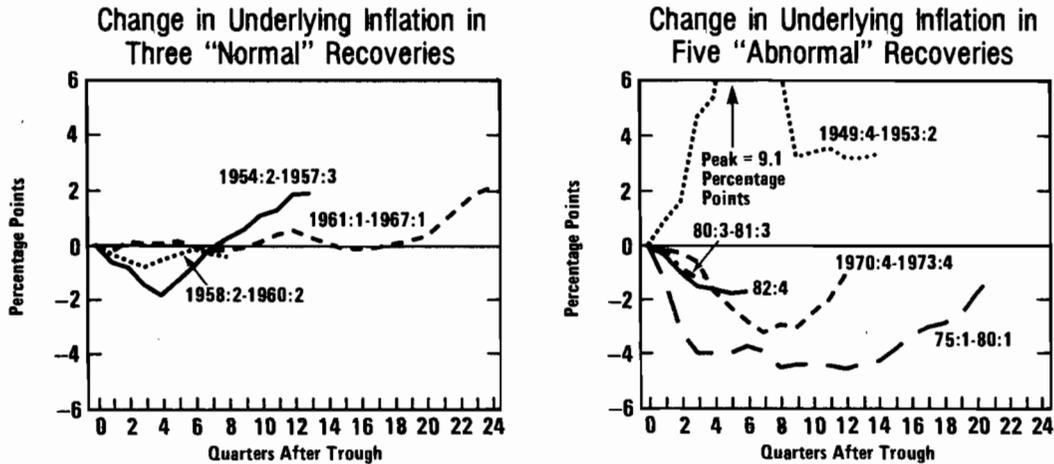
THE NORMAL CYCLICAL PATTERN OF INFLATION

Many people believe that inflation rises during periods of cyclical expansion. The statistical evidence for this is relatively meager, however, since most of the large changes in inflation rates since World War II have been directly associated with special events rather than with cyclical expansion. Thus, in the first five years following a cyclical trough (or in the time to the next cyclical peak, whichever came first) the inflation rate (measured by the stripped CPIU) rose above its level at the cyclical trough in only three out of the seven postwar recoveries (see Figure II-15). The first and largest rise came during the Korean War, while the other two followed the 1954 and 1961 troughs. In the remaining four cases, inflation (measured by the stripped CPIU) never rose above its level at the recession trough. From 1970 to 1973 the (temporary) wage and price control program held down inflation, while in the 1975-1979 and 1980-1981 recoveries this measure of inflation declined. Other measures of inflation were higher because of the great swings in oil prices and exchange rates. Right now, oil prices are again falling and so far the dollar exchange rate has been very strong.

During two long expansion periods when no special factors intervened (that is, from 1954 to 1958 and from 1961 to 1967), inflation accelerated by about two percentage points from the rate at the recession trough, and between three and six years after the trough. But the two recessions of the 1980s, taken together, represented a much longer and deeper period of low real aggregate demand than was experienced in any other postwar recession. In view of the slack that still exists in the economy, however, any acceleration in inflation may be much lower than one would expect on the basis of past cyclical experience.

for International Business Cycle Research at Columbia University, is currently signalling a sharp increase in inflation at the end of 1984 or the beginning of 1985. The index is based on movements in the employment-population ratio, commodity prices, and a proxy for total debt growth in the economy. But although the index has tracked past CPI inflation well (see Figure II-16), its current interpretation is likely to differ from the past:

Figure II-15.
Inflation Changes in Recovery Periods

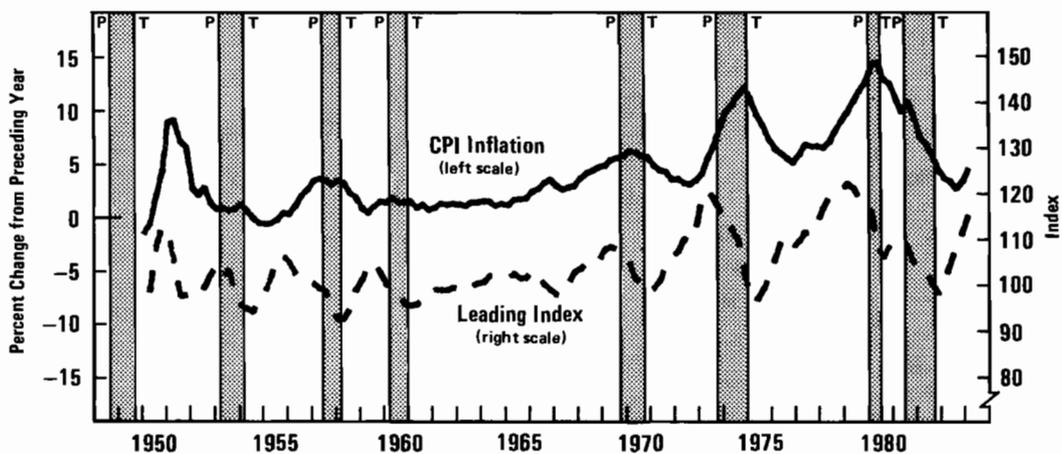


NOTE: Underlying inflation is measured by the stripped CPI-U. The change in underlying inflation from that at the recession trough is plotted for the first six years following a recession trough, or until the next peak, whichever occurs first.

- o The employment-population ratio, one of the major sources of increase in the leading inflation index, has an upward trend because of the opening of job opportunities for women and the increased desire of women to enter the work force. This increased participation of women in the labor force should tend to hold down the rate of inflation, since it does not reflect an increase in the overall demand for labor relative to the supply.
- o Recent heavy merger activity has probably increased credit demands in relation to the demand for goods and services, thus diminishing the usefulness of the debt variable as an indicator of aggregate demand pressures.

If one looks at the fundamentals, much of the decline in inflation during the past few years seems likely to be long-lasting. The possibility of sharp oil price increases in the near future appears to be low. Another possible source of higher inflation would be a sharp drop in the dollar exchange rate, which over the past four years has been helping to hold down inflation. Aside from these, the upswing probably still has a way to go before pressures on labor markets and capacity are high enough to spur inflation.

Figure II-16.
Leading Index of Inflation and CPI Inflation



SOURCES: Department of Labor, Bureau of Labor Statistics; Columbia University, Center for International Business Cycle Research.

NOTE: P and T lines indicate business cycle peak and trough dates.

