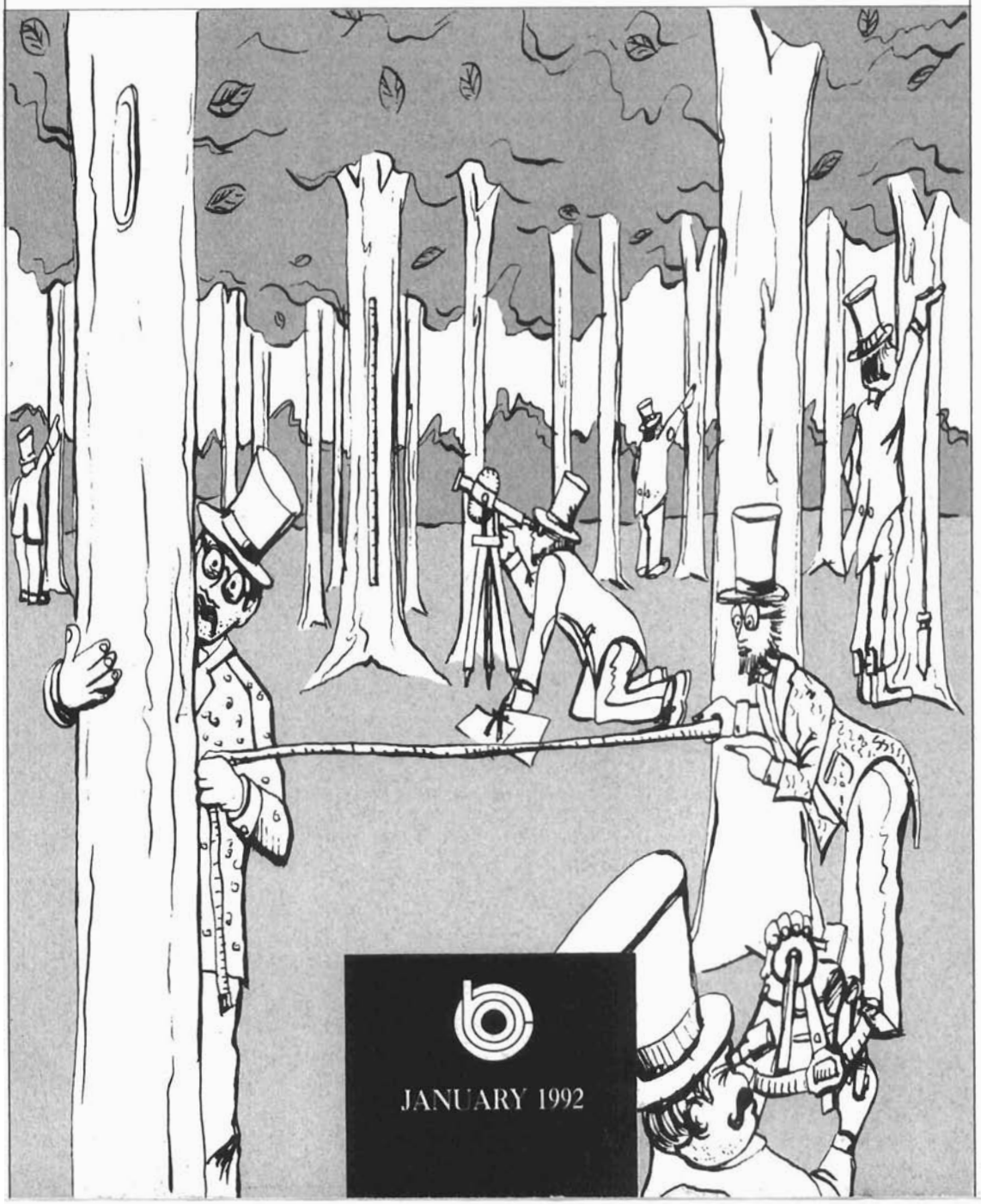
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

# The Economic and Budget Outlook: Fiscal Years 1993-1997

A Report to the Senate and House Committees on the Budget

As Required by Public Law 93-344



# THE ECONOMIC AND BUDGET OUTLOOK: FISCAL YEARS 1993-1997

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## NOTES

Unless otherwise indicated, all years referred to in Chapter 1 are calendar years and all years in Chapters 2 through 5 are fiscal years.

Figures showing periods of recession (indicated by shaded vertical bars) reflect the peak and trough of the recession. The shaded bars assume the recession that began in August 1990 has not yet ended. There are some indications, however, that the trough of the recession may have occurred during the second quarter of 1991.

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

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

The Balanced Budget and Emergency Deficit Control Act of 1985 (commonly known as Gramm-Rudman-Hollings) is also referred to in this volume more briefly as the Balanced Budget Act. This act was amended by the Omnibus Budget Reconciliation Act of 1990, referred to in this volume as OBRA-90 or the reconciliation act.

# Preface

This volume is one in a series of reports on the state of the economy and the budget that the Congressional Budget Office (CBO) issues periodically. It satisfies the requirements of sections 202(f) and 308(c) of the Congressional Budget Act of 1974 to submit an annual report to the Committees on the Budget with respect to fiscal policy and to provide five-year baseline projections of the federal budget. It also satisfies the requirement of section 254(d) of the Budget Enforcement Act of 1990 to provide a sequestration preview report regarding the status of the discretionary spending limits, pay-as-you-go requirements, and maximum deficit amounts. In accordance with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook and monetary and fiscal policies presented in Chapters 1 and 5 was prepared by the Fiscal Analysis Division under the direction of Frederick Ribe, Robert Dennis, John F. Peterson, and Kim J. Kowalewski. Matthew Salomon wrote Chapter 1, and Angelo Mascaro and Frank S. Russek wrote Chapter 5 with major contributions from Leonard Burman and Eric Toder. Robert Arnold and John F. Peterson carried out the economic forecast, and Trevor Alleyne, Victoria Farrell, Douglas R. Hamilton, George Iden, Joyce Manchester, John Sturrock, Stephan Thurman, and Christopher Williams provided background analysis. Research assistance was provided by Dan Covitz, Mark McMullen, Michael Simpson, and Patricia Wahl.

The baseline projections of outlays were prepared by the staff of the Budget Analysis Division under the supervision of James L. Blum, C.G. Nuckols, Michael Miller, Charles Seagrave, Robert Sunshine, and Paul N. Van de Water. The revenue estimates were prepared by the staff of the Tax Analysis Division under the direction of Rosemary D. Marcuss and Richard A. Kasten. Kathy A. Ruffing and Paul N. Van de Water wrote Chapter 2. Kathy Ruffing also wrote Chapter 3. Rosemary Marcuss and Richard Kasten wrote Chapter 4. The appendixes were written by Paul N. Van de Water (Appendix A); Kathy Ruffing (Appendix B); Jeffery M. Holland (Appendix C); and Richard A. Krop (Appendix D). Gail Del Balzo and John Sturrock prepared the glossary. Paul N. Van de Water wrote the summary of the report.

Paul L. Houts supervised the editing and production of the report, assisted by Sherry Snyder. Major portions were edited by Paul L. Houts, Sherwood Kohn, Roger Williams, and Sherry Snyder. Christian Spoor provided editorial assistance during production and coordinated the graphics. The authors owe special thanks to Marion Curry, Janice Johnson, Dorothy Kornegay, Verlinda Lewis, L. Rae Roy, Denise Thomas, and Simone Thomas, who typed the many drafts. With the assistance of Martina Wojak, Kathryn Quattrone prepared the report for publication.

Robert D. Reischauer
Director

January 1992

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# Summary

Federal budgeting in 1992 is caught on the horns of a nasty dilemma. The immediate concern is an economy struggling to recover from recession. Of long-term consequence are the continued stagnation of personal incomes and a string of record budget deficits. Unfortunately, fiscal policies that would aid the economy's short-term recovery are all too likely to undercut its long-run performance.

Most economic forecasters, including the Congressional Budget Office (CBO), expect a strong rebound to begin in the spring. But even then, the pace of economic growth will probably fall well short of what normally occurs early in a recovery. Although a looser fiscal policy would do little to hasten the onset of recovery, tax cuts or increased government spending could strengthen the expansion late this year and early next year. An expansionary fiscal policy, however, will immediately add to the federal government's already mammoth borrowing requirements, and some proposals would spill more red ink down the road as well.

Fiscal year 1991 closed with a record deficit of $269 billion, but 1992 and 1993 seem certain to exceed even that figure. CBO projects that, under current budgetary policies, the deficit will reach $352 billion this year and $327 billion in 1993. Even adjusting for the size of the economy, those figures approach the highest levels ever.

The huge shortfalls will arise despite the stringent limits on discretionary spending that were imposed as part of the five-year, $500 billion deficit reduction agreement negotiated by the President and the Congress in 1990. During the 1980s, discretionary spending shrank from 10.5 percent of gross domestic product (GDP) to a postwar low of 9.5 percent. Under current policies, the ratio of discretionary spending to GDP will fall another 2 percentage points in the next five years. Achieving the reductions in discretionary spending mandated by the budget agreement is almost certain to require further substantial cuts in the defense budget, and will keep funds for new international and domestic initiatives in short supply.

Although deficit reduction is a critical goal, other budgetary claims tug in the opposite direction. Examples abound. For over a decade, the nation has curbed investment in infrastructure, education, and other forms of public capital that could increase long-term growth. Sixteen percent of people under age 65 have no health insurance coverage. The United States has a historic opportunity to help the emerging nations in Eastern Europe and the former Soviet Union develop strong market economies and sound democratic institutions. And some analysts and politicians feel that the tax burden on middle-income families is too high, while others want to reduce the taxation of income from capital.

No single step can satisfy all of those concerns simultaneously, and the Congress must decide how to balance the competing demands. For fiscal stimulus, the most effective policy is one that can be carried out quickly, takes effect promptly, and promotes spending rather than saving. Although measures that increase the federal deficit temporarily tend to be less effective than those that raise it permanently, temporary measures are less likely to spook financial markets and raise interest rates. Encouraging growth, by contrast, calls for reducing the budget deficit and increasing the share of government spending devoted to investment in physical and human capital. And, obviously, demands for additional public spending cannot be satisfied while simultaneously cutting taxes and making further inroads into the deficit.

# The Economic Outlook

Six months ago, CBO and most other forecasters expected the recovery to be fully under way by the start of 1992. Nineteen ninety-two is now here, but the recovery is not. What went wrong?

First, high vacancy rates for office buildings and rental housing continued to cast a pall over new construction, which declined during the second half of 1991. Second, an unusually large share of the spurt in demand that occurred in the late spring and summer was satisfied by imports rather than domestic production. Third, the decline in personal income and frequent announcements of job layoffs shook consumer confidence.

Although the low level of consumer confidence raises the specter of a double-dip recession, CBO believes that a recovery, albeit mild and delayed, is a more likely prospect. Recent declines in interest rates should allow the economy to pick up steam by spring. A moderate recovery should take hold in the second half of the year and continue into 1993. But the pace of recovery will be slowed by structural adjustments in commercial real estate, financial services, state and local governments, and other sectors of the economy.

## Forecast for 1992 and 1993

CBO forecasts that real gross domestic product in 1992 and 1993 will grow about 3 percent a year, slightly above the *Blue Chip* average of private-sector forecasts but only about half the rate that normally occurs in the first two years of recovery (see Summary Table 1). This lukewarm performance will only gradually reduce the hardships that the recession has brought to many parts of the country. The unemployment rate will remain high for some time, averaging close to 7 percent in 1992, as the recovery gradually entices discouraged, jobless workers back into the labor force.

*A moderate recovery should take hold in the second half of the year and continue into 1993.*

CBO projects that inflation, as measured by the change in the consumer price index, will be 3.4 percent in 1992 and 3.6 percent in 1993 on a fourth-quarter-to-fourth-quarter basis. Excluding food and energy prices, the underlying rate of inflation is projected to be 3.6 percent in 1992 and 1993, the smallest two-year increase since the mid-1960s. But that considerable achievement, it should be noted, has been purchased at the cost of low wage growth and high unemployment.

Short-term interest rates will remain close to 4 percent in early 1992, but they are likely to rise modestly--to about 4.8 percent--by

year's end. A further rise to 5.1 percent is expected in 1993, as the recovery continues and the demand for borrowed funds grows. The recovery is not expected to produce any large changes in long-term interest rates, however. The 10-year Treasury note rate, which closed 1991 at 6.8 percent, should be only slightly higher in 1992 and 1993.

## Projections for 1994-1997

CBO does not attempt to forecast cyclical fluctuations in the economy more than two years into the future. So beyond 1993, the projections are based on trends in the labor force, productivity, and saving. Over the 1994-1997 period, CBO projects that the substantial economic slack left by the recession will be gradually eliminated through growth in real GDP that averages 2.6 percent per year (see Summary Table 2). By comparison, potential output grows at an annual rate of only 2.1 percent.

The reduction in the underlying rate of inflation, brought about by the recession and

**Summary Table 1.**
**Comparison of Forecasts for 1992 and 1993**

| | Actual 1990 | Estimated 1991 | Forecast 1992 | Forecast 1993 |
|---|---|---|---|---|
| | **Fourth Quarter to Fourth Quarter (Percentage change)** | | | |
| Nominal GDP | | | | |
| CBO | 4.1 | 3.2 | 5.9 | 6.6 |
| *Blue Chip* | 4.1 | 3.4 | 5.7 | 6.5 |
| Real GDP | | | | |
| CBO | -0.1 | 0.0 | 2.8 | 3.3 |
| *Blue Chip* | -0.1 | 0.2 | 2.4 | 3.0 |
| Implicit GDP Deflator | | | | |
| CBO | 4.2 | 3.2 | 3.1 | 3.2 |
| *Blue Chip* | 4.2 | 3.2 | 3.1 | 3.4 |
| Consumer Price Index[a] | | | | |
| CBO | 6.3 | 3.0 | 3.4 | 3.6 |
| *Blue Chip* | 6.3 | 3.0 | 3.5 | 3.8 |
| | **Calendar-Year Averages (Percent)** | | | |
| Civilian Unemployment Rate | | | | |
| CBO | 5.5 | 6.7 | 6.9 | 6.4 |
| *Blue Chip* | 5.5 | 6.7 | 6.8 | 6.3 |
| Three-Month Treasury Bill Rate | | | | |
| CBO | 7.5 | 5.4 | 4.4 | 5.1 |
| *Blue Chip* | 7.5 | 5.4 | 4.1 | 5.0 |
| Ten-Year Treasury Note Rate | | | | |
| CBO | 8.6 | 7.9 | 7.1 | 7.1 |
| *Blue Chip*[b] | 8.6 | 7.9 | 7.0 | 7.5 |

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators;* Department of Commerce, Bureau of Economic Analysis.

NOTE: The *Blue Chip* forecasts through 1993 are based on a survey of 50 private forecasters, published on January 10, 1992. These forecasts are reported on a basis that is consistent with the recent revision of the national income and product accounts.

a. The consumer price index for all urban consumers (CPI-U).

b. *Blue Chip* does not project a 10-year note rate. The values shown here for the 10-year note rate are based on the *Blue Chip* projections of the Aaa bond rate, adjusted by CBO to reflect the estimated spread between Aaa bonds and 10-year Treasury notes.

the tight monetary policy that preceded it, is likely to persist through much of the 1990s. The consumer price index is projected to grow by 3.6 percent a year. The implicit GDP deflator will grow a bit less rapidly, reflecting a continued drop in the price of computers and their mounting importance in the economy.

The CBO projections assume that real (inflation-adjusted) interest rates will remain below prerecession levels. Long-term rates are projected to be flat, with short-term rates rising slightly after 1993. By 1997, real interest rates are projected to be about 1 percent below the 1986-1989 average.

# The Budget Outlook

The course of the budget through 1995 was set by the 1990 budget agreement. It included tax increases and spending reductions totaling almost $500 billion over the 1991-1995 period. New budgetary procedures attempted to guarantee that the savings would not be eroded by future legislation.

The new budget process is spelled out in the Budget Enforcement Act of 1990. Dollar limits apply to discretionary spending. Defense, international, and domestic discretionary spending have separate caps through 1993, and a single aggregate limit applies in 1994 and 1995. A pay-as-you-go requirement provides that, taken together, changes in mandatory spending programs and tax laws must not increase the deficit in any year.

Although the Budget Enforcement Act contains deficit targets, they are irrelevant through at least 1993, and the law contains no requirement that the deficit fall to any specified level.

**Summary Table 2.**
**Medium-Term Economic Projections for Calendar Years 1992 Through 1997**

| | Estimated | Forecast | | Projected | | | |
|---|---|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| Nominal GDP (Billions of dollars) | 5,671 | 5,931 | 6,337 | 6,714 | 7,104 | 7,520 | 7,961 |
| Nominal GDP (Percentage change) | 2.9 | 4.6 | 6.9 | 5.9 | 5.8 | 5.9 | 5.9 |
| Real GDP (Percentage change) | -0.8 | 1.6 | 3.6 | 2.7 | 2.5 | 2.6 | 2.6 |
| Implicit GDP Deflator (Percentage change) | 3.7 | 2.9 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Fixed-Weighted GDP Price Index (Percentage change) | 3.7 | 3.0 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 |
| CPI-U (Percentage change) | 4.2 | 3.3 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| Unemployment Rate (Percent) | 6.7 | 6.9 | 6.4 | 6.2 | 6.0 | 5.9 | 5.7 |
| Three-Month Treasury Bill Rate (Percent) | 5.4 | 4.4 | 5.1 | 5.2 | 5.4 | 5.5 | 5.6 |
| Ten-Year Treasury Note Rate (Percent) | 7.9 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 |

SOURCE: Congressional Budget Office.

NOTE: CPI-U is the consumer price index for all urban consumers.

## The Outlook for the Deficit

CBO projects that the federal deficit will exceed $350 billion in 1992, setting a new record for the second year in a row (see Summary Table 3). In relation to the size of the economy, the 1992 deficit will amount to 6.0 percent of GDP, just shy of the postwar high reached in 1983. By the mid-1990s, the deficit will drop back to about $200 billion, or about 3 percent of GDP.

If budgetary policies are not changed, that may prove to be the acme of success in deficit reduction. Without additional spending cuts or tax increases, the improvement will cease, with the deficit likely to grow faster than GDP in the second half of the decade.

Yet the total deficit is not the most relevant measure for policy discussions. Its ups and downs obscure an underlying stability in federal fiscal policy. To appreciate the fundamental pattern, some temporary factors must be removed from the budget totals.

First, federal spending in recent years has been swelled by the cost of bailing out or clos-

**Summary Table 3.**
**CBO Deficit Projections (By fiscal year)**

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|---|
| | | | | **In Billions of Dollars** | | | | |
| Total Deficit | 220 | 269 | 352 | 327 | 260 | 194 | 178 | 226 |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 162 | 246 | 290 | 258 | 227 | 210 | 222 | 254 |
| Standardized-Employment Deficit[a] | 150 | 172 | 191 | 189 | 178 | 170 | 191 | 234 |
| Deficit Excluding Social Security and Postal Service | 277 | 321 | 404 | 391 | 337 | 281 | 276 | 335 |
| | | | | **As a Percentage of GDP** | | | | |
| Total Deficit | 4.0 | 4.8 | 6.0 | 5.2 | 3.9 | 2.8 | 2.4 | 2.9 |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 3.0 | 4.4 | 5.0 | 4.1 | 3.4 | 3.0 | 3.0 | 3.2 |
| Standardized-Employment Deficit[a] | 2.7 | 2.9 | 3.1 | 2.9 | 2.6 | 2.4 | 2.5 | 3.0 |
| Deficit Excluding Social Security and Postal Service | 5.1 | 5.7 | 6.9 | 6.3 | 5.1 | 4.0 | 3.7 | 4.3 |
| **Memorandum:** | | | | | | | | |
| Gross Domestic Product | 5,460 | 5,627 | 5,846 | 6,237 | 6,621 | 7,004 | 7,414 | 7,849 |

SOURCE: Congressional Budget Office.

a. Excluding deposit insurance and Desert Storm contributions. Shown as a percentage of potential GDP.

ing hundreds of insolvent thrift institutions and commercial banks, whose deposits are insured by the federal government. Deposit insurance costs are expected to remain enormous through 1993, drop sharply in 1994, and turn negative in 1995, when proceeds from selling the assets of previously failed institutions will exceed the spending required to resolve new failures.

Contributions from U.S. allies to help finance Operation Desert Storm represent a second transitory item. Those contributions lower the deficit by $43 billion in 1991 and $5 billion in 1992. The large year-to-year swings in deposit insurance spending and the allies' contributions have little current effect on the economy and on interest rates.

Excluding deposit insurance and Desert Storm contributions, the deficit peaks at 5.0 percent of GDP in fiscal year 1992 and then declines gradually to 3.0 percent in 1995 and 1996. But even these deficit estimates are not the most relevant, because they contain a cyclical element that should be less troubling than a structural imbalance. The standardized-employment deficit, which removes the cyclical component, hovers around 3 percent of GDP for the rest of the decade.

## The Budget Process

Three major budgetary issues face the Administration and the Congress as they grapple with the 1993 budget. How should the discretionary spending limits be met? Should the existing categorical limits be changed? And should some sort of countercyclical tax cut or spending increase be enacted?

Meeting the discretionary spending limits for fiscal year 1993 will require holding defense and domestic appropriations below their 1992 levels, after allowing for inflation. By CBO's calculations, the required cuts in defense budget authority amount to $15 billion, or 5 percent below the 1992 level. For domestic discretionary programs, the budget authority cut is $6 billion, or 3 percent. Required outlay reductions total almost $9 billion, which amounts to 4 percent of total domestic discretionary outlays and 8 percent of outlays from new budget authority.

*The standardized-employment deficit hovers around 3 percent of GDP for the rest of the decade.*

As the Budget Enforcement Act now stands, funds cannot be shifted from one category of discretionary spending to another in 1993. If spending in any category is held below the legal limit, the shortfall must be applied to deficit reduction. Since October 1990, when the act was adopted, however, the world has changed in ways that could not have been foreseen. One now hears arguments that the caps on 1993 defense spending are too high, and that additional defense cuts should be used to pay for tax reductions or higher domestic spending.

The third question involves whether to attempt to use the budget to boost the economy. Chapter 5 of this report concludes that fiscal measures could strengthen the recovery in the latter half of 1992 and throughout 1993, but might impair economic growth in the long run. Among the measures that might provide relatively rapid stimulus with relatively few long-term side effects are personal tax rebates for 1991 tax liabilities, a temporary investment tax credit, and temporary, unrestricted fiscal assistance to states and localities.

## Conclusion

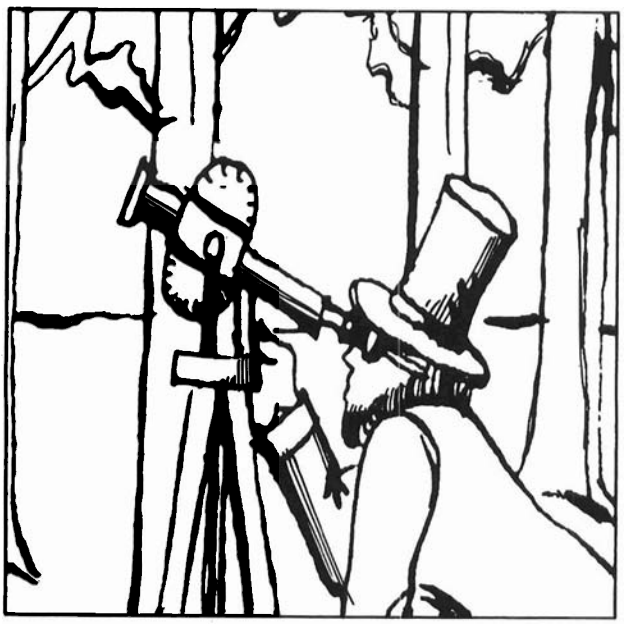
Although the recession has made further deficit reduction inadvisable this year, the deficit should return to the top of the political agenda in 1993. Excluding deposit insurance, the deficit is likely to exceed $200 billion for the foreseeable future and move higher toward the end of the 1990s. Deficits of those magnitudes cripple economic growth by reducing national saving and capital formation. They also create a vicious cycle of more federal borrowing and higher debt service costs, which in turn make it still more difficult to reduce the deficit.

Another round of spending reductions and tax increases, rivaling the $500 billion achieved in 1990, must come soon if the deficit is to be reduced to reasonable levels.

Chapter One

# The Economic Outlook

Economic growth stalled in the second half of 1991, raising serious concerns about whether the recent recession had, in fact, ended. As late as mid-1991, most forecasters, including the Congressional Budget Office (CBO), had expected the recovery to be fully under way by the start of 1992. But the disappointing developments during the second half of last year undermined these predictions and sent a wave of pessimism through the economy (see Box 1-1).



CBO now forecasts only marginal growth through the first quarter of 1992. A more solid recovery should set in during the spring, when the lower interest rates of recent months will begin to stimulate a stronger expansion in spending and, in turn, added employment and increased personal income. Even so, by historical standards the recovery is expected to be lackluster, as a number of sectors continue to grapple with structural adjustments. Growth in real gross domestic product (GDP) is projected to average 3.1 percent over 1992 and 1993--only about half the rate that normally occurs in the first two years of a recovery.

More than the usual amount of caution attends this forecast. A significant risk still exists that the economy could decline even further in early 1992, with many sectors experiencing sluggishness. A sharp contraction appears unlikely, however. Even if one did take place, a recovery should be starting by midyear.

The tepid recovery will only gradually reduce the hardships that the recession brought to many parts of the country. Over the long term, however, the structural adjustments that are restraining the expansion will eventually improve overall economic performance. Feeble growth in nonresidential construction, for example, will reduce currently towering vacancy rates in the overbuilt commercial sector to levels that are more conducive to balanced growth in the long term. Similarly, adjustments in the banking system should make the financial system less vulnerable to crises such as that which overwhelmed the savings and loan industry in the 1980s. The recession has already lowered the rate of inflation, and the slow recovery should prevent a resurgence.

## Box 1-1.
## How Severe Has This Recession Really Been?

Compared with previous recessions, the current downturn in the economy is probably more severe than the commonly used measures such as the unemployment rate indicate. It now appears that the recent downturn has been close to the average for past recessions. This recession, however, as difficult as it may have been for many individuals and certain regions, has been much less severe for the nation as a whole than the downturns of 1973-1975 and 1981-1982.

Many economists initially characterized this recession as mild, largely because of the small increase in the unemployment rate and the relatively small decline in real economic activity from the peak in the third quarter of 1990 to the apparent trough in the second quarter of 1991. If, in fact, the second quarter of 1991 were to be designated the trough, the drop in real GDP would indeed be mild--a drop of 1.3 percent compared with a postwar recession average of about 2.3 percent.

*The recent downturn has been close to the average for past recessions.*

This recession differs from previous recessions, however, in that growth in output was extremely slow in the year preceding the recession. In fact, real GDP growth in the four quarters before this recession was slower than in any other similar period. Thus, the recession and the previous year, taken together, constitute a long period of subpar growth that is more serious than is indicated by the relatively small decline during the recession proper. In addition, CBO forecasts a delayed and weak recovery. The percentage "GDP gap"--the extent to which the economy performs below potential--for this whole period is similar to the average for periods around business cycle peaks since 1955.

While the overall unemployment rate also indicates a relatively mild recession, it too is probably misleading. Although it may yet go higher, the peak of the unemployment rate on a quarterly basis in this recession was 6.9 percent in the fourth quarter of 1991, up from the recent low of 5.2 percent in the first quarter of 1989. Both the peak rate and the increase in the unemployment rate are mild compared with those in past recessions. In the eight previous recessions, the increase in the unemployment rate averaged almost 2.7 percentage points, and the quarterly peak rate was above 6.9 percent in six of those recessions.

The peak value of the unemployment rate is not always an accurate reflection of a recession's severity. Also to be examined are other labor market indicators such as the rate of decline in employment, the degree to which potential workers have been discouraged from seeking work, the percentage of the labor force that has suffered a spell of unemployment during the year, the extent to which people have been forced to take part-time work, and the average duration of unemployment.

The rate of decline in employment in this recession so far has been virtually the same as the drop in the 1981-1982 recession, but the recent decline is smaller than that of four other postwar recessions. Demographic trends dampened labor force growth in recent

years compared with the 1970s and early 1980s. Therefore, since the underlying trend growth of employment is probably lower now than in those periods, the simple comparison of employment growth rates in recessions is slightly misleading. Even when corrected for changes in the underlying demographic trends, however, the decline in employment indicates that the recent recession was at least as severe as the postwar recessions on average.

Although the underlying data may be misleading, current estimates of the degree to which workers were discouraged from seeking work do not indicate the recession was more severe than previously thought. Growth in the labor force slowed much more in this recession than usual, particularly among younger workers. It is not clear how much of the slowing of labor force growth is the result of discouragement among potential workers. The official measure of discouraged workers, which only exists from 1970, suggests that the increase in discouraged workers as a percentage of the labor force was quite small recently compared with the recessions in the early 1980s. However, the accuracy of this measure is quite uncertain, and younger workers may not declare themselves as not looking for a job because of poor prospects (that is, they would not be counted as discouraged workers), even if they are in fact discouraged by the poor economy.