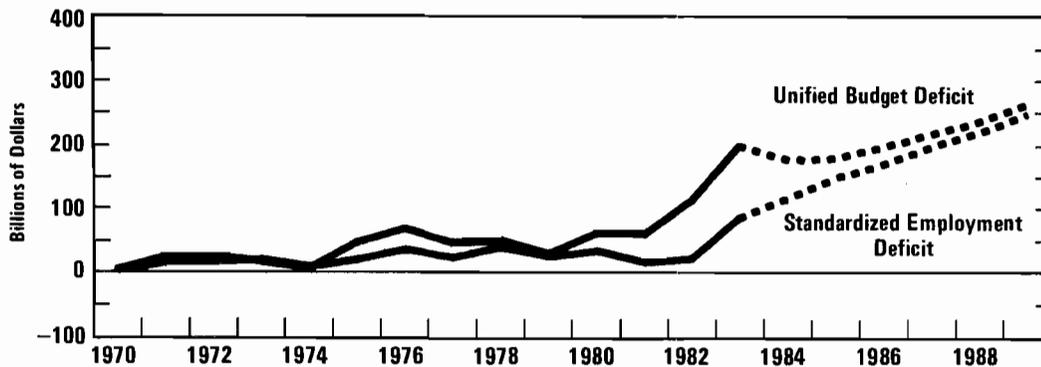
FISCAL POLICY

Structural deficits have increased greatly since 1981. CBO's revised baseline budget projections show this trend continuing through the rest of the decade (see Figure II-17). Final action on the 1985 budget resolution and appropriations bills will produce some changes in projected outlays and deficits, but these changes are not likely to alter greatly the longer-term budget outlook.

Recent Fiscal Policy

The federal deficit (on a NIPA basis) nearly tripled from \$64 billion in calendar year 1981 to \$179 billion in 1983, bringing the deficit to 5.4

Figure II-17.
Unified Budget Deficits



SOURCES: Office of Management and Budget; Congressional Budget Office.

percent of GNP by 1983 (see Table II-2).^{13/} Somewhat more than half of this increase reflected a decline in federal receipts relative to GNP. The effective personal income tax rate declined by 1.6 percentage points, although this was somewhat offset by increases in social insurance tax rates. Federal expenditures rose by 1.5 percent of GNP, primarily reflecting record peacetime growth in defense purchases amounting to 0.9 percent of GNP. Federal spending for net interest and transfers to persons also rose faster than GNP.

It is very difficult to measure the independent effect of fiscal policy on economic growth. One reason is that the relative impact of fiscal and monetary policy is still disputed. Under the current system of flexible exchange rates, the expansionary effect of fiscal stimulus is diminished by a decline in net exports resulting from higher interest rates, increased capital

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13. These budget numbers are on a National Income and Product Account (NIPA) basis. NIPA measures of federal expenditures and revenues are frequently used for economic analyses. These numbers differ from the unified budget figures in four aspects: timing of transactions, netting and grossing of receipts against spending, treatment of lending activities, and coverage. For a discussion of these differences, see Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1985-1989 (February 1984).

TABLE II-2. RECENT FISCAL POLICY IN PERSPECTIVE (By calendar years, NIPA basis)

	1970s <u>a/</u>	1980	1981	1982	1983	1984 <u>b/</u>
Deficit						
Billions of dollars	28	61	64	148	179	165
Percent of GNP	1.8	2.3	2.2	4.8	5.4	4.5
Receipts						
Billions of dollars	308	541	625	617	641	712
Percent of GNP	19.4	20.6	21.1	20.1	19.4	19.3
Expenditures						
Billions of dollars	337	602	689	765	820	877
Percent of GNP	21.2	22.9	23.3	24.9	24.8	23.8
Purchases						
Billions of dollars	122	197	229	259	268	295
Percent of GNP	8.0	7.5	7.7	8.4	8.2	8.0
Defense (percent of GNP)	5.5	5.0	5.2	5.8	6.1	6.1
Effective Federal Tax Rates						
Personal income tax rate <u>c/</u>	12.8	14.1	14.5	14.1	12.9	12.4
Social insurance tax rate <u>d/</u>	11.5	12.8	13.7	13.7	14.1	14.6
Corporate profits tax rate <u>e/</u>	39.3	40.1	34.6	29.3	26.6	26.7

a. Average for the 1970-1979 period.

b. CBO estimate.

c. Personal income taxes as a percentage of taxable personal income.

d. Social insurance contributions as a percentage of wages and salaries.

e. Corporate tax accruals as a percentage of economic profits.

inflows from abroad, and a consequent appreciation of the dollar. Nevertheless, the magnitude of the fiscal policy shift since 1981 suggests that it contributed (with some lag) to the rapid growth in real GNP during the first half of 1984.

- o One measure of the short-term effect of fiscal policy on **aggregate demand** is the change in the structural component of the

deficit--that is the component that remains when the economy is operating at some benchmark rate of unemployment (currently 6 percent). ^{14/} The change in the structural deficit amounted to 1.9 percent of benchmark GNP between fiscal years 1981 and 1983, compared to 2.5 percent during 1957-1959 and 2.7 percent during 1966-1968--the most stimulative two-year periods in the history of the series. Those periods, though, were followed by periods of substantial fiscal restraint--a situation not projected for 1984 and beyond (see Table II-3).

- o The Economic Recovery Tax Act of 1981 reduced marginal tax rates for individuals and provided more generous depreciation deductions for businesses. The effects on **aggregate supply** (work effort, saving, and capital formation) are not yet clear, though the stronger-than-usual performance of investment during the recent recession was almost certainly due in part to the liberalization of depreciation allowances, the effect of which was magnified by the deceleration of inflation. ^{15/}

The Fiscal Policy Outlook

According to CBO estimates, the Deficit Reduction Act of 1984 will raise unified budget revenues by \$51 billion and will lower spending by \$12

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14. Many analysts believe that in order to assess fiscal policy changes, it is necessary to isolate discretionary policy changes from the response of the budget to economic developments. The structural deficit is a measure that attempts to do this. It has been argued, however, that this measure of fiscal policy is too limited because it excludes the impact of inflation on the real value of outstanding federal debt. In the 1981-1983 period, this factor may cause the structural deficit to understate the amount of fiscal stimulus, because of the decline in the rate of inflation. During periods of rising inflation, however, it may cause the structural deficit to overstate fiscal stimulus.
 15. The structural deficit does not provide information about the effects of fiscal policy on aggregate supply because this budget measure does not reveal the effect of policy change on the after-tax rates of return to these activities. The response of supply to fiscal policy actions generally is thought to be slower than that of demand. Thus, more time will be required to determine the aggregate supply effects of recent fiscal policy changes.

billion over the fiscal year 1984-1987 period. Projected out through 1989, these totals rise to \$104 billion and \$21 billion, respectively. Given these and other policy changes made since last February, as well as the updated economic projections discussed in Chapter I, CBO now estimates unified budget deficits of \$172 billion in 1984 and \$178 billion in 1985 rising to \$263 billion in 1989 (see Table II-3). ^{16/} Relative to GNP, the 1985-1989 deficits increase from 4.5 percent to 4.9 percent. This revised outlook represents a significant reduction from CBO estimates made in February when the deficit-to-GNP ratio was projected to rise from 5.0 percent to 5.7 percent during 1985-1989. ^{17/}

Despite the deficit-reducing measures enacted since February, CBO expects the structural component of the deficit to continue rising if further budgetary action is not taken. Under current law, the increase in the standardized-employment deficit--the unified budget deficit standardized at a 6 percent unemployment rate--amounts to 1.0 percent of standardized GNP during 1985-1989 (see Table II-3), compared to an increase of 0.7 percent projected by CBO in February. Relative to standardized GNP, standardized outlays rise from 23.1 percent to 24.1 percent, while standardized revenues are fairly constant at an average of 19.4 percent. Assuming that no further fiscal policy action is taken, the structural deficit would continue to rise during a projected period of sustained economic growth. This portends a long period of high real interest rates and a consequent evolution in the composition of output toward relatively more consumption and less investment.