Two other labor market indicators suggest more distress than the unemployment rate indicates. Unemployment has persisted at the 6.7 percent to 7.1 percent rate for almost a year. Because of this, relatively more workers are probably experiencing spells of unemployment in this recession than a simple comparison of peak values of unemployment indicates. The Bureau of Labor Statistics reported that 14.7 percent of the labor force experienced one or more spells of unemployment in 1990.[1] Data for 1991 are not yet available, but CBO estimates suggest that about 17 percent of the labor force was unemployed at some time in 1991. If so, this recession would be more like an average recession. Involuntary part-time work is also greater than indicated by the overall unemployment rate. The percentage of employed who are involuntary part time increased more rapidly in this recession than the average for the six previous recessions for which data on part-time work are available.

Various measures of the duration of unemployment indicate that this recession to date is slightly less severe than the average. About 2.0 percent of the total labor force was unemployed for more than 15 weeks at the end of last year. The quarterly average peak value for previous recessions is 2.4 percent. Note, however, that the percentage of the labor force suffering from long-term unemployment has probably not yet peaked in this recession.

Real per capita disposable income has performed worse in the period leading up to and including this recession than the average for comparable periods around business cycle peaks. The recent data for this measure are subject to large revision, but the current data indicate that real per capita disposable income is now at the same level as in the last half of 1988. Only during the double recessions of the early 1980s did per capita income perform so poorly over such a long period.

It is difficult to measure the relative severity of recessions, particularly since the data are incomplete, but this recession appears more similar to the average of previous recessions than initially thought. It is unlikely, however, that the recent experience is as bad as the deep, protracted recessions of 1973-1975 and 1981-1982.

1. For reference, 12.9 percent of the labor force was unemployed at some time in 1988, a year in which the economy was close to potential.

# The Elusive Recovery

In mid-1991, a variety of economic indicators suggested that a recovery from the recession was imminent, if not already in progress. The Federal Reserve had been easing monetary policy for more than two years, and this together with weak demand further reduced short-term interest rates below their prerecession levels; the rate on three-month Treasury bills, for example, had, by the end of July 1991, fallen more than 3 percentage points below its peak in 1989. To most analysts, improvements in housing sales, retail sales, orders for durable goods, industrial production, hours worked, and employment heralded the end of the recession. By most accounts, an economic recovery was emerging.

The growth in these indicators carried through to a 1.5 percent annual rate of increase in real GDP on average over the second and third quarters of 1991 (the use of GDP as the basic measure of economic activity is discussed in Box 1-2). But growth ceased in August, and most of the indicators weakened through the balance of 1991. The last months of the year saw little or no growth in industrial production, employment, or real household incomes, and initial claims for unemployment benefits remained discouragingly high. As many large corporations announced plans to reduce their work forces, concerns about job security soared, and consumer and business confidence plunged.

Growth in real GDP during the second half of 1991 seems to have been only about one-half of one percent, well below what CBO and others forecast last summer. Two unexpected developments accounted for most of the weakness in growth: construction spending fell, and foreign producers captured an unusually large share of the initial spurt in domestic buying. The aftereffects of these developments should continue to depress growth in incomes during the early months of 1992. Occurring in a pessimistic environment characterized by unusually low levels of consumer confidence, the stalling of the economy raises a serious risk of a further drop in production and incomes early this year.

In mid-1991, many analysts expected private-sector spending on construction to grow slightly during the second half of 1991, with stronger housing construction offsetting weakness in nonresidential construction. Now it appears that spending declined overall at about a 7 percent annual rate during that period, with both nonresidential and residential construction weaker than anticipated.

Nonresidential construction activity fell even more rapidly during the second half of 1991 than in the first. Extensive overbuilding in the office and commercial portions of this market during the 1980s has raised vacancy rates--in the case of offices, to as high as 20 percent nationwide--and the depressing effect of this on new construction apparently has not yet fully run its course.

The factors determining residential construction, in contrast, have improved, and so has activity in residential construction: nevertheless, it grew at only a modest 6 percent rate in the second half of 1991, and its growth petered out toward the end of the year. Throughout the third quarter, mortgage rates continued to fall and the affordability of housing improved. This bright spot led initially to an increase in sales of new single-family homes, inspiring hopes that a mild expansion was just around the corner. However, declining home sales in late summer and fall dashed these hopes. Analysts believe the late-year declines were caused by concerns about jobs and, possibly, by perceptions among potential homebuyers that housing prices and mortgage rates might continue to fall through early 1992.

Analysts were also surprised by the degree to which anticipation of the recovery prompted orders for foreign goods. During the months following the end of the Persian Gulf War, businesses seem to have anticipated a normal cyclical recovery, and orders surged. A disproportionate share of these orders,

however, appears to have been placed with foreign producers. As a result, real imports of nonpetroleum goods were unexpectedly strong during the period from June to October, but production of domestic goods increased only marginally.

With construction--usually one of the sectors that leads the economy out of recession--falling in late 1991, and with domestic production further dampened by the growth in imports, employment and incomes also became worse. This in turn cut demand for consumer goods and services. As a result, producers planned further reductions in production and inventories. In the automobile industry, for instance, slumbering sales during the third quarter of 1991 led automakers to curtail production plans for the first months of this year. Their decision, made in the final months of last year, is in turn believed to have led many of their suppliers to reduce production and to meet current orders by drawing down inventories. The decline in the produc-

## Box 1-2. The Switch from GNP to GDP

In this and future reports on the economy, CBO will use gross domestic product (GDP) rather than gross national product (GNP) as the basic measure of economic activity. Most agencies of the federal government have switched to emphasizing GDP: the Commerce Department emphasized GDP in its recent major revision of the national income and product accounts, and the Administration will use GDP in its budget documents.

The primary advantages of emphasizing GDP are: (1) it is a more appropriate measure for tracking short-run economic activity, (2) it can be estimated more accurately than GNP, and (3) its use helps in making comparisons with the vast majority of other countries that use a GDP concept.[1] GNP, however, is a better measure of income of U.S. residents, so it is more useful for measuring concepts that are related to income, such as saving.

GDP measures the output (goods and services) produced by labor and property located within the United States, and GNP measures the output produced by labor and property supplied by residents of the United States, regardless of where the labor and property are located. Therefore, GNP adds to GDP the output produced abroad on foreign-located labor and property supplied by U.S. residents, and subtracts from GDP the output produced by labor and property located in the United States that foreign residents supply. Because U.S. residents earn more on foreign assets than foreigners earn on U.S.-based assets, GNP is greater than GDP. In 1990, GNP was $10.8 billion, or 0.2 percent, greater than GDP.

The new emphasis on GDP does not significantly affect policy analysis or perceptions of the state of the economy. Growth of real GDP over the 1979 to 1991 period averaged 0.1 percent a year more than growth in real GNP, and most forecasts indicate that real GDP growth will continue to be slightly greater than real GNP growth during the 1990s. The Commerce Department will continue to publish the GNP measure, however, so that information will still be available for any analysis for which the GNP concept is more appropriate.

1. For a detailed explanation of the advantages of GDP, see "Gross Domestic Product as Measure of U.S. Production," *Survey of Current Business*, vol. 71, no. 8 (August 1991), p. 8.

tion of motor vehicles is expected to retard growth in the first quarter of 1992 as well.

The aftereffects of the disappointing developments of the latter half of 1991 are likely to continue into the early months of 1992. Production, employment, and incomes will remain depressed, and a pickup in the accumulation of inventories--normally an important contributor to growth during recoveries--is probably still several months away.

*The aftereffects of the disappointing developments of the latter half of 1991 are likely to continue into the early months of 1992.*

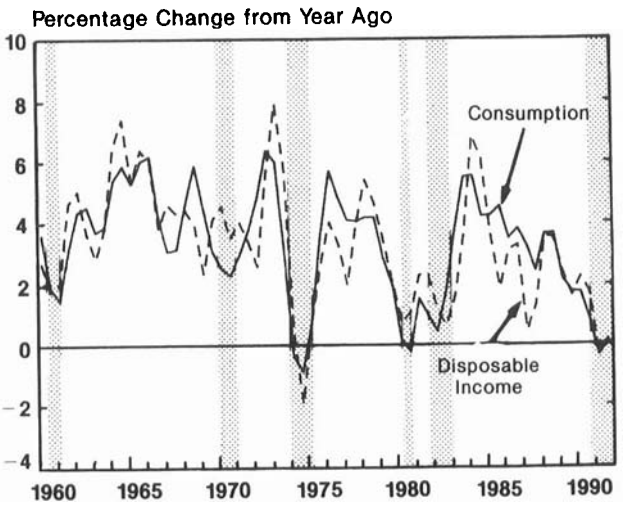
While the recession has been about as severe as the average for downturns, consumer confidence is unusually weak and is probably contributing more than usual to the overall weakness of demand. Although confidence rebounded in March 1991 from its depressed levels during the Persian Gulf War, consumers became increasingly pessimistic about the economic outlook thereafter, and in late 1991 confidence plummeted.

In part, the unusual pessimism is a reflection that the recession has turned out to be more severe than the mild downturn forecasters expected earlier. The recession still seems mild if one focuses only on the unemployment rate, which has risen far less than in previous recessions. But this measure is misleading, because the unemployment rate has been held down by an extraordinary reduction in the growth of the labor force stemming from an unusually large number of people who were discouraged from participating in the labor force during the recession--another manifestation of pessimism. The unusually severe decline in personal disposable income during the recession gives a better measure of the severity of the recession than does the rise in the unemployment rate (see Figure 1-1 and Box 1-1).

Announcements by a number of large corporations of future layoffs and slower hiring in future years may have also deflated confidence more than in past recessions. Many of these announcements are the result of requirements that large firms declare in advance their intentions to trim their work forces substantially.

Although the unusual pessimism has not as yet been translated into unusual weakness in consumer demand, it represents a serious risk to the near-term outlook. The current pessimism is also a cause for concern because it seems to go even beyond what is warranted by

**Figure 1-1.**
**Real Consumption and Disposable Income**




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

NOTE: Semiannual data for consumption and disposable income, in 1987 dollars.

weak current incomes, and thus may be signaling the possibility of a sharp slowing in consumer spending in early 1992. In this event, production, employment, and incomes could fall for a few months, and the unemployment rate could rise more sharply than the CBO forecast assumes.

Such an outlook, in which the collapse of confidence leads to a renewed downturn or "double-dip" recession early this year, recalls the experience of mid-1981 when a sharp downturn followed the beginning of a recovery from the 1980 recession. However, this comparison is inappropriate. Even if a widespread decline develops in early 1992, it is not likely to be nearly as severe as the 1981 and 1982 recession.

The reason a more optimistic outlook now seems likelier lies with the differences between the monetary policy followed in the early 1980s and that followed now. The 1981 recession was largely brought on by a rapid switch from an expansionary to a highly restrictive monetary policy, a switch that was intended to cut double-digit inflation rates. In contrast to what happened in 1981, monetary policy has now been easing gradually for two years. Moreover, no sharp monetary tightening seems to be in the cards. Even before the recession, inflation was nowhere near as high as in 1981, and inflation has dropped during the recession.

## Federal Fiscal Policy

Under CBO's baseline assumptions, federal fiscal policy will be approximately neutral over the near term. By restraining growth in discretionary federal spending, the provisions of the Omnibus Budget Reconciliation and Budget Enforcement Acts of 1990 will limit the direct contribution of the federal sector to the overall economic recovery. Over the medium term, however, this restraint will contribute to a higher rate of national saving and a higher sustainable rate of capital accumulation than would have occurred without such fiscal discipline.

**The Effects of Fiscal Policy over the Short Run.** Under CBO's baseline assumptions, the total federal budget deficit will rise from $269 billion in fiscal year 1991 to $352 billion in fiscal year 1992 before falling to $327 billion in 1993 (see Chapter 2). These year-to-year fluctuations in the federal budget deficit largely reflect the effects of the recession and subsequent recovery. Outlays for deposit insurance are expected to remain close to the levels posted in fiscal year 1991 throughout the next two years.

In order to assess the effect of discretionary fiscal policy on the economy, the effects of both cyclical economic fluctuations and outlays for deposit insurance on the total budget deficit must be removed. Cyclical effects are removed because they reflect ways in which the economy affects the budget rather than the reverse. Such changes include, for example, increases in outlays for unemployment compensation stemming from an increase in the number of insured unemployed or a reduction in federal revenues attributable to depressed incomes during a recession. Outlays for deposit insurance are removed because most of this spending represents only an exchange of assets and because changes in these outlays do not accurately reflect the pattern of effects of the deposit insurance program on aggregate demand.[1]

One commonly used measure that removes these effects from the overall federal deficit is

1. Federal outlays for deposit insurance simply replace one claim on the federal government (guarantees of deposits in failed thrift institutions) with another (obligations of the government to its debtholders). Similarly, outlays to purchase the assets of failed thrifts are purely financial transactions, involving substitutions between existing assets. See CBO, *The Economic Effects of the Savings & Loan Crisis* (January 1992).

**Table 1-1.**
**The Fiscal Policy Outlook (By fiscal year, on a budget basis)**

| | 1990 | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|---|
| **Measures of Discretionary Fiscal Policy and Measures Relevant to Short-Run Effects on Aggregate Demand (Billions of dollars)** | | | | | | | | |
| Total Budget Deficit[a] | 162 | 246 | 290 | 258 | 227 | 210 | 222 | 254 |
| Standardized-employment deficit | 150 | 172 | 191 | 189 | 178 | 170 | 191 | 234 |
| Cyclical deficit | 12 | 74 | 99 | 69 | 49 | 40 | 31 | 20 |
| Standardized-Employment Deficit Excluding Interest Payments[a] | -33 | -25 | -9 | -22 | -52 | -75 | -69 | -44 |
| **Measures Relevant to Effects on Long-Run Economic Growth (Percentage of GDP)** | | | | | | | | |
| Total Budget Deficit[a] | 3.0 | 4.4 | 5.0 | 4.1 | 3.4 | 3.0 | 3.0 | 3.2 |
| Total Inflation-Adjusted Budget Deficit[a] | 1.2 | 2.9 | 3.5 | 2.5 | 1.7 | 1.3 | 1.2 | 1.5 |
| Publicly Held Federal Debt | 44.2 | 47.8 | 51.9 | 53.9 | 54.7 | 54.6 | 54.1 | 54.1 |
| **Memoranda: (Billions of dollars)** | | | | | | | | |
| Deposit Insurance | 58 | 66 | 67 | 68 | 33 | -16 | -44 | -28 |
| Allied Contributions for the Persian Gulf War | n.a. | 43 | 5 | n.a. | n.a. | n.a. | n.a. | n.a. |

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable during this period.

a. These measures of fiscal policy reflect the policies of the budget resolution for 1992 (including the spending caps in the Budget Enforcement Act of 1990), but exclude current outlays for deposit insurance. Also, the deficit number for 1991 excludes $43 billion of allied contributions for the Persian Gulf War, and another $5 billion is excluded for 1992.

the "standardized-employment" deficit.[2] CBO estimates that the standardized-employment deficit will increase by $19 billion in fiscal year 1992, followed by a very small decline in 1993 (see Table 1-1). Although these changes seem to suggest a mildly stimulative fiscal stance, in fact they do not accurately reflect fiscal policy during the current cycle because the turning points of business cycles need not coincide with boundaries between fiscal years.

Instead, it is useful to focus on movements in the standardized-employment deficit in the neighborhood of cyclical turning points. Taking mid-1991 (when the economy appeared to be beginning a recovery) as a reference date for the current cycle, CBO estimates that the standardized-employment deficit will be about the same in the four quarters following mid-1991 as it was in the preceding four quarters.

2. For recent surveys of other measures of this type, see Congressional Budget Office, *The Federal Deficit: Does It Measure the Government's Effect on National Saving?* (March 1990); and M. I. Blejer and A. Cheasty, "The Measurement of Fiscal Deficits: Analytical and Methodological Issues," *Journal of Economic Literature* (December 1991), pp. 1644-1678.

Thus, during the current cycle, fiscal policy is approximately neutral.

The neutrality of fiscal policy during the current business cycle contrasts sharply with the federal government's fiscal stance during previous recoveries. In all but one of the previous postwar recoveries since 1958, federal fiscal policy has been at least mildly stimulative, with the standardized-employment deficit rising by at least one-half of one percent of potential GDP between the four quarters preceding a recession trough and the four quarters following one. (The expansion in 1975 saw an enormous stimulus of about 2 percent of potential GDP.) The only previous recovery during which the fiscal stance departed from this pattern of stimulus was that of mid-1980, when there was a fiscal contraction of about three-tenths of one percent of potential GDP.

The weakness in the economy has prompted a number of policymakers to advance proposals to provide a temporary fiscal stimulus to the economy. As is discussed in Chapter 5 of this report, these policies would probably have only a limited impact on the timing of the recovery. Even proposals that provide some stimulus over the near term are not likely to do so quickly enough to mitigate the current weakness. They could, however, help increase the rate of growth once the recovery begins. But initiatives that adhere to the Budget Enforcement Act and are deficit neutral are not likely even to do this because they would not provide significant stimulus.

**Fiscal Policy Through the Medium Term.** Over the medium term, fiscal stimulus is less relevant to the economic outlook. Instead, what is important is how government borrowing diminishes national saving and eventually inhibits capital investment and economic growth. The CBO baseline assumptions imply that the total budget deficit (excluding deposit insurance) will fall as a percentage of GDP in 1994 and 1995. As a result, the federal government will be absorbing less capital to finance its deficit, thereby making more funds available for other investments.

In 1996 and 1997, the total deficit is projected to rise. These increases result from the expiration in 1995 of the caps on discretionary spending mandated under the Budget Enforcement Act, the expiration of certain tax provisions adopted in 1990, and the effects of rapidly rising health care costs on Medicare and Medicaid (see Chapter 2).

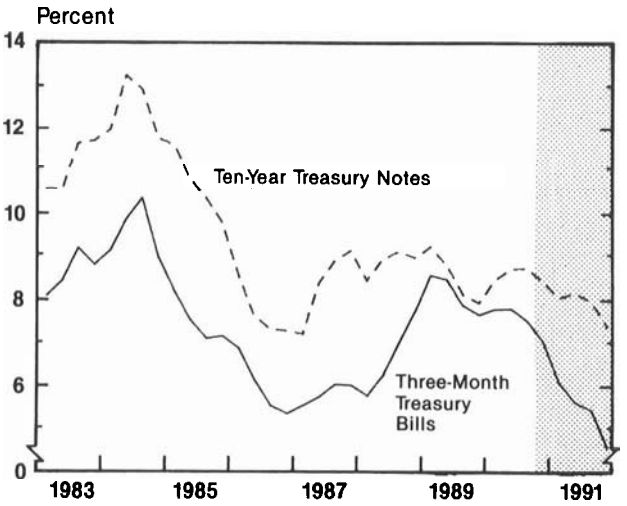
## Monetary Policy, Inflation, the Dollar, and Credit Markets

Reacting to mounting evidence that the economy was not recovering as expected, the Federal Reserve eased monetary policy continually throughout the second half of 1991, particularly in December when the central bank moved decisively to lower interest rates. Short-term interest rates and the underlying rate of inflation continued to fall during the second half of the year as they had in the first. Long-term interest rates, which had remained high early in the year, also began to decline in the latter half of the year, possibly as a result of lowered expectations of inflation.

**Monetary Policy.** Confronted with both the weak economy and the increased flexibility that diminished inflationary pressures make possible, the Federal Reserve lowered its target for the federal funds rate by a quarter of a percentage point in each of the five months from August to November. In December, the target was reduced by half a percentage point. The federal funds rate ended the year at 4.1 percent, down more than 4 percentage points from the third quarter of 1990, as compared with an average decline of 2.9 percentage points in previous recessions. In addition, the central bank lowered the discount rate by half a percentage point in September and November, and by a full percentage point in December. At 3.5 percent, the discount rate is currently at its lowest level since 1964. Because interest rates have fallen more than in most recessions, while the recession has been of about average severity, these declines in interest rates appear to indicate monetary easing.

By the end of 1991, the easier monetary policy was reflected in other important financial indicators as well. Total bank reserves grew at an 11.8 percent annual rate over the second half of 1991, or 9.2 percent in real terms. By the fourth quarter of 1991, real and nominal reserves had grown more rapidly from the levels that prevailed at the peak of the business cycle than they had in any previous recession. Reflecting both monetary policy and the weak state of the economy, the three-month Treasury bill rate fell 1.5 percentage points over the second half of 1991, closing the year at just over 4 percent, its lowest level since the early 1970s (see Figure 1-2). Long-term interest rates began to decline in the second half of 1991, possibly reflecting reduced expectations of inflation as a result of the weaker economy. The drop in long-term interest rates in the latter half of the year, however, was not as large as the decline in short-term rates. The 10-year rate on Treasury notes, for example, fell only 1.2 percentage points over the second half of 1991.

**Figure 1-2.**
**Interest Rates**




SOURCES: Congressional Budget Office; Federal Reserve Board.

One important indicator of monetary policy has not reflected the more liberal monetary stance, though its significance is unclear. Growth in M2, the measure of the money supply that the Federal Reserve monitors most closely, has been remarkably weak.[3] In the last six months of 1991, M2 grew a paltry 0.8 percent at an annual rate, posting in the third quarter its first quarterly decline in the 33 years for which data on M2 are available. By the end of 1991, real M2 had fallen about 1 percent below its level at the business cycle peak, compared with the 2.9 percent increase that is the average for previous cycles at this stage. Although some economists regard the slow expansion in this measure as indicative of insufficiently stimulative monetary policy, others regard M2 as a faulty indicator of current monetary policy. (This controversy is discussed at greater length in Chapter 5.)

Thus, throughout 1991, most monetary measures indicated that the Federal Reserve had eased policy. Moreover, in December the Federal Reserve moved decisively to lower interest rates further. On top of the declines in

3. M2 primarily consists of the nonbank public's holdings of currency, traveler's checks, and checking accounts (collectively known as M1), plus the public's holdings of savings and small (less than $100,000) time deposits and money-market deposit accounts held at depository institutions, as well as accounts in money-market mutual funds.

interest rates earlier in the year, this most recent easing should help to stimulate real activity sufficiently for the economy to begin a sustainable recovery by midyear.

*One of the bright spots on the economic landscape is inflation.*

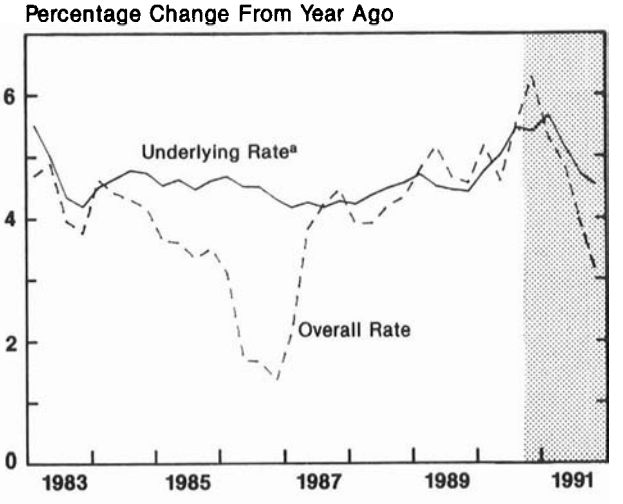
Why has the easing in monetary policy so far not apparently been enough to generate a recovery in demand? One possibility is that a variety of innovations in financial markets over the last decade have changed the ways in which monetary policy affects the economy--in particular, lengthening the time it takes for a given action by the central bank to generate a desired change in demand. Another possible reason that the required monetary stimulus seems larger than expected is that stimulative monetary policies during the current business cycle are not buttressed by a corresponding fiscal stimulus, as was generally true in previous recessions. (Again, see Chapter 5.)

**Current Inflation.** One of the bright spots on the economic landscape is inflation: through the first 11 months of 1991, the consumer price index (CPI) rose only 2.9 percent at an annual rate. The underlying rate of inflation--growth in all consumer prices except those for food, energy, and used cars--slowed in the second half of 1991, reflecting the considerable slack capacity throughout the economy (see Figure 1-3). High unemployment depressed growth in labor compensation per hour to an estimated 3.4 percent in the second half of 1991. Compensation had been rising by more than 5 percent at an annual rate before the recession. Largely as a result of the slowdown in wages, the underlying rate of inflation slowed to a 3.6 percent annual rate in the last quarter of 1991.

Given the low underlying rate of inflation, the prognosis for consumer prices is quite good. Although volatile fluctuations in the prices of both food and oil are often responsible for temporary departures of inflation in consumer prices from the underlying rate, CBO's forecast assumes that these prices will be stable over the near term. Food prices are expected to grow more slowly than overall consumer prices. With some of Kuwait's production capacity already restored and Organization of Petroleum Exporting Countries generally reluctant to cut production, world oil prices should remain close to current levels throughout most of this year.

**The Dollar.** Movements in the international value of the dollar in 1991 were affected as much by developments abroad as by events in the United States. In the first half of the year, the Persian Gulf War, the breakup of the

**Figure 1-3.**
**Recent Inflation in Consumer Prices**




SOURCES: Congressional Budget Office; Department of Labor, Bureau of Labor Statistics.

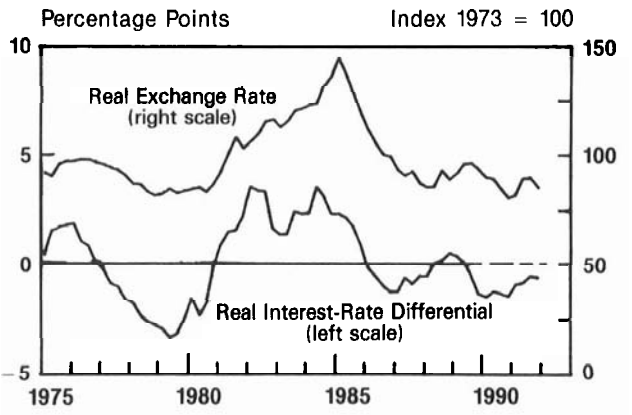
NOTE: The treatment of home ownership in the official consumer price index for all urban consumers (CPI-U) changed in 1983. The inflation series in the figure uses a consistent definition throughout.

a. CPI-U less food, energy, and used cars.

Soviet Union, and the deteriorating outlook for eastern Germany combined to cause a "flight to quality" and a sharp increase in the value of the dollar against other currencies (see Figure 1-4). Although the dollar remains an attractive currency for those concerned by the instability in Eastern Europe, lower interest rates in the United States during the second half of 1991, as well as late-year increases in European rates (especially in Germany), made the dollar less attractive to investors. As a result, the dollar retreated late in 1991.

Yet, several factors point to a rise in the dollar during 1992. If the economic, political, and social order in the countries of the former Eastern Bloc continues to unravel, investors will increasingly move out of European currencies and into the dollar, working to strengthen the dollar's value against other currencies. As of the end of 1991, a new political entity has replaced the political wreckage of the Soviet Union--the Commonwealth of Independent States--but it is not yet apparent how the thicket of political problems of the various former republics will be cleared. In the meantime, the economies of the former Soviet republics are descending into chaos. In Yugoslavia, the breakdown of the former political consensus has led to a violent civil war. This chaos may also prove to be the outcome in some parts of the former Soviet empire.

**Figure 1-4.**
**The Real Exchange Rate and the Interest Rate Differential**




SOURCES: Congressional Budget Office; Federal Reserve Board; International Monetary Fund.

NOTES: The real exchange rate is calculated from the ratios of consumer prices in the United States to consumer prices in 10 industrialized countries. These ratios are adjusted by the corresponding exchange rate and weighted by trade shares. Movements in the real exchange rate are dominated by movements in exchange rates. An increase in the real exchange rate corresponds to dollar appreciation.

The real interest rate differential is the difference between U.S. real long-term interest rates and an average of foreign real long-term rates weighted by gross domestic product. Real interest rates are nominal long-term rates less expected inflation, estimated by a centered two-year moving average of actual and forecast inflation rates.

Moreover, interest rates may move to reinforce the rise in the dollar by mid-1992. Recovery should bring a rise in rates in the United States, even without significant monetary tightening. In Europe, rates may fall. The most recent increase in German interest rates, engineered in response to a slight increase in Germany's inflation rate, has required increases in interest rates in those countries whose currencies are tied to the deutsche mark through the European Monetary System. Many of these countries do not welcome this degree of monetary tightness, and some response is likely--either reductions in German interest rates, or some realignment of exchange rates within the European Monetary System to allow some monetary leeway to countries striving to end their own recessions. Either of these developments would work to reduce the return on lending to European countries and raise the value of the dollar.

**Credit Markets.** As was true in 1990, credit markets remained weaker in 1991 than could be accounted for by the recession alone. Most economists agree that adjustments by banks, businesses, and households to build capital and reduce debt underlie the lackluster pace of growth in credit extensions, though economists disagree as to which of these sectors is most responsible for the unusually slow pace. These balance-sheet adjustments should not, however, significantly undermine economic growth during the recovery.

Extensions of credit to consumers and businesses slowed further in 1991 from their snail's pace of 1990. Bank lending was exceptionally meager: in November 1991, bank lending for commercial, industrial, household, and real estate purposes stood a mere 0.2 percent above the levels of July 1990 (the business cycle peak). On average, bank lending advanced 11 percent during the corresponding period of previous cycles. Although credit extensions through other channels, such as commercial paper markets, were more robust in 1991 than bank loans, these other sources are generally available only to the largest and most creditworthy borrowers.