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16. See Chapter III for a detailed discussion of the tax and spending policy assumptions.
 17. See Congressional Budget Office, An Analysis of the President's Budgetary Proposals for Fiscal Year 1985 (February 1984).

TABLE II-3. THE FISCAL POLICY OUTLOOK (By fiscal year, unified budget basis)

	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989
Billions of Dollars										
Unified Budget Deficit	60	58	111	195	172	178	195	216	238	263
Standardized-Employment										
Deficit	33	14	20	83	112	146	167	195	221	246
Revenues	540	635	690	686	720	778	834	898	979	1055
Outlays	573	649	711	769	832	923	1001	1093	1200	1302
Middle-Expansion Deficit <u>a/</u>	64	53	63	127	158	194	219	250	281	310

Percent of GNP										
Unified Budget Deficit	2.3	2.0	3.6	6.1	4.8	4.5	4.6	4.7	4.8	4.9
Standardized-Employment										
Deficit <u>b/</u>	1.2	0.5	0.6	2.4	3.0	3.6	3.9	4.2	4.4	4.6
Revenues	20.5	21.2	21.0	19.5	19.3	19.4	19.3	19.3	19.5	19.5
Outlays	21.7	21.7	21.6	21.9	22.3	23.1	23.2	23.5	24.0	24.1
Middle-Expansion Deficit <u>c/</u>	2.5	1.8	2.0	3.7	4.4	5.0	5.2	5.5	5.8	5.9

SOURCE: Congressional Budget Office.

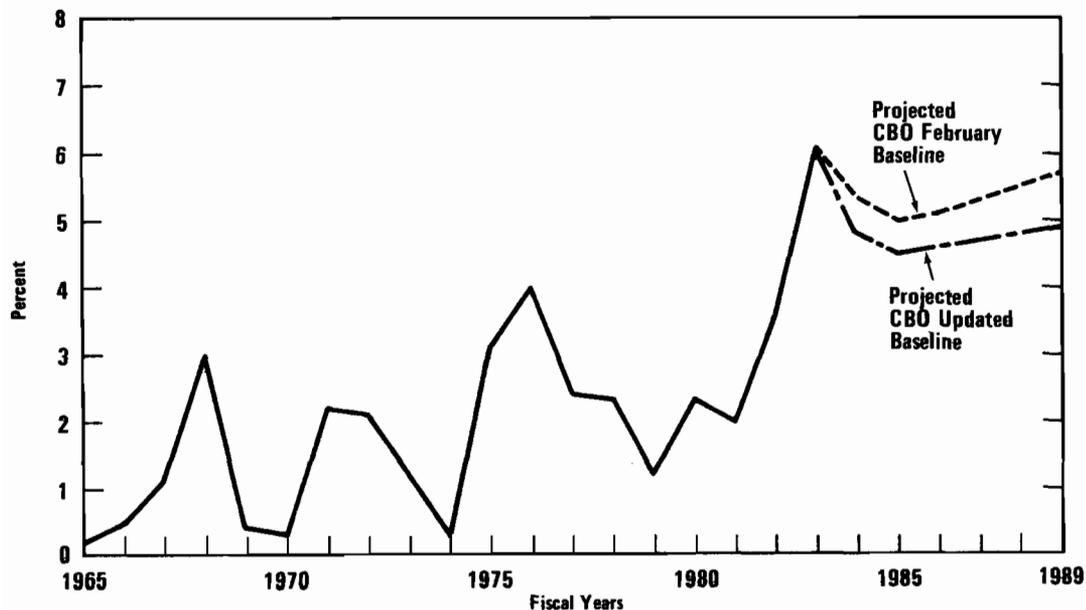
- a. The middle-expansion deficit is a budget measure that is standardized at trend levels of output and unemployment rates. Based on this measure, the size of the structural deficit is much larger when measured at 6 percent unemployment, but the change from one period to the next is similar in magnitude. For a discussion of this GNP measure, see Frank deLeeuw and Thomas M. Holloway, "Cyclical Adjustment of the Federal Budget and Federal Debt," *Survey of Current Business* (December 1983), pp. 25-40. Also see Congressional Budget Office, The Economic Outlook (February 1984), Appendix B.
- b. Calculated as a percentage of GNP standardized at a 6 percent rate of unemployment.
- c. Calculated as a percentage of middle-expansion trend GNP.

CHAPTER III. THE BUDGET OUTLOOK

Recent Congressional action has reduced projected budget deficits for the next several years. With the enactment of the Deficit Reduction Act of 1984 and several other budget measures, together with revised economic and technical assumptions, CBO's latest baseline projections show the budget deficit at \$172 billion in 1984, \$178 billion in 1985, and \$263 billion by 1989. Last February, CBO projected that, given the spending and taxing policies in place at that time, the federal budget deficit would grow from \$189 billion in 1984 to \$197 billion in 1985 and \$308 billion by 1989.

The revised outlook for the deficit becomes clearer when it is related to the size of the economy. Baseline deficits are now projected to decline from 4.8 percent of GNP in 1984 to 4.5 percent in 1985 and then to rise slowly to 4.9 percent by 1989. This contrasts with the February projections of 5.3 percent in 1984, 5.0 percent in 1985, and 5.7 percent in 1989 (see Figure III-1).

Figure III-1.
Federal Deficit as a Percentage of GNP



SOURCE: Congressional Budget Office.

While the budget outlook has improved over the last six months, high and growing deficits remain the prospect for the next five years unless further actions are taken. Some actions will be taken this year through the appropriation process, but these are not likely to change the picture significantly.