*Extensions of credit to consumers and businesses slowed further in 1991 from their snail's pace of 1990.*

Some economists argue that the current weakness in credit markets is largely the result of an increased unwillingness by banks to lend, even to the most creditworthy borrowers. Sharp declines in real estate prices have left many banks, whose lending for real estate and commercial building expanded rapidly in the 1980s, with bad debts. As a result, banks are now more cautious lenders and, further prompted by increased regulatory oversight, banks are now restricting growth in their liabilities and rebuilding their capital. By reducing the rates they pay to depositors, banks are not encouraging new deposits. Moreover, banks are lowering the risks on their asset base by investing in low-risk government securities rather than in loans to businesses and individuals. Indications of these balance-sheet adjustments in 1991 included falling loan-to-deposit ratios and wider spreads between the lending rates of banks and their cost of funds.

Nevertheless, bank retrenchment seems to be an important factor only in New England and, to a lesser extent, the mid-Atlantic region. Outside those regions, the evidence that banks are restricting the overall supply of credit is inconclusive. Bank loans are not the only source of credit and, as pointed out earlier, credit extensions from nonbank sources have not slowed to the same degree as has bank credit. Also, contrary to widespread fears that banks are enforcing unusually restrictive lending criteria, some economists have argued that recent changes in standards of quality for bank lending have followed a typical business cycle pattern--namely, increased tightening of credit standards and general unwillingness to lend before and during recessions.[4]

In contrast to those who have focused on credit supply, other economists argue that slow growth in credit primarily reflects weak demand. Current demand for credit has weakened in the aftermath of the dramatic rise in the indebtedness of businesses and households during the 1980s (see Figure 1-5). Large debt balances inherited from the 1980s may have reduced the creditworthiness of many businesses and households.

The debt splurge of the 1980s may have made further borrowing less attractive, with the result that businesses and households are restructuring their balance sheets by reducing the debt content of their portfolios. For businesses, the trend of the last decade toward substituting debt for equity now appears to be undergoing a reversal: data through the second quarter of 1991 indicate that businesses have been replacing debt with equity and, at the same time, substituting long-term for short-term debt.

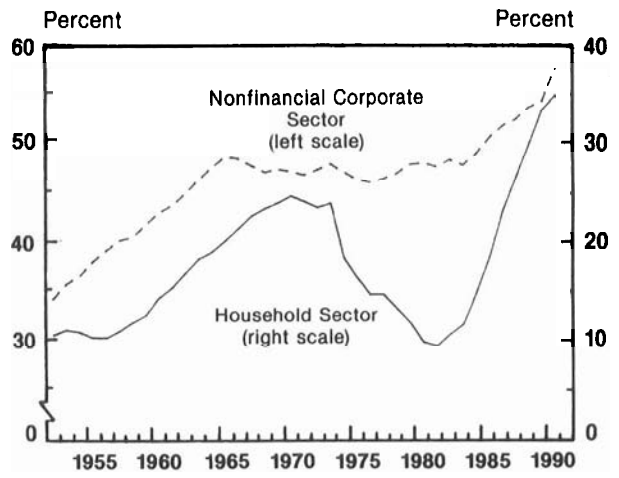
4. See Stacey L. Schreft and Raymond E. Owens, "Survey Evidence of Tighter Credit Conditions: What Does It Mean?" Federal Reserve Bank of Richmond, *Economic Review* (March/April 1991), pp. 29-34.

For households, the data indicate similar shifts: facing lower interest rates, many households have moved to refinance existing mortgage debt while, at the same time, they are whittling down their installment debt. The net result was a 4.7 percent annual rate of increase in total household debt outstanding over the first half of 1991, well below the annual double-digit growth posted in the last decade. Mortgage debt increased at an annual rate of 6.1 percent in the first half of 1991, slightly more than half the pace of the 1980s.

The adjustments in the balance sheets of banks, businesses, and households will probably last for several more quarters. But the current weakness in credit markets and the debt hangover from the 1980s are, by themselves, not likely to slow economic growth significantly during the recovery.

Businesses typically rely on retained earnings rather than debt to finance investment during recoveries, and the effects of balance-sheet adjustments and lower interest rates should boost business profits. Similarly, households tend to rely far more heavily on income than wealth to finance most of their spending for consumption over the short term. Indeed, the restructuring by households thus far has not been accompanied by any significant increase in household saving rates. Thus, weak growth in income is likely to restrain consumption more decisively during the recovery than will a slowdown in wealth and reduced accumulation of debt. Over the long term, however, the completion of the adjustments to balance sheets should lay a solid foundation for future economic growth.

**Figure 1-5.**
**Ratios of Debt to Net Worth**




SOURCES: Congressional Budget Office; Federal Reserve Board.

*CBO forecasts that, after several months of little growth, the economy will begin to recover in earnest during the spring of this year.*

# CBO's Economic Forecast

CBO forecasts that, after several months of little growth, the economy will begin to recover in earnest during the spring of this year. Once under way, however, this recovery is expected to be slower than the historical average for postwar recoveries.

## The Forecast for 1992 and 1993

Growth in overall demand is expected to accelerate through 1992: real GDP for the fourth quarter of this year is forecast to be 2.8 percent higher than that of the final quarter of last year (see Table 1-2 and Figure 1-6). Even though demand picks up, however, the unemployment rate is expected to remain high, averaging 6.9 percent in 1992. As a result of

the considerable excess capacity reflected by this high rate of unemployment, the rate of inflation is expected to be a moderate 3.4 percent this year. Short-term interest rates should be about a percentage point less this year than in 1991, and long-term rates also will be lower.

The recovery is expected to maintain its pace into 1993. CBO forecasts that real GDP will grow 3.3 percent between the final quarters of 1992 and 1993. Rising employment should allow the unemployment rate to fall to 6.4 percent. Demand for credit should also rise with the recovery, which, along with some firming of monetary policy, is expected to push short-term interest rates up in 1993: the average rate on three-month Treasury bills is projected to rise by 0.7 percentage points over its 1992 level. Long-term interest rates, however, are expected to remain at about the same levels posted in 1992.

**The Road to Recovery.** The lower interest rates inherited from the closing months of 1991 will encourage the economy to grow--albeit slowly--in the early months of this year by stimulating those components of demand that are most sensitive to changes in interest rates. In early 1992, CBO expects a pickup in purchases of new single-family homes, consumer expenditures on durable goods, and, owing to the weaker dollar of the second half of 1991, some temporary improvement in net exports.

The gains in final sales that result from the pickup in interest-sensitive demand will help to boost incomes and bolster confidence in the recovery. Increased corporate profits, re-

**Table 1-2.**
**The CBO Forecast for 1992 and 1993**

| | Actual 1990 | Estimated 1991 | Forecast 1992 | Forecast 1993 |
|---|---|---|---|---|
| | **Fourth Quarter to Fourth Quarter (Percentage change)** | | | |
| Nominal GDP | 4.1 | 3.2 | 5.9 | 6.6 |
| Real GDP[a] | -0.1 | 0.0 | 2.8 | 3.3 |
| Implicit GDP Deflator | 4.2 | 3.2 | 3.1 | 3.2 |
| Fixed-Weighted GDP Price Index[b] | 4.2 | 3.2 | 3.2 | 3.3 |
| CPI-U[c] | 6.3 | 3.0 | 3.4 | 3.6 |
| | **Calendar-Year Averages (Percent)** | | | |
| Civilian Unemployment Rate | 5.5 | 6.7 | 6.9 | 6.4 |
| Three-Month Treasury Bill Rate | 7.5 | 5.4 | 4.4 | 5.1 |
| Ten-Year Government Note Rate | 8.6 | 7.9 | 7.1 | 7.1 |

SOURCE: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

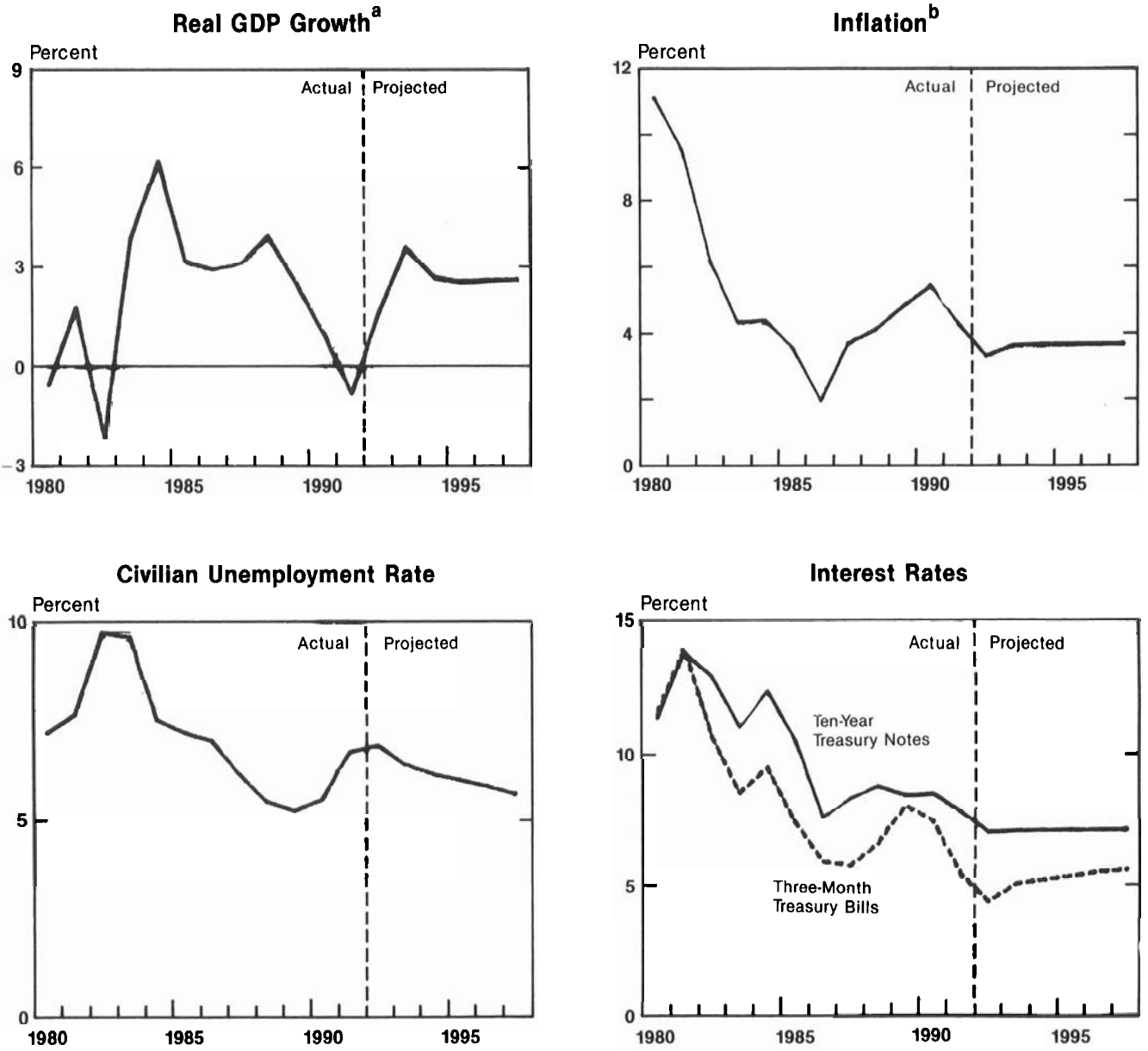
a. Based on constant 1987 dollars.

b. CBO estimated the 1990 growth rate. The Commerce Department has not yet published the revised historical fixed-weighted price indices.

c. Consumer price index for all urban consumers.

inforced by lower costs of maintaining debt and an increased rate of growth in productivity, should stimulate businesses to increase employment and capital investment in the spring months. The increased employment will enlarge personal incomes, which in turn will stimulate additional consumer spending. As growth in final sales accelerates and confidence is restored, businesses are expected to accumulate inventories at a more rapid rate.

**Figure 1-6.**
**The Economic Forecast and Projection**




SOURCE: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis; Federal Reserve Board.

NOTE: All data are annual values; growth rates are year-over-year.

a. The annual value for real GDP growth for 1991 is estimated by CBO.

b. Consumer price index for all urban consumers (CPI-U). The treatment of home ownership in the official CPI-U changed in 1983. The inflation series in the figure uses a consistent definition throughout.

**The Outlook for Inflation.** The underlying rate of inflation is projected to average 3.6 percent a year over this year and next, which would be the smallest two-year rate of inflation by this measure since the mid-1960s.[5] This considerable achievement comes at some cost, however, since it largely reflects the shrinkage in the growth of wages that stemmed from the slack economic conditions of the recession.

Many economists approximate the effect of slack capacity on inflation by measuring the amount by which the unemployment rate differs from an estimated benchmark measure of unemployment that is consistent with non-accelerating inflation, the so-called NAIRU. A commonly used rule of thumb suggests that for every two to three point-years of unemployment above the NAIRU, the inflation rate is reduced by 1 percentage point. (A point-year of unemployment is an unemployment rate that is 1 percentage point above the NAIRU for a period of one year.) Applying this rule, CBO estimates that the actual rate of unemployment will have exceeded the NAIRU by about 1.4 percentage points in both 1991 and 1992. Following the conventional rule, CBO calculates that, by the end of 1992, the rate of inflation will have fallen by roughly 1 percentage point from the rate that prevailed before the recession.

**The Outlook for Interest Rates.** Interest rates should continue to decline in coming months and, as the recovery gains pace around mid-year, the spreads between long-term and short-term interest rates should begin to narrow. Such narrowing typically occurs during a recovery and is expected to persist through 1993.

Short-term interest rates will remain close to 4 percent in the early months of this year, and even though they are expected to rise modestly through the year, short-term rates should average only 4.4 percent in 1992. This rate is expected to rise further in 1993, to 5.1 percent, as the economic recovery continues and borrowing strengthens. This forecast assumes that the Federal Reserve will not significantly tighten monetary policy early in the recovery. Indeed, with inflation and real growth as low as CBO forecasts, there is little reason to expect such a tightening.

The recovery is not expected to bring about any large changes in long-term interest rates. After ending last year at 6.7 percent, the rate on 10-year Treasury notes should close both 1992 and 1993 only slightly higher. By the end of 1993, the spread between the 10-year note rate and the rate on three-month Treasury bills is expected to be 2.0 percentage points, a drop of 0.8 percentage points below the spread that prevailed at the close of 1991.

**Comparison with Other Forecasts.** CBO's current forecast for real growth and inflation in 1992 is substantially lower than its forecast published last summer (see Table 1-3). Most of this difference stems from the unexpected weakness in the economy over the six months since CBO published its summer report. A small portion of the difference between the forecasts stems from revised historical data that were recently published by the Department of Commerce (see Box 1-3).

Overall, CBO's near-term forecast is similar to the average of private-sector forecasters reflected in the *Blue Chip* consensus survey, although a strict comparison between the forecasts is difficult to make because many of these forecasters have not yet produced forecasts that fully reflect the revised data.

Like CBO, the *Blue Chip* consensus calls for a recovery in 1992, with a decline in interest rates from their 1991 levels. However, the consensus expects the recovery to be somewhat weaker than does CBO: the *Blue Chip* forecasters project that growth in real GDP between the fourth quarter of 1991 and the fourth quarter of 1992 will be 0.4 percentage points below CBO's forecast. The

5. Although the underlying rate of inflation also appeared to be this low in the early 1970s, that lower level stemmed from the temporary suppression of inflation by wage and price controls. Once the controls were lifted, the inflation rate rebounded.

**Table 1-3.**
**Comparison of Forecasts for 1992 and 1993**

| | Actual 1990 | Estimated 1991 | Forecast 1992 | Forecast 1993 |
|---|---|---|---|---|
| **Fourth Quarter to Fourth Quarter (Percentage change)** | | | | |
| Nominal GDP | | | | |
| CBO current forecast | 4.1 | 3.2 | 5.9 | 6.6 |
| *Blue Chip* | a | 3.4 | 5.7 | 6.5 |
| CBO July 1991 forecast | a | 4.8 | 6.7 | 6.0 |
| Real GDP | | | | |
| CBO current forecast | -0.1 | 0.0 | 2.8 | 3.3 |
| *Blue Chip* | a | 0.2 | 2.4 | 3.0 |
| CBO July 1991 forecast[b] | a | 1.3 | 3.3 | 2.6 |
| Implicit GDP Deflator | | | | |
| CBO current forecast | 4.2 | 3.2 | 3.1 | 3.2 |
| *Blue Chip* | a | 3.2 | 3.1 | 3.4 |
| CBO July 1991 forecast[b] | a | 3.5 | 3.3 | 3.4 |
| Consumer Price Index[c] | | | | |
| CBO current forecast | 6.3 | 3.0 | 3.4 | 3.6 |
| *Blue Chip* | a | 3.0 | 3.4 | 3.8 |
| CBO July 1991 forecast | a | 3.2 | 3.9 | 3.9 |
| **Calendar-Year Averages (Percent)** | | | | |
| Civilian Unemployment Rate | | | | |
| CBO current forecast | 5.5 | 6.7 | 6.9 | 6.4 |
| *Blue Chip* | a | 6.7 | 6.8 | 6.3 |
| CBO July 1991 forecast | a | 6.7 | 6.2 | 5.9 |
| Three-Month Treasury Bill Rate | | | | |
| CBO current forecast | 7.5 | 5.4 | 4.4 | 5.1 |
| *Blue Chip* | a | 5.4 | 4.2 | 5.0 |
| CBO July 1991 forecast | a | 5.8 | 6.2 | 6.2 |
| Ten-Year Treasury Note Rate | | | | |
| CBO current forecast | 8.6 | 7.9 | 7.1 | 7.1 |
| *Blue Chip*[d] | a | 7.9 | 7.0 | 7.5 |
| CBO July 1991 forecast | a | 8.2 | 8.3 | 8.0 |

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators;* Department of Commerce, Bureau of Economic Analysis.

NOTE: The *Blue Chip* forecasts through 1993 are based on a survey of 50 private forecasters, published on January 10, 1992. These forecasts are reported on a basis that is consistent with the recent revision of the national income and product accounts.

a. Actual data for 1990 are shown only for the current CBO forecast.

b. In contrast with its current forecast, which uses 1987 as the base year for calculating price deflators and constant dollar magnitudes, CBO's July 1991 forecast used 1982 as the base year. As a result, some of the differences between CBO's July 1991 forecast and the other forecasts for the years 1991 through 1993 result from statistical revisions of the national income and product accounts.

c. The consumer price index for all urban consumers (CPI-U).

d. *Blue Chip* does not project a 10-year note rate. The values shown here for the 10-year note rate are based on the *Blue Chip* projections of the Aaa bond rate, adjusted by CBO to reflect the estimated spread between Aaa bonds and 10-year Treasury notes.

## Box 1-3.
## The Revisions to the National Income and Product Accounts

The Commerce Department's recent comprehensive revision of the national income and product accounts (NIPAs) indicates that during the 1980s, real growth was slightly slower than previously indicated, private saving rates were higher, investment in nonresidential structures was greater, and the share of output that went to economic profits was larger. The revision also indicates that economic activity declined more rapidly during the recession than was reported earlier.

Comprehensive revisions incorporate two main categories of changes: definitional and classificatory changes, and statistical changes. The first type is made when changes in the economy indicate that the data would be more useful if defined or classified differently. For example, in the recent revision, receipts for services provided by government, mainly health and tuition, have been redefined as government sales and included in expenditures for personal consumption. The receipts were previously classified as a type of tax that was subtracted from household income rather than categorized as a household outlay. The new classification provides a more accurate indication of the consumption decisions made by households. These definitional changes are described in the September 1990 *Survey of Current Business*.

The second category of revisions, the statistical changes, are the source of the most important revisions. This category includes the shift from 1982 to 1987 as the base period for calculating the constant dollar values, revisions stemming from newly available and revised data for the last three years, the incorporation of new estimating procedures, and new benchmark data (specifically the 1982 input-output tables, the 1987 Economic Censuses, and some annual surveys).

The shift in the base period is the single most important revision in the constant dollar, or "real," NIPA data. The base period is the year whose prices are used to value constant dollar series and whose output is used to compile fixed-weighted price indices. A base period is necessary for calculating real growth in economic activity, and the switch to 1987 as the base year makes it possible for the NIPAs to better reflect real economic activity in recent years. The farther back the base year, the more likely the measure of real growth will be distorted (usually distorted upward), so the revised accounts provide a more accurate indication of recent real economic activity.[1]

The Commerce Department noted that the measured average growth of real GDP from 1977 to 1990 was reduced by 0.2 percent a year by the shift to the new base period. The measure of the severity of the decline in output during the recession was also affected. The new data indicate real GDP fell 1.6 percent from the third the quarter of 1990 to the first quarter of 1991, instead of the previously published 1.3 percent; the rebasing more than accounted for the downward revision.

The revision also resulted in some significant changes in the nominal, or current dollar, data. The average nominal GDP growth rate for the 1977-1990 period was revised up 0.1 percent a year. The changed saving and investment rates were, however, the most interesting aspect of the revisions. Gross saving and investment as a share of GDP were revised up 1.1 percent for the 1980s, and net saving and investment were revised up 1.0 percent. The bulk of the increase in investment was the result of a new procedure for estimating private nonresidential structures, and the source of the increase in saving was mainly attributed to households rather than business or government. (In fact, the government deficit as a share of GDP--a measure of government dissaving--was revised up.) The concern about the decline in saving in the 1980s will not be soothed by these revisions, however. The new data also show a decline in the 1980s--net national saving averages 8.3 percent in the 1960s and 1970s, but only 4.4 percent in the 1980s.

Income shares were significantly revised, particularly for the late 1980s. The largest change was for economic profits, whose share was revised up about 0.5 percentage points in the late 1980s. The dividend and personal interest income shares of GDP were also revised up, and employee benefits were revised up sharply for the last three years to reflect new information on employer contributions to health plans.

The Commerce Department has not yet released the revised NIPA measures of inflation, the fixed-weighted price indices for GDP, and the various categories of final demand such as personal consumption. The Commerce Department has indicated that the growth rates of the fixed-weighted measures were likely to be revised downward for the 1980s, but the extent of the revision is not yet available.

1. For an explanation of how the choice of base period affects measures of real economic activity, see Allan H. Young, "Alternative Measures of Real GNP," *Survey of Current Business*, vol. 69, no. 4 (April 1989), pp. 27-34.

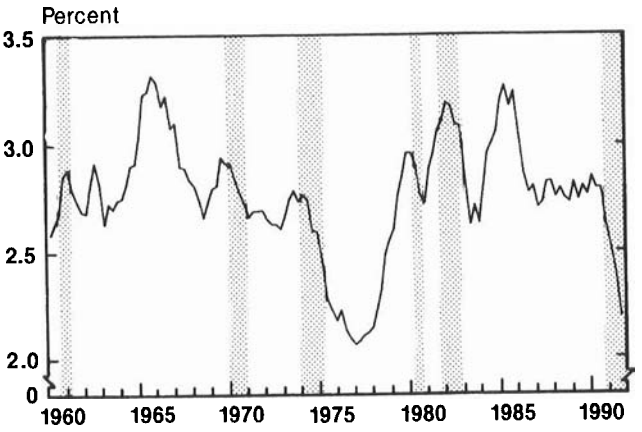
consensus prediction for short-term interest rates is lower than CBO's forecast in 1992, but its view of long-term rates is about the same as CBO's. This suggests a possible explanation of the different forecasts of recovery: the private-sector forecasters may believe that the Federal Reserve will be less effective in stimulating demand than CBO assumes.

**Why the Recovery Is Expected To Be Weak.** The relatively moderate growth projected for the recovery stems from an unusual coincidence of structural and other problems afflicting the economy. The structural problems include excess capacity in commercial building and multifamily housing; fiscal overextension of state, local, and federal governments; and cutbacks in employment by U.S. firms pressed to survive in highly competitive international markets. Although most of these structural problems were already evident before the onset of the recession, the downturn exacerbated many of them. Other factors working to slow the recovery are weak growth in world demand for U.S. exports and a subdued pace of inventory accumulation.

*Construction* is not likely to contribute significantly to the strength of the recovery--real spending on private construction as a share of GDP is expected to provide only a small stimulus during the recovery. In contrast, this share has usually risen sharply during previous postwar recoveries. In the aftermath of the building boom of the 1980s and the chronically high vacancy rates that resulted, construction of commercial and multifamily structures is expected to grow at a much more lethargic pace even when the recovery is fully under way (see Figure 1-7). In addition, investment in single-family housing is expected to recover at a somewhat slower rate than in past recoveries, as growth will be tempered by slower projected rates of household formation than occurred during the past two decades.

Although *purchases by state and local governments* typically grow more slowly than GDP during recoveries, this sector is expected to exert an unusually large drag on growth in 1992: by the end of 1993, real purchases are

**Figure 1-7.**
**Construction of Nonresidential Buildings as a Share of GDP**




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

NOTE: Data for construction and gross domestic product are in 1987 dollars.

expected to advance from their level at the peak of the business cycle at a rate that is less than half the average rate of growth recorded between 1983 and 1990. State and local governments will continue to make painful adjustments to reverse budgetary trends that began in the last decade: since 1984, the deficits of state and local governments (excluding surpluses in their social insurance budgets) have been rising relative to GDP, and the recession further damaged their budgets, prompting many states and localities to lower their deficits (see Figure 1-8). In order to balance their general fund budgets, state and local governments have been raising taxes and slashing spending. They are reducing, among other things, their payrolls through furloughs and layoffs. Indeed, during the third quarter of 1991, real compensation payments fell for the first time since 1982. Such fiscal austerity is expected to continue during this year and next.

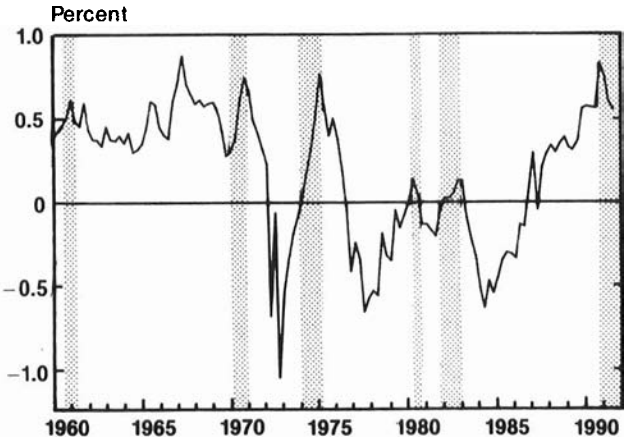
*Employment* is also likely to grow more slowly than was true in previous recoveries. Faced with increased pressures to cut costs and increase their competitiveness in international markets, many U.S. businesses--

particularly those in defense-related production, retailing, and finance--will slow hiring or even scale back their employment over the next several years. Consequently, personal income will advance at a relatively subdued pace during the recovery, which in turn will rein in growth in consumption.

*World demand* is likely to post only a modest increase in 1992, which is expected to slow growth in U.S. exports from the rapid pace recorded in the late 1980s (see Figure 1-9). Although the most recently available data indicate that the recessions in Canada and the United Kingdom are over, most forecasters predict that economic growth in Germany and Japan will slow in 1992.

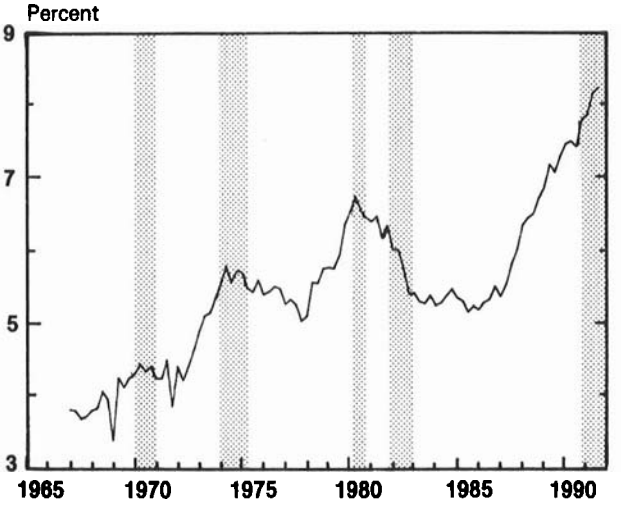
Concerned over the inflationary pressures created by the public outlays required for unification, the German central bank raised the discount rate by 2 percentage points over the course of 1991 to 8 percent, its highest level in the postwar period. The central bank is expected to maintain a relatively tight monetary policy in 1992, which, in conjunction with tax increases already in place, will limit Germany's rate of growth. In addition, Germany's tight monetary policy is expected to slow expansion elsewhere in Europe because it will encourage relatively tight monetary policies and slow growth in the other nations of the European Monetary System (EMS) as well. These countries are required virtually to match changes in German interest rates in order to keep the values of their currencies in relation to the deutsche mark within the narrow bands the EMS prescribes.

**Figure 1-8.**
**Deficits of State and Local Governments as a Share of GDP**




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

**Figure 1-9.**
**Real Merchandise Exports as a Share of GDP**




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

NOTE: Data for exports and GDP are in 1987 dollars.