CBO BASELINE BUDGET PROJECTIONS

CBO's baseline budget projections assume no further changes in current laws governing taxes or entitlement spending. The projections for revenues, entitlements, and other mandatory spending incorporate Congressional action before the July recess on the Deficit Reduction Act and other budget measures. Action is still under way on the 1985 appropriation bills that will affect defense and other discretionary spending programs. For these programs, CBO's projections reflect only changes to the 1984 base and revised economic and technical assumptions; they do not incorporate the effects of any enacted 1985 appropriations. The projections for nondefense discretionary spending generally assume that the 1984 appropriations level will be maintained, and that future increases will keep pace with inflation. The projections for defense spending provide for roughly 5 percent real increases in defense budget authority, as assumed in the Congressional budget resolution adopted in June 1983. (These assumptions are the same as were used for the February baseline projections.)

Table III-1 presents updated projections for fiscal years 1985-1989 as well as revised estimates for 1984. These incorporate legislation enacted since the beginning of the year and revised economic and technical estimating assumptions. The changes made in CBO's February projections are summarized in Table III-2. Over the six-year period from 1984 through 1989, projected unified budget deficits under baseline assumptions are cumulatively \$166 billion lower now than CBO projected in February. Enacted legislation accounts for \$142 billion of this reduction. Revised economic assumptions--largely higher interest rates--add \$62 billion for the period, but technical reestimates offset \$40 billion of this increase. Together, these legislative, economic, and technical changes yield savings in debt service of \$46 billion.

Revenues

CBO projects baseline revenues to be \$751 billion in fiscal year 1985 and to rise to \$1,042 billion in 1989. Receipts will be growing faster than GNP over the 1985-1989 period, rising from 19.1 percent of GNP in 1985 to 19.4 percent by 1989 (see Table III-3). Strong economic growth in 1984 has

TABLE III-1. UPDATED CBO BASELINE BUDGET PROJECTIONS
(By fiscal year)

	1983 Actual	1984 Base	Projections				
			1985	1986	1987	1988	1989
In Billions of Dollars							
Revenues	601	673	751	811	881	965	1,042
Outlays	796	845	929	1,006	1,097	1,203	1,305
Unified Budget Deficit	195	172	178	195	216	238	263
Off-Budget Deficit	12	11	14	14	15	16	15
Total Deficit	208	183	191	209	231	254	278
As a Percent of GNP							
Revenues	18.6	18.7	19.1	19.1	19.2	19.4	19.4
Outlays	24.7	23.5	23.7	23.7	23.9	24.2	24.3
Unified Budget Deficit	6.1	4.8	4.5	4.6	4.7	4.8	4.9
Off-Budget Deficit	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total Deficit	6.4	5.1	4.9	4.9	5.0	5.1	5.2

brought the current revenue share of GNP above the February CBO estimate, and the tax increases of the Deficit Reduction Act of 1984 (Public Law 98-369) will further increase the revenue share of GNP over the 1985-1989 period compared to the February estimates.

Baseline revenues are revenues generated under existing tax law, with three exceptions. Hazardous substance response trust fund (superfund) taxes are assumed to be extended at current rates beyond their scheduled expiration date in 1985; airport and airway trust fund taxes beyond 1987; and highway trust fund taxes beyond 1988. These extensions contribute \$14 billion to baseline revenues in 1989. All other provisions of existing tax law, including the extension of the telephone excise tax and other temporary provisions of the Deficit Reduction Act, which are scheduled to expire during the 1984-1989 period, are assumed to do so on schedule.

TABLE III-2. CHANGES MADE IN CBO FEBRUARY BASELINE BUDGET PROJECTIONS (By fiscal year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
Revenues						
CBO February baseline ^{a/}	663	733	795	863	945	1,016
Enacted legislation						
Deficit Reduction Act	1	11	17	23	25	27
Revised economic assumptions	10	5	-2	-8	-10	-6
Technical reestimates	-1	2	2	3	4	5
Updated baseline	<u>673</u>	<u>751</u>	<u>811</u>	<u>881</u>	<u>965</u>	<u>1,042</u>
Outlays						
CBO February baseline ^{a/}	852	930	1,012	1,109	1,217	1,323
Enacted legislation						
Deficit Reduction Act	-*	-4	-4	-5	-4	-5
Budget Reconciliation Act	-*	-1	-1	-1	-1	-1
Agriculture Act	*	1	-1	-3	-5	-6
Revised economic assumptions	1	7	8	8	12	15
Technical reestimates	-8	-1	-3	-3	-5	-7
Debt service savings	-*	-4	-6	-9	-12	-16
Updated baseline	<u>845</u>	<u>929</u>	<u>1,006</u>	<u>1,097</u>	<u>1,203</u>	<u>1,305</u>
Unified Budget Deficit ^{a/}						
CBO February baseline ^{a/}	189	197	217	245	272	308
Enacted legislation	-1	-14	-22	-31	-35	-39
Revised economic assumptions	-9	2	11	16	22	21
Technical reestimates	-7	-3	-4	-6	-9	-11
Debt service savings	-*	-4	-6	-9	-12	-16
Updated baseline	<u>172</u>	<u>178</u>	<u>195</u>	<u>216</u>	<u>238</u>	<u>263</u>
Off-Budget Deficit ^{a/}						
CBO February baseline ^{a/}	15	15	14	15	16	15
Technical reestimates	-4	-1	---	---	---	---
Updated baseline	<u>11</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>15</u>

a. The CBO February baseline figures shown here were published in Congressional Budget Office, An Analysis of the President's Budgetary Proposals for Fiscal Year 1985 (February 1984).

* Less than \$500 million.

TABLE III-3. BASELINE REVENUE PROJECTIONS (By fiscal year)

Major Source	1984 Base	Projections				
		1985	1986	1987	1988	1989
In Billions of Dollars						
Individual Income Taxes	302	342	375	411	454	498
Corporate Income Taxes	60	66	73	86	91	96
Social Insurance Taxes	239	268	290	311	345	372
Excise Taxes						
Windfall Profit Taxes	8	7	6	5	4	4
Other	29	32	30	31	31	30
Estate and Gift Taxes	6	6	5	5	5	5
Customs Duties	11	13	13	14	15	15
Miscellaneous Receipts	17	18	19	19	20	21
Total Baseline Revenues	673	751	811	881	965	1,042

As a Percent of GNP						
Individual Income Taxes	8.4	8.7	8.8	8.9	9.1	9.3
Corporate Income Taxes	1.7	1.7	1.7	1.9	1.8	1.8
Social Insurance Taxes	6.7	6.8	6.8	6.8	6.9	6.9
Excise Taxes						
Windfall Profit Taxes	0.2	0.2	0.1	0.1	0.1	0.1
Other	0.8	0.8	0.7	0.7	0.6	0.6
Estate and Gift Taxes	0.2	0.1	0.1	0.1	0.1	0.1
Customs Duties	0.3	0.3	0.3	0.3	0.3	0.3
Miscellaneous Receipts	0.5	0.5	0.4	0.4	0.4	0.4
Total Baseline Revenues	18.7	19.1	19.1	19.2	19.4	19.4

Upward revisions in baseline revenues, compared to CBO's February estimates, range from \$18 billion in 1985 to \$26 billion in 1989 (see Table III-4). The factor accounting for most of these revisions is the Deficit Reduction Act of 1984, which was signed by the President on July 18. The act increases estimated revenues by \$11 billion in 1985, \$23 billion in 1987, and \$27 billion by 1989.