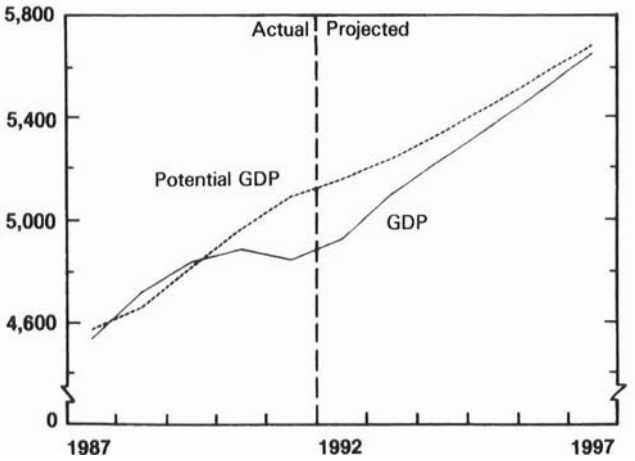
In Japan, declining land values and the weakening in the Tokyo stock market are expected to stunt growth, particularly in the demand for investment, as Japanese banks, whose assets include land and equities, become less willing to lend to domestic firms. Compared with their U.S. counterparts, Japanese businesses depend heavily on bank credit to finance their investment, so a cutback in bank lending is likely to have a larger effect in Japan than it does in the United States.

Most forecasters expect that growth rates in nearly all of the newly industrializing countries (South Korea, Taiwan, Singapore, Hong Kong, and Mexico) will be among the highest in the world over the next several years.

Moreover, average growth in Latin America is expected to be higher than it has been in a number of years. Despite these bright spots, world demand is expected to be weak in 1992 and to restrain growth in U.S. exports.

Finally, *inventory accumulation* is likely to proceed at a more laggardly pace during the recovery than was true following previous recessions. Swings in inventory accumulation typically account for a large proportion of swings in GDP in recoveries--nearly half during the initial phase of the upturn. During this recovery, however, such contributions from inventory accumulation to growth in GDP are unlikely. The failure in mid-1991 of the anticipated recovery to materialize and the related loss in confidence are likely to make domestic producers wary of undertaking ambitious inventory building until the recovery is well under way.

**Figure 1-10.**
**Closing the Gap: GDP vs. Potential GDP**




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

NOTE: Data for GDP and potential GDP are in 1987 dollars.

## The Projections for 1994 Through 1997

Over the medium term, CBO projects that real GDP will grow at an average annual rate of 2.6 percent. At this rate, the gap between the actual and the estimated potential levels of real GDP will reach its historical average by 1997. This gap widened during the recession and is expected to remain large, even at the end of 1993. As a result, actual output will have to grow at a rate higher than the 2.1 percent projection for growth in potential output over the years between 1994 and 1997 (see Figure 1-10). The size of the gap during most of the projection period, however, allows the medium-term growth to be achieved without a flare-up in inflation.

CBO's projection for the medium term is not a forecast of the most likely outcome for the economy. Rather, CBO's projection for economic growth relies on an extrapolation of trends in such fundamental factors as growth in the labor force, national saving, and productivity. Following a methodology described in earlier reports, CBO uses these variables to project the potential levels of variables such as GDP and real interest rates. Actual values of these variables are then projected using the historical relationship between the actual and potential values (see Tables 1-4 and 1-5).

The recent Department of Commerce revisions to the NIPA data were used in the construction of CBO's projection. Unfortunately, the department has not yet published all of the revised series that CBO needs to develop its projection for the medium term. The most important omissions were revised measures of the capital stock, which CBO uses to estimate potential output. As a result, CBO was forced to depart slightly from its standard methodology for projections.[6]

6. CBO calculated the level of potential output in three stages. First, CBO developed a projection for potential output on a 1982-dollar basis using its standard methodology in conjunction with the latest available (unrevised) data from the Department of Commerce along with revised projections of growth in the labor force from the Department of Labor. In the next stage, CBO lowered the growth rate in its 1982-dollar projection for potential output by the average 0.2 per-

**Table 1-4.**
**Medium-Term Economic Projections for Calendar Years 1992 Through 1997**

| | Estimated | Forecast | | Projected | | | |
|---|---|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| Nominal GDP (Billions of dollars) | 5,671 | 5,931 | 6,337 | 6,714 | 7,104 | 7,520 | 7,961 |
| Nominal GDP (Percentage change) | 2.9 | 4.6 | 6.9 | 5.9 | 5.8 | 5.9 | 5.9 |
| Real GDP (Percentage change) | -0.8 | 1.6 | 3.6 | 2.7 | 2.5 | 2.6 | 2.6 |
| Implicit GDP Deflator (Percentage change) | 3.7 | 2.9 | 3.2 | 3.2 | 3.2 | 3.2 | 3.2 |
| Fixed-Weighted GDP Price Index (Percentage change) | 3.7 | 3.0 | 3.3 | 3.4 | 3.4 | 3.4 | 3.4 |
| CPI-U (Percentage change) | 4.2 | 3.3 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| Unemployment Rate (Percent) | 6.7 | 6.9 | 6.4 | 6.2 | 6.0 | 5.9 | 5.7 |
| Three-Month Treasury Bill Rate (Percent) | 5.4 | 4.4 | 5.1 | 5.2 | 5.4 | 5.5 | 5.6 |
| Ten-Year Treasury Note Rate (Percent) | 7.9 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 |
| Tax Bases (Percentage of GDP) | | | | | | | |
| Corporate profits | 5.4 | 6.0 | 6.6 | 6.6 | 6.5 | 6.3 | 6.2 |
| Other taxable income | 21.5 | 21.2 | 21.0 | 21.1 | 21.1 | 21.2 | 21.3 |
| Wage and salary disbursements | 49.5 | 49.5 | 49.4 | 49.5 | 49.6 | 49.8 | 49.9 |
| Total | 76.4 | 76.6 | 77.1 | 77.2 | 77.3 | 77.4 | 77.4 |

SOURCE: Congressional Budget Office.

NOTE: CPI-U is the consumer price index for all urban consumers.

**Accounting for Growth.** CBO projects that growth in real GDP will average 2.1 percent over the years between 1990 and 1997, considerably slower than the 2.4 percent average posted in the 1980s (see Table 1-6). Slower growth of the labor force from the pace of the last decade accounts for much of the lower rate of growth in output.

Underlying this projection is the assumption that the civilian labor force will grow at an average annual rate of 1.3 percent over the years from 1990 through 1997. This corresponds to the revised midrange projections made by the Bureau of Labor Statistics and is slightly higher than the assumption used last summer. The projected trend in the growth of the civilian labor force has been revised up by 0.1 percentage point over the 1993-1997 period. This revision is the result of an increase in the projected rate of immigration to the United States, and, to a lesser extent, some projected demobilization of the armed forces. Even with this revision, however, the labor force is projected to grow less than was true in

centage points attributable to the change from 1982 to 1987 prices. Finally, CBO assumed the same proportionate gap in the final year of the projection period between actual and potential output that it used in last summer's report. Together, these adjustments yield a path for potential output through the near and medium terms as well as a medium-term projection for actual output.

earlier decades, largely because of slower growth of the working-age population.

CBO projects that labor productivity will grow at an average annual rate of 1.0 percent over the 1990-1997 period. Compared with the 1980s, this slight pickup reflects the rebound in the economy from the current recession.

**The Projection for Inflation.** The reduction in the underlying rate of inflation that resulted from the recession and the tight monetary policy that preceded it will likely persist through much of the 1990s. Both CPI inflation and the underlying rate of inflation are projected at 3.6 percent over the years 1994 through 1997.

The CPI measure of inflation is projected to be somewhat higher than the growth of the implicit GDP deflator (projected to average 3.2 percent a year) and, to a lesser extent, the fixed-weighted GDP price index (projected to average 3.4 percent). Although the Commerce Department's revision of the GDP deflator and the fixed-weighted price index to incorporate the use of 1987 as a base year has narrowed the difference between their respective growth rates, both price series are expected to grow more slowly than the CPI (which is a fixed-weighted index based on

**Table 1-5.**
**Medium-Term Economic Projections for Fiscal Years 1992 Through 1997**

| | Actual | Forecast | | Projected | | | |
|---|---|---|---|---|---|---|---|
| | 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
| Nominal GDP (Billions of dollars) | 5,627 | 5,846 | 6,237 | 6,621 | 7,004 | 7,414 | 7,849 |
| Nominal GDP (Percentage change) | 3.1 | 3.9 | 6.7 | 6.2 | 5.8 | 5.8 | 5.9 |
| Real GDP (Percentage change) | -0.8 | 0.9 | 3.5 | 2.9 | 2.5 | 2.6 | 2.6 |
| Implicit GDP Deflator (Percentage change) | 3.9 | 2.9 | 3.1 | 3.2 | 3.2 | 3.2 | 3.2 |
| Fixed-Weighted GDP Price Index (Percentage change) | 4.0 | 3.0 | 3.2 | 3.4 | 3.4 | 3.4 | 3.4 |
| CPI-U (Percentage change) | 5.1 | 3.2 | 3.6 | 3.6 | 3.6 | 3.6 | 3.6 |
| Unemployment Rate (Percent) | 6.5 | 6.9 | 6.5 | 6.2 | 6.0 | 5.9 | 5.6 |
| Three-Month Treasury Bill Rate (Percent) | 6.0 | 4.4 | 5.0 | 5.2 | 5.3 | 5.5 | 5.6 |
| Ten-Year Treasury Note Rate (Percent) | 8.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 | 7.1 |
| Tax Bases (Percentage of GDP) | | | | | | | |
| Corporate profits | 6.4 | 5.8 | 6.6 | 6.7 | 6.5 | 6.4 | 6.2 |
| Other taxable income | 21.6 | 21.3 | 21.0 | 21.0 | 21.1 | 21.2 | 21.3 |
| Wage and salary disbursements | 49.6 | 49.5 | 49.4 | 49.5 | 49.6 | 49.7 | 49.9 |
| Total | 76.6 | 76.5 | 77.0 | 77.2 | 77.2 | 77.4 | 77.4 |

SOURCE: Congressional Budget Office.

NOTE: CPI-U is the consumer price index for all urban consumers.

1982-1984 consumption patterns). This difference in growth rates largely reflects the declines projected for the quality-adjusted prices of computers together with the growing importance of computers in the economy. These factors are not reflected in the CPI, and, as a result, this measure of inflation will remain higher than those based on the GDP price index.

**The Projection for Interest Rates.** The CBO projection assumes that real (inflation-adjusted) interest rates will drop below the levels that prevailed during the four years preceding the recession. By 1997, real short-term rates are projected to be 2.0 percent, or 0.8 percentage points below the 1986-1989 average, while long-term rates are estimated to be 3.5 percent, 0.9 percentage points below the average for the prerecession period.

The projected declines in real interest rates over the medium term relative to the average for the most recent nonrecessionary period reflect an increase in the domestic supply of capital that stems from an increase in the U.S. saving rate. By 1997, the net national saving rate is projected to be 0.6 percentage points above its average for the 1986-1989 period. Most of this increase, 0.5 percentage points, stems from lower federal deficits.

Balanced against these increases in the supply of capital are projected increases in demand that will put upward pressure on real interest rates. Some of the increased demand over the medium term is the result of the domestic recovery. In addition, increased world capital demands stemming from German unification, from economic integration in Western Europe, and, to a lesser extent, from the reconstruction in the Middle East in the aftermath of the Persian Gulf War and the needs of the former Communist bloc nations for infrastructure will continue to put upward pressure on world interest rates. CBO esti-

**Table 1-6.**
**Accounting for Growth in Real GDP (Average annual rate of growth, in percent)**

| | | Actual | | | | Projected |
|---|---|---|---|---|---|---|
| | Components of Growth | 1953:2 to 1960:2 | 1960:2 to 1973:4 | 1973:4 to 1980:1 | 1980:1 to 1990:3 | 1990 to 1997 |
| | Civilian Labor Force | 1.5 | 2.0 | 2.6 | 1.5 | 1.3 |
| + | Civilian Employment Rate | -0.4 | 0.0 | -0.3 | 0.1 | 0.0 |
| = | Civilian Employment | 1.1 | 2.0 | 2.4 | 1.6 | 1.3 |
| + | Nonfarm Hours per Civilian Employee | -0.7 [a] | -0.4 | -0.6 | 0.1 | 0.1 |
| = | Total Hours (Nonfarm business) | 0.4 | 1.6 | 1.8 | 1.7 | 1.4 |
| + | Output per Hour (Nonfarm business) | 1.9 | 2.4 | 0.5 | 0.8 | 1.0 |
| = | Nonfarm Business Output | n.a. | 4.0 [a] | 2.3 | 2.6 | 2.4 |
| - | Nonfarm Business Output Share of GDP | n.a. | 0.1 [a] | -0.2 | 0.2 | 0.2 |
| = | Real GDP | n.a. | 3.9 | 2.5 | 2.4 | 2.1 |

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

NOTE: The revised data for the national income and product accounts have, to date, been published only for the years since 1959. The historical periods in the table begin and end at business cycle peaks, as designated by the National Bureau of Economic Research.

n.a. = not available.

a. Estimated by CBO.

mates that the developments in Europe alone have already boosted real interest rates in the United States by between 0.5 and 1 percentage point.[7]

## Conclusions

The unexpected weakness of the economy over the second half of 1991 brought with it a rising tide of pessimism. Although the risks of renewed declines loom large, a somewhat more likely outcome is that poor growth will continue for several more months. Sparked by rebounds in interest-sensitive sectors of the economy, a more solid recovery should begin by the middle of 1992. Once it begins, however, the recovery is expected to proceed at a slower pace than was true in previous postwar recoveries. Already under way before the recession, structural adjustments across a wide swath of the economy will temper the pace of the expansion. Once completed, these adjustments should lay the foundation for more balanced economic growth in the mid-1990s.

7. See Congressional Budget Office, *How the Economic Transformations in Europe Will Affect the United States* (December 1990).

Chapter Two

# The Budget Outlook and the Budget Process

The federal deficit will top $350 billion in 1992, surpassing 1991's record of $269 billion, according to the Congressional Budget Office's newest estimates. The deficit then declines slowly through the middle of the decade but refuses to sink much below $200 billion. It starts to climb again in mid-decade, refuting the once-widespread notion that the mere passage of time will cure it. All of these projections hinge critically on compliance with the Budget Enforcement Act, a product of 1990's budget summit agreement, which sets stringent caps on discretionary spending in the next few years.

This chapter has two parts, one summarizing the deficit outlook and the second gauging the current state of the budget process. The first half presents CBO's latest baseline projections through 1997. Baseline projections show the likely path of spending and revenues if current laws remain unchanged. They are not a projection of budget outcomes, but are essential in showing the consequences of today's policies. The second half of the chapter reviews experience so far under 1990's Budget Enforcement Act. Although the first year has gone smoothly, short- and long-run pressures are mounting. There are many calls to use fiscal policy to spur the economy in the short term. But the longer-run challenges are the exact opposite: the deficit needs to be tamed, and national priorities reexamined.