Revisions to estimates stemming from changes in the economic outlook since February lead to higher revenues in 1985, relative to the February estimates, but reduce revenues thereafter. Technical revisions raise revenues in each year after 1984. These revisions are discussed in more detail below.

The Deficit Reduction Act of 1984. The tax provisions of the Deficit Reduction Act of 1984, which constitute the Tax Reform Act of 1984, raise \$51 billion over the 1984-1987 period and \$104 billion over 1984-1989. The

TABLE III-4. CHANGES MADE IN CBO FEBRUARY BASELINE REVENUE PROJECTIONS (By fiscal year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
CBO February Baseline	663	733	795	863	945	1,016
Changes By Source						
Enacted legislation						
Deficit Reduction Act	1	11	17	23	25	27
Revised economic assumptions						
Individual income and social insurance taxes						
Corporate income taxes	8	3	-3	-7	-9	-10
Other	-1	-2	-3	-4	-4	*
Subtotal	<u>2</u>	<u>4</u>	<u>3</u>	<u>3</u>	<u>3</u>	<u>4</u>
Subtotal	<u>10</u>	<u>5</u>	<u>-2</u>	<u>-8</u>	<u>-10</u>	<u>-6</u>
Technical reestimates						
Individual income and social insurance taxes						
Corporate income taxes	1	2	1	2	3	4
Other	-1	-1	-1	*	0	*
Subtotal	<u>*</u>	<u>*</u>	<u>1</u>	<u>1</u>	<u>1</u>	<u>1</u>
Subtotal	<u>-1</u>	<u>2</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>
Total Changes	10	18	16	18	20	26
CBO August Baseline	673	751	811	881	965	1,042

* Less than \$500 million.

act raises revenues in a number of ways. It adjusts or repeals tax reductions scheduled to go into effect after 1984; it tightens the rules for income averaging; it places limits on the volume of state-issued tax-exempt industrial development bonds; it reduces the tax advantages available from property leased to tax-exempt entities; it lengthens the depreciation period for real estate; it raises liquor taxes; and it curbs a number of tax shelter and tax accounting abuses (see box). Slightly more than half (54 percent) of the 1984-1989 net revenue increase is from individual income taxes. Thirty-eight percent is from higher corporate income taxes, and 8 percent is from higher excise taxes.

MAJOR REVENUE PROVISIONS OF THE DEFICIT REDUCTION ACT OF 1984

Provision	Summary	1984-1989 Revenue Effect (in billions of dollars)
Freeze of Scheduled Tax Reductions	The act postpones or repeals several tax reductions scheduled for after 1984 including the net interest exclusion, finance leasing rules, increased eligibility for expensed property, and reductions in estate and gift tax and telephone excise tax rates.	26
Limits on Tax-Exempt Leasing	Certain property used by tax-exempt entities must now be depreciated using a less advantageous depreciation method; and the availability of the investment tax credit for such property is further limited.	17
Changes in Accounting Rules	Several accounting rules are made more stringent, including those regarding deferred payment transactions and the premature accrual of deductible business expenses.	15
Modification of Income Averaging	The act increases the threshold for "averageable income" and allows only the three preceding years' income to be included.	11
Restrictions on Depreciation Rules for Real Estate	The length of time over which real property can be depreciated is increased from 15 to 18 years.	8
Increase in Excise Tax on Liquor	The tax rate on distilled spirits is increased by \$2.00 (19 percent) per proof gallon.	2
All Other Provisions	The act also provides for restructuring of the taxation of life insurance companies, changes in the treatment of tax-exempt bonds, extension of the targeted jobs tax credit, more stringent foreign and partnership provisions, and a wide variety of other tax reform provisions.	27
	Total net revenue gain for the 1984-1989 period.	104

The act also contains provisions that reduce revenues. The holding period necessary for preferential capital gains treatment is reduced from one year to six months (effective through 1987) and the 30 percent withholding tax on interest paid to foreign investors is repealed. The act extends the tax exemption for qualified mortgage revenue bonds for four years. It also extends for one year the targeted jobs credit available to employers hiring disadvantaged workers, and it increases the earned income credit available to low-income workers with families. In all, revenue-losing provisions reduce receipts by \$11 billion over the 1984-1989 period.

Changes in the Economic Outlook. Two factors related to the economy have altered the outlook for revenues since last February. Economic growth this year was stronger than expected, and National Income and Product Accounts (NIPA) data were revised for the period from 1981 forward.

The continuing economic strength during the past two quarters has led CBO to project taxable personal income and economic profits during the 1984-1986 period that are higher than those contained in its February economic forecast (see Table I-3). But its projections for incomes after 1986 are lower than those contained in the February forecast. This change reflects downward revisions in projected economic growth and the price level for these years.

As a result of higher employment and nonwage incomes, projected individual income taxes through 1986 have been raised above CBO's February estimates; after 1986 income taxes are lowered relative to the earlier projections. Lower inflation and other factors, which lead to lower total wages and salaries despite the higher employment levels, reduce Social Security revenues after 1984 relative to the February projections (see Table III-4). Unemployment insurance revenues, the largest other component of social insurance taxes, are now also projected at lower levels for 1985-1989 than were projected in February, reflecting reductions in state unemployment tax rates made possible by the stronger labor market.

Taxable profits of corporations are now projected at lower levels and at a lower share of GNP through 1988, relative to the February CBO projections. This reduction reflects higher investment in depreciable assets, which leads to additional tax credits and depreciation deductions, and lower inflation gains on inventories, which also reduce corporate income tax liability.

Higher projected levels of imports boost customs duties, and higher interest rates raise Federal Reserve System payments (the major component of miscellaneous receipts) relative to the February estimates.

Revised NIPA data for 1983 and the first half of 1984 show that, overall, taxable personal income was higher than had been assumed earlier, with all of the upward revision in the nonwage component of income. Wage and salary income was revised downward. Although the higher level of economic activity raised corporate cash flow above previously assumed levels, taxable profits were lower as the result of increased depreciation deductions associated with higher than assumed levels of investment. Overall, the National Income and Product Accounts revisions were relatively minor, but they did make it easier to explain trends revealed by recent tax collections.

Technical Reestimates. Two elements dominate technical reestimates. One is an increase in individual income tax estimates based on new information about the payment of back taxes on liabilities outstanding from earlier years. The second is a decrease in unemployment insurance tax estimates based on new data for the distribution of taxable wages and salaries. Technical reestimates for other tax sources are smaller and mostly offsetting.

Outlays

Baseline outlays are now projected to rise from \$845 billion in 1984 to \$929 billion in 1985 and \$1.3 trillion by 1989. The growth in outlays between 1984 and 1989 averages 9 percent per year, slightly more than the assumed rate of increase in GNP for this period. Consequently, total outlays as a percent of GNP rise from 23.5 percent in 1984 to 24.3 percent in 1989. The composition of budget outlays relative to GNP also changes somewhat over the next five years, as shown in Table III-5. The share of outlays for national defense and net interest each rise by about 1 percent of GNP, while other spending falls.

The major sources of growth in baseline spending after 1984 are detailed in Table III-6 and portrayed graphically in Figure III-2. Defense spending accounts for nearly two-fifths of the projected \$459 billion increase in outlays between 1984 and 1989. Entitlements and other mandatory spending contributes one-third of the projected growth in total outlays, and rising net interest costs account for another quarter. Nondefense discretionary spending accounts for about 10 percent of the overall increase in outlays.

As shown in Table III-7, CBO's updated baseline outlay projections differ very little from those made in February. Total outlays for 1984 have been lowered from \$852 billion to \$845 billion, largely as a result of

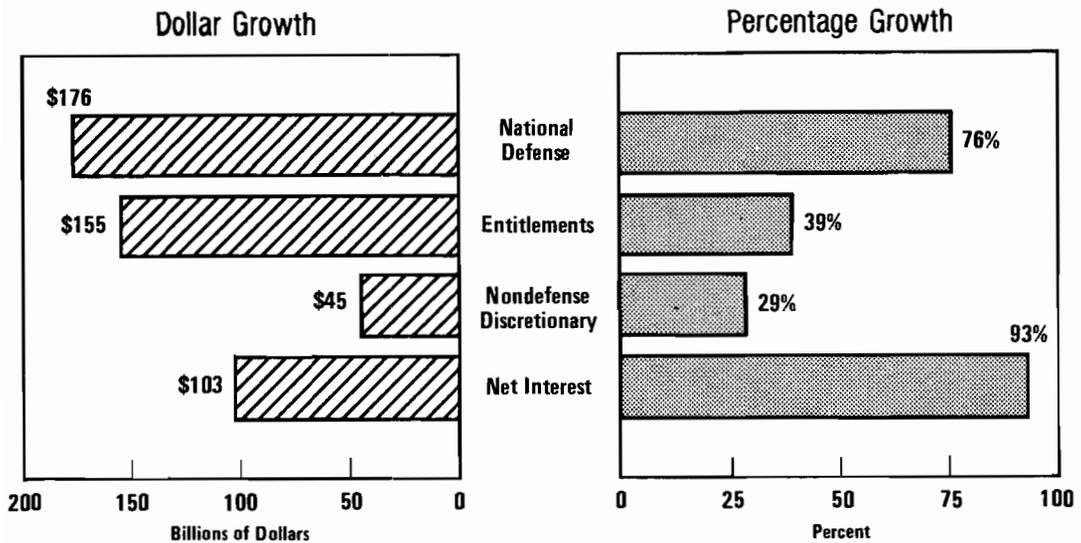
TABLE III-5. BASELINE OUTLAY PROJECTIONS FOR MAJOR SPENDING CATEGORIES (By fiscal year)

	1983	1984	Projections				
	Actual	Base	1985	1986	1987	1988	1989
In Billions of Dollars							
National Defense	210	230	262	293	327	366	406
Entitlements and Other							
Mandatory Spending	400	396	417	446	477	514	551
Nondefense Discretionary Spending	144	155	164	171	181	190	199
Net Interest	90	111	134	150	169	194	214
Offsetting Receipts	-48	-47	-48	-54	-58	-61	-66
Total Budget Outlays	796	845	929	1,006	1,097	1,203	1,305
Off-Budget Federal Entities	12	11	14	14	15	16	15
Total Outlays	808	856	943	1,020	1,112	1,219	1,319
As a Percent of GNP							
National Defense	6.5	6.4	6.7	6.9	7.1	7.4	7.6
Entitlements and Other							
Mandatory Spending	12.4	11.0	10.6	10.5	10.4	10.3	10.3
Nondefense Discretionary Spending	4.5	4.3	4.2	4.0	3.9	3.8	3.7
Net Interest	2.8	3.1	3.4	3.5	3.7	3.9	4.0
Offsetting Receipts	-1.5	-1.3	-1.2	-1.3	-1.3	-1.2	-1.2
Total Budget Outlays	24.7	23.5	23.7	23.7	23.9	24.2	24.3
Off-Budget Federal Entities	0.4	0.3	0.3	0.3	0.3	0.3	0.3
Total Outlays	25.1	23.8	24.0	24.0	24.2	24.5	24.6

TABLE III-6. SOURCES OF GROWTH IN BASELINE SPENDING
AFTER 1984 (By fiscal year, in billions of dollars)

	1985	1986	1987	1988	1989
Defense					
Real defense growth	1	12	29	47	70
Discretionary inflation adjustments	5	16	30	47	66
Prior year increases in budget authority	<u>25</u>	<u>34</u>	<u>38</u>	<u>41</u>	<u>40</u>
Subtotal	<u>31</u>	<u>62</u>	<u>97</u>	<u>135</u>	<u>176</u>
Entitlements and Other Mandatory Spending					
Cost-of-living adjustments	6	20	33	47	61
Medical cost increases	5	10	17	24	32
Caseload increases	3	9	15	22	30
Increased medical care utilization	4	7	12	17	23
Farm price supports and other	<u>4</u>	<u>5</u>	<u>5</u>	<u>8</u>	<u>9</u>
Subtotal	<u>22</u>	<u>51</u>	<u>82</u>	<u>118</u>	<u>155</u>
Nondefense Discretionary Spending					
Discretionary inflation adjustments	3	7	12	18	25
Civilian agency pay raises	1	3	5	7	9
Other	<u>5</u>	<u>7</u>	<u>9</u>	<u>10</u>	<u>11</u>
Subtotal	<u>9</u>	<u>17</u>	<u>26</u>	<u>35</u>	<u>45</u>
Net Interest	22	39	58	83	103
Offsetting Receipts	<u>-1</u>	<u>-7</u>	<u>-11</u>	<u>-14</u>	<u>-19</u>
Total Growth from 1984	84	161	251	358	459

Figure III-2.
Projected Budget Outlay Growth, 1984-1989



technical reestimates based on actual spending through June. For 1985-1989, total projected outlays have been lowered by \$52 billion (about 1 percent). Enacted legislation reduced projected baseline outlays by \$38 billion. About half of the legislative reductions result from the Deficit Reduction Act, with the largest reduction in the Medicare program. Technical reestimates also reduced projected outlays (by \$18 billion) but revised economic assumptions--largely higher interest rates--increased projected outlays by \$50 billion for the five-year period. The effect of all these changes in the outlay projections, together with the changes in the revenue projections, is to reduce projected deficits by \$120 billion for 1984-1989. This in turn provides additional savings in debt service costs amounting to \$46 billion.