## The Deficit Outlook

If policymakers comply with the Budget Enforcement Act, the deficit is expected to shrink by almost half by 1996 (see Table 2-1). But short-lived factors such as spending for deposit insurance can obscure underlying trends.

In the past few years, the federal government has spent heavily on deposit insurance--closing or merging many insolvent savings and loan institutions and, more recently, commercial banks. These costs swell the deficit but do not drain credit or spur the economy quite like other spending because they do not make recipients richer. Instead, such outlays basically reflect transfers of existing assets and liabilities. The great waste of resources symbolized by today's huge expenditures occurred mostly in the past, when bad loans and investments were made. Thus, financial markets generally greet today's heavy borrowing for deposit insurance with relative equanimity. Deposit insurance costs are expected to remain enormous through 1993 but then fade, actually turning negative by 1995 as proceeds from selling assets dwarf the ongoing costs of resolutions.

Another ephemeral factor is contributions from foreign nations to help finance Opera-

tion Desert Storm. These contributions--totaling $43 billion in 1991 and $5 billion in 1992--are a flash in the budgetary pan. A good, simple measure of the underlying deficit thus excludes deposit insurance and Desert Storm contributions. As Table 2-1 makes clear, this measure is even less encouraging about the long-run outlook: the deficit improves through 1995, but becomes marginally worse thereafter, when these adjustments are made.

Over long periods, it is better to compare figures in relation to the size of the economy rather than in dollar terms. As a percentage of gross domestic product (GDP), the deficit excluding deposit insurance crests at 5 percent in 1992 and then subsides to about 3 percent in 1995. By 1997, it will have been almost two decades since the deficit dropped significantly below this level (see Figure 2-1). And in a disturbing trend, the deficit begins to creep up once again as a share of GDP.

**Why does the deficit stop falling after mid-decade?** In the 1992-1995 period, revenues climb modestly as a percentage of GDP, and discretionary spending--controlled by caps in the Budget Enforcement Act--falls. The caps are particularly crucial, driving discretionary spending down by almost 2 percent of GDP between 1992 and 1995. But after 1995 things change. Several revenue-raising measures adopted in the past two years expire in 1995

**Table 2-1.**
**CBO Deficit Projections (By fiscal year)**

| | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| | | | | **In Billions of Dollars** | | | |
| Total Deficit Assuming Discretionary Caps | 269 | 352 | 327 | 260 | 194 | 178 | 226 |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 246 | 290 | 258 | 227 | 210 | 222 | 254 |
| On-Budget Deficit (Excluding Social Security and Postal Service) | 321 | 404 | 391 | 337 | 281 | 276 | 335 |
| **Memoranda:** | | | | | | | |
| Deposit Insurance | 66 | 67 | 68 | 33 | -16 | -44 | -28 |
| Desert Storm Contributions | -43 | -5 | 0 | 0 | 0 | 0 | 0 |
| Off-Budget Surplus | | | | | | | |
| Social Security | 54 | 53 | 65 | 76 | 86 | 98 | 110 |
| Postal Service | -1 | -1 | -1 | a | 1 | a | -1 |
| Total | 52 | 52 | 64 | 76 | 87 | 98 | 109 |
| | | | | **As a Percentage of GDP** | | | |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 4.4 | 5.0 | 4.1 | 3.4 | 3.0 | 3.0 | 3.2 |

SOURCE: Congressional Budget Office.

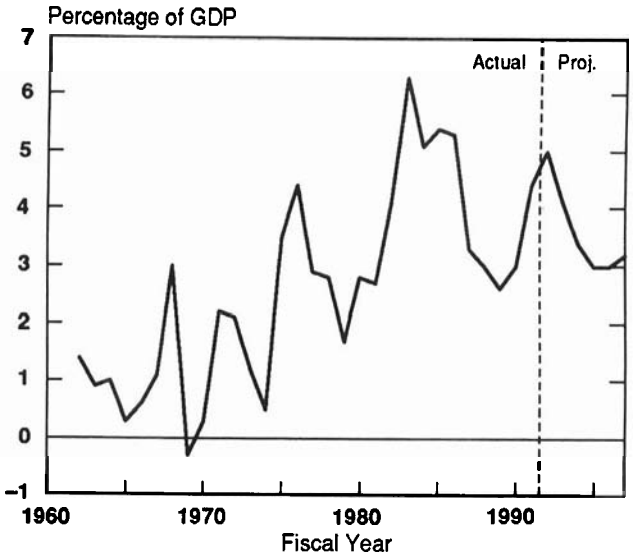
a. Less than $500 million.

or 1996. Discretionary spending is no longer controlled by caps and, following the standard baseline methodology, CBO assumes that it will resume rising with inflation. Entitlement programs, which have never stopped growing strongly throughout this period, continue apace. Together these factors begin pushing the deficit back up in mid-decade.

CBO normally does budget estimates extending six years into the future. But such estimates can leave unanswered questions about even longer-run trends. Does the nation eventually grow out of the deficit? Under current taxing and spending policies, the apparent answer is no (see Box 2-1). In 1998 through 2002, the deficit resumes climbing both in dollar terms and, more alarmingly, as a percentage of GDP.

The deficit outlook is far bleaker than was expected when the Congress and the President reached their budget summit agreement in the fall of 1990. The summit agreement did not fail; on the contrary, it cut the deficit by almost $500 billion over five years, the most ambitious deficit reduction package ever. But the economy is weaker than forecasters then expected, with a deeper and more stubborn recession and dimmer prospects for long-term growth. Technical factors, too, have dampened revenues and swollen spending on benefit programs, particularly health care. CBO has now performed three comprehensive reviews of the budget outlook since the summit--in January 1991, August 1991, and now; each time, it has concluded that the long-run deficit outlook appears worse. If it were not for the summit package, the budget would be in a much deeper hole. But another round of deficit reductions, rivaling the summit agreement, now seems urgent if the government's continued drain on national saving is to be curbed.

**Figure 2-1.**
**Federal Deficit as a Share of GDP**




SOURCE: Congressional Budget Office.

NOTE: Excludes deposit insurance and Desert Storm contributions.

## How Has the Budget Outlook Changed Since August?

In its August 1991 report, CBO warned policymakers of the bleak deficit outlook. Projected deficits have worsened marginally since then, mainly for technical reasons. Table 2-2 summarizes why the outlook has deteriorated since August.

**Recent Legislation.** The past year has witnessed relatively little budget-related legislation, following the huge effort that went into crafting and implementing the budget summit a year earlier. Budgetary impacts of legislation adopted since last August appear in Table 2-2. *Pay-as-you-go* legislation primarily reflects extra unemployment insurance benefits (costing $5 billion and expiring in June), largely financed by tax speedups and enhanced collection of guaranteed student loans. In other major actions, a dozen tax preferences were extended for six months, and the highway bill decreased some mandatory spending. *Emergency appropriations*--permitted under the budget summit agreement--granted extra money for Operation Desert Storm (much of it simply a restoration of funds approved last year that would otherwise

## Box 2-1.
## The Budget Outlook Through 2002

The budget outlook does not improve after 1997. Under current policies, CBO projects that the deficit will exceed $400 billion a decade from now. As a percentage of gross domestic product, the deficit excluding deposit insurance climbs from 3.2 percent in 1997 to 4.1 percent in 2002.

CBO expects that, under current policies, revenues will remain about 19 percent of GDP (see the table below). But spending growth outstrips revenues. Outlays climb by slightly more than 1 percent of GDP in the 1997-2002 period. Within the spending totals, some categories grow and others shrink. The government's big health care programs--Medicare and Medicaid--continue to soar, and together they represent 5.8 percent of GDP in 2002 (compared with 4.4 percent in 1997). Net interest outlays inch up from 3.5 percent of GDP in 1997 to 3.8 percent in 2002. Social Security benefits stay at about 4.7 percent of GDP. In 2002, the big demands that the baby-boom generation will place on Social Security and Medicare are still more than five years away. Most other spending programs roughly preserve their 1997 shares. A sole exception is discretionary spending--defense, international, and domestic. These programs are assumed, in the baseline projections, to keep up with inflation once the Budget Enforcement Act's caps expire in 1995. They therefore dwindle gradually as a share of GDP, from 7.2 percent in 1997 (already a historic low) to 6.6 percent in 2002.

Economic assumptions are critical to these projections. In the 1998-2002 period, CBO posits that real economic growth will continue at about 2 percent a year. The unemployment rate remains at about 5½ percent, down very slightly from 1997's level. Short-term interest rates (as measured by three-month Treasury bills) and longer-term rates (such as 10-year Treasury notes) are also assumed to remain constant, at 5.6 percent and 7.1 percent, respectively. Inflation continues at 3.6 percent.

Five-year budget projections are highly uncertain, and 10-year extrapolations are even more so. Some key uncertainties surround the assumptions about economic performance (chiefly, real economic growth and interest rates), and others are more narrowly budget-related: uncertainty about the continued surge in medical care expenditures, the size and timing of outlays for deposit insurance, and so forth. CBO's projections, uncertain though they are, nevertheless call into question the comfortable notion that the deficit will eventually go away of its own accord.

**The Budget Outlook Through 2002 (By fiscal year)**

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | **In Billions of Dollars** | | | | | |
| Revenues | 1,102 | 1,179 | 1,263 | 1,342 | 1,415 | 1,492 | 1,580 | 1,667 | 1,758 | 1,854 | 1,955 |
| Outlays | 1,454 | 1,505 | 1,523 | 1,536 | 1,593 | 1,718 | 1,834 | 1,953 | 2,079 | 2,214 | 2.362 |
| Deficit | 352 | 327 | 260 | 194 | 178 | 226 | 254 | 286 | 322 | 360 | 407 |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 290 | 258 | 227 | 210 | 222 | 254 | 272 | 298 | 332 | 369 | 414 |
| | | | | | | **As a Percentage of GDP** | | | | | |
| Revenues | 18.9 | 18.9 | 19.1 | 19.2 | 19.1 | 19.0 | 19.1 | 19.1 | 19.1 | 19.1 | 19.1 |
| Outlays | 24.9 | 24.1 | 23.0 | 21.9 | 21.5 | 21.9 | 22.1 | 22.4 | 22.6 | 22.8 | 23.1 |
| Deficit | 6.0 | 5.2 | 3.9 | 2.8 | 2.4 | 2.9 | 3.1 | 3.3 | 3.5 | 3.7 | 4.0 |
| Deficit Excluding Deposit Insurance and Desert Storm Contributions | 5.0 | 4.1 | 3.4 | 3.0 | 3.0 | 3.2 | 3.3 | 3.4 | 3.6 | 3.8 | 4.1 |

SOURCE: Congressional Budget Office.

**Table 2-2.**
**Changes in CBO Budget Projections Since August (By fiscal year, in billions of dollars)**

| | 1992 | 1993 | 1994 | 1995 | 1996 |
|---|---|---|---|---|---|
| | | | **Revenues** | | |
| August 1991 Estimate | 1,141 | 1,223 | 1,299 | 1,377 | 1,449 |
| Policy Changes (Pay-as-you-go) | 3 | a | a | a | 1 |
| Economic Assumptions | -29 | -29 | -20 | -18 | -18 |
| Technical Reestimates | -13 | -16 | -16 | -17 | -17 |
| Total | -39 | -45 | -37 | -35 | -34 |
| Current Estimate | 1,102 | 1,179 | 1,263 | 1,342 | 1,415 |
| | | | **Outlays** | | |
| August 1991 Estimate | 1,504 | 1,501 | 1,534 | 1,534 | 1,605 |
| Policy Changes | | | | | |
| Mandatory spending (Pay-as-you-go) | 4 | -2 | a | a | a |
| Other (Emergency appropriations)[b] | 7 | 4 | 2 | 1 | 1 |
| Subtotal | 11 | 2 | 2 | 1 | 1 |
| Economic Assumptions | | | | | |
| Net interest | -13 | -22 | -23 | -22 | -20 |
| Benefits and discretionary spending | 1 | -5 | -13 | -18 | -21 |
| Subtotal | -12 | -27 | -36 | -41 | -40 |
| Technical Reestimates | | | | | |
| Deposit insurance[c] | -45 | 15 | 5 | 20 | 3 |
| Defense | -12 | a | 0 | 0 | 0 |
| Medicaid | 6 | 9 | 8 | 8 | 7 |
| Other benefit programs | 3 | 4 | 5 | 6 | 8 |
| Net interest[c] | 1 | -1 | 2 | 6 | 9 |
| Other | -3 | 2 | 3 | 2 | 1 |
| Subtotal | -49 | 29 | 24 | 41 | 28 |
| Total | -49 | 4 | -10 | 2 | -11 |
| Current Estimate | 1,454 | 1,505 | 1,523 | 1,536 | 1,593 |
| | | | **Deficit** | | |
| August 1991 Estimate | 362 | 278 | 234 | 157 | 156 |
| Policy Changes | | | | | |
| Revenues and mandatory spending (Pay-as-you-go) | 1 | -2 | a | a | a |
| Other (Emergency appropriations)[b] | 7 | 4 | 2 | 1 | 1 |
| Economic Assumptions | 17 | 2 | -16 | -23 | -23 |
| Technical Reestimates | -36 | 45 | 40 | 58 | 45 |
| Total | -11 | 49 | 26 | 37 | 23 |
| Current Estimate | 352 | 327 | 260 | 194 | 178 |

SOURCE: Congressional Budget Office.

a. Less than $500 million.

b. Includes additional debt service costs.

c. Adjusted for changes in interest paid by two deposit insurance agencies--the Bank Insurance Fund and the Resolution Trust Corporation--to the Treasury. These payments are intrabudgetary and do not affect the deficit.

have lapsed, unspent, in 1992) and aid to disaster victims.

**Economic Reestimates.** Not surprisingly, revisions to the economic outlook make the deficit worse in 1992 as the recovery takes longer than previously expected to gain momentum. But in the longer run, recent economic developments actually reduce projected deficits.

The weaker-than-expected recovery and muted inflation depress revenues--by $29 billion in 1992 and 1993, and by $18 billion to $20 billion a year thereafter, compared with CBO's earlier projections. The most important component is lower personal income, as the labor market proves weaker than was anticipated last August. Because four-fifths of revenues come from personal income and payroll taxes, a weak labor market crimps overall revenue growth. Corporate profits have also been revised downward in the short term, dampening projected corporate income tax revenues for 1992 and 1993. However, the recovery in profits is delayed, not diminished; projected revenues from this source catch up to last August's forecast by 1994.

The new forecast contains good news on the outlay front, as inflation and short-term interest rates are down. The effects on net interest, benefit programs, and discretionary spending are detailed in Table 2-2. The Budget Enforcement Act called for adjusting the discretionary spending caps, with a lag, if actual