Budget Deficits and the Federal Debt

Assuming 5 percent annual real defense growth, the unified budget deficit is projected to rise from \$172 billion in 1984 to \$263 billion by 1989. This projected growth roughly parallels the assumed growth in the economy, so that the deficit-to-GNP ratio in 1984 is about the same as in 1984--slightly under 5 percent. The off-budget deficit is projected to remain fairly constant during 1985-1989, averaging about \$15 billion a year. The total deficit--that of the unified budget plus the off-budget deficit--averages 5 percent of GNP for each of the next five years (See Table III-1).

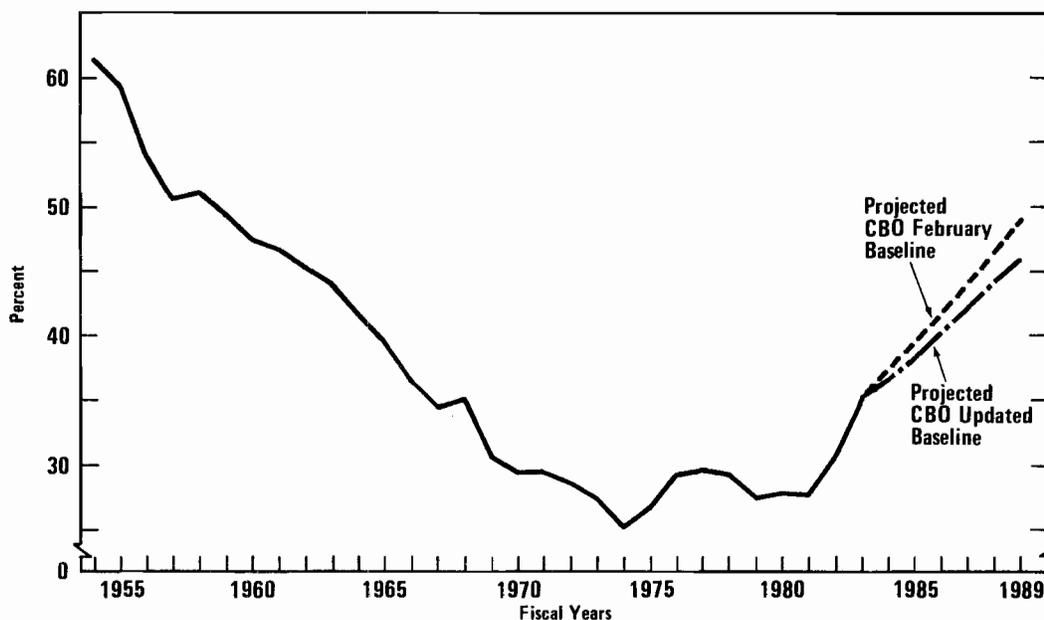
TABLE III-7. CHANGES MADE IN CBO FEBRUARY BASELINE OUTLAY PROJECTIONS (By fiscal year, in billions of dollars)

	1984	1985	1986	1987	1988	1989
CBO February Baseline ^{a/}	852	930	1,012	1,109	1,217	1,323
Changes						
Enacted legislation						
Deficit Reduction Act	-*	-4	-4	-5	-4	-5
Reconciliation Act	-*	-1	-1	-1	-1	-1
Agriculture Act	*	1	-1	-3	-5	-6
Subtotal	-*	-3	-5	-9	-10	-12
Revised economic assumptions						
Net Interest and other interest sensitive programs						
	2	12	13	12	16	17
Unemployment compensation and related benefits						
	-2	-3	-2	-2	-1	-1
Social Security and programs affected by inflation						
Subtotal	-*	-3	-3	-2	-2	-1
	1	7	8	8	12	15
Technical reestimates						
Defense programs	-4	-2	-2	-2	-2	-2
Agriculture	1	1	2	3	3	2
Medicare	-1	-2	-2	-2	-3	-3
Net Interest	-*	*	-1	-2	-3	-4
Other	-4	2	*	*	*	*
Subtotal	-8	-1	-3	-3	-5	-7
Effect of changes in deficit projections on interest costs						
	-*	-4	-6	-9	-12	-16
Total changes	-7	-1	-6	-12	-14	-19
CBO August Baseline	845	929	1,006	1,097	1,203	1,305

a. The CBO February baseline figures shown here were published in Congressional Budget Office, An Analysis of the President's Budgetary Proposals for Fiscal Year 1985 (February 1984).

* Less than \$500 million.

Figure III-3.
Federal Debt Held by the Public as a Percentage of GNP



SOURCE: Congressional Budget Office.

The large baseline deficits cause debt held by the public to increase very rapidly during the next five years--from \$1.3 trillion in 1984 to \$2.5 trillion by 1989 (see Table III-8). The ratio of debt held by the public to gross national product rises from an estimated 36 percent in 1984 to 46 percent in 1989, the highest ratio since the early 1960s (see Figure III-3). Debt subject to statutory limit, which includes debt held by various government trust funds, is projected to double during the next five years.

POSSIBLE FURTHER CONGRESSIONAL ACTION

As of the end of July, the Congress had not adopted a new budget resolution for 1985, although each House had passed a new resolution. The major unresolved issues concern the appropriate spending levels for defense and nondefense discretionary programs that are subject to annual appropriations. The spending levels for nondefense discretionary programs in the House and Senate resolutions for 1985-1987 do not differ substantially, but there is a significant difference in defense spending levels.

TABLE III-8. BUDGET FINANCING AND DEBT (By fiscal year)

	1983	1984	Projections				
	Actual	Base	1985	1986	1987	1988	1989
In Billions of Dollars							
Budget Financing							
Unified budget deficit	195	172	178	195	216	238	263
Off-budget deficit	<u>12</u>	<u>11</u>	<u>14</u>	<u>14</u>	<u>15</u>	<u>16</u>	<u>15</u>
Total	208	183	191	209	231	254	278
Means of financing other than borrowing from the public a/	5	-17	-2	-1	-1	-1	-1
Borrowing from the public	213	166	189	209	230	253	277
Debt Outstanding, End of Year							
Held by public	1,142	1,308	1,497	1,706	1,936	2,189	2,466
Held by government accounts	240	268	325	393	470	568	677
Total, gross federal debt	1,382	1,576	1,822	2,099	2,406	2,757	3,144
Debt subject to statutory limit	1,378	1,572	1,818	2,095	2,402	2,754	3,140
As a Percent of GNP							
Debt Held by the Public	35.4	36.4	38.1	40.2	42.1	44.1	46.0

a. Primarily seigniorage and changes in cash balances.

National Defense Programs

The CBO baseline projections for defense spending for 1985-1987 assume real increases in budget authority of 5 percent per year, based on the last budget resolution adopted by the Congress in June 1983. These projections total \$994 billion in budget authority and \$881 billion in outlays for the three-year period (see Table III-9). The President's original budget for 1985 proposed higher levels of defense spending for this period, amounting to \$68 billion in budget authority and \$50 billion in outlays above the CBO baseline projections. In May, the President accepted a reduction in defense spending as part of a deficit down-payment plan amounting to \$57 billion in budget authority and \$40 billion in outlays for 1985-1987. The revised Administration defense spending levels were incorporated in the Senate-passed budget resolution. The House-passed budget resolution contains lower defense spending levels. Compared to the Senate-passed resolution and the President's May budget revision, the House resolution provides \$73 billion lower budget authority and \$55 billion lower outlays for the three-year period.

TABLE III-9. NATIONAL DEFENSE FUNCTION FUNDING LEVELS
(By fiscal year, in billions of dollars)

	1985	1986	1987	Total 1985-1987
Budget Authority				
CBO Updated Baseline	297.5	329.1	367.3	993.9
President's February Request	313.4	359.0	389.1	1,061.5
House-Passed Resolution	285.7	310.0	336.1	931.8
Senate-Passed Resolution	299.0	333.7	372.0	1,004.7
Outlays				
CBO Updated Baseline	261.6	292.7	327.1	881.4
President's February Request	272.0	310.6	348.6	931.2
House-Passed Resolution	255.9	275.8	303.9	835.6
Senate-Passed Resolution	266.0	294.6	330.4	891.0

CBO's updated baseline projection for defense programs lies between the House and Senate levels, but is nearer the Senate than the House totals for 1985-1987. If final appropriation action is close to the House budget resolution targets for the three-year period, the effect will be to lower projected budget deficits for 1985-1987 by \$52 billion (including lower debt service costs). On the other hand, if final action is close to the Senate levels, the effect will be to raise projected baseline budget deficits by \$12 billion.

Nondefense Discretionary Programs

CBO's baseline projections for nondefense discretionary spending levels assume that 1984 appropriation levels will be continued in real terms, with increases only for projected inflation. As shown in Table III-10, both the House and Senate-passed budget resolutions provide for spending levels

TABLE III-10. NONDEFENSE DISCRETIONARY SPENDING LEVELS
(By fiscal year, in billions of dollars)

	1985	1986	1987	Total 1985-1987
Budget Authority				
CBO Updated Baseline	146.8	154.6	163.9	465.3
President's February Request	138.9	145.8	153.0	437.7
House-Passed Resolution	148.3	153.5	161.6	463.4
Senate-Passed Resolution	142.5 <u>a/</u>	148.0	155.9	446.4
Outlays				
CBO Updated Baseline	164.2	171.5	181.2	516.9
President's February Request	162.6	166.7	173.2	502.5
House-Passed Resolution	163.3	170.3	178.5	512.1
Senate-Passed Resolution	161.4	166.9	173.5	501.8

- a. The Deficit Reduction Act expresses the sense of the Senate that FY 1985 appropriations bills shall not exceed, in the aggregate, \$139.8 billion for nondefense discretionary accounts. This amount is consistent with that ceiling.

for these programs slightly below the CBO projections for 1985-1987, but somewhat above the President's February budget proposals. The difference between the House and Senate resolutions for nondefense discretionary spending programs amounts to \$17 billion in budget authority over three years and \$10 billion in outlays. If final appropriation action is close to the lower Senate resolution targets for 1985-1987, the effect will be to reduce the updated CBO baseline deficits by \$17 billion (including lower interest costs) for this period. Enactment of the House targets for nondefense spending programs will also reduce the CBO baseline deficits for 1985-1987 by \$5 billion.

OTHER UNCERTAINTIES IN THE BUDGET OUTLOOK

In addition to the uncertainty of final Congressional action on the 1985 budget, the updated CBO baseline projections could change by significant amounts if the economy does not perform as assumed, or for other reasons. For example, if interest rates are one percentage point higher than assumed for the CBO projections, the baseline budget deficit for 1985 will be higher by \$4 billion and for 1989 by \$26 billion (see Table III-11). On the other

TABLE III-11. THE EFFECT ON BASELINE BUDGET PROJECTIONS OF HIGHER REAL GROWTH AND INTEREST RATES (By fiscal year, in billions of dollars)

	1985	1986	1987	1988	1989
Real Growth: Effect of One-Percentage-Point Higher Annual Rate Beginning October 1984					
Change in revenues	8	22	38	56	77
Change in outlays	-1	-4	-9	-17	-28
Change in deficits	-9	-26	-47	-73	-105
Interest Rates: Effect of One-Percentage-Point Higher Annual Rates Beginning October 1984					
Change in revenues	1	1	1	1	1
Change in outlays	5	10	15	22	27
Change in deficit	4	10	14	21	26

hand, if real growth is one percentage point higher than assumed for the CBO projections throughout the 1985-1989 period, the baseline deficit for 1985 will be \$9 billion lower and the 1989 baseline deficit will be reduced by \$105 billion.

These results should not be interpreted as alternative economic scenarios. Sustained changes in one economic variable do not generally occur without changes in other variables as well. Also, it should be noted that a one-percentage-point change in both variables was assumed as a convenience and not to reflect typical forecasting errors. Interest rates tend to be volatile and difficult to forecast, especially in recent years. Real growth rates, although they fluctuate greatly from year to year, tend to be more stable over five-year periods. Hence, a one-percentage-point average error in forecasting and projecting interest rates is more probable than a one-percentage-point error in forecasting and projecting real growth rates over a five-year period. 1/

Other nonlegislative factors that can significantly affect projected budget totals include the effects of abnormal weather conditions on farm price supports and disaster assistance, changing program participation rates on entitlement benefits, and changing spending rates for defense and other discretionary spending programs. These effects can result in fairly large technical reestimates, although they are usually smaller than are the changes resulting from economic forecasting and projection errors.

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1. For a more complete discussion of the sensitivity of the budget to economic assumptions, see Congressional Budget Office, Baseline Budget Projections for Fiscal Years 1985-1989 (February 1984), Chap. IV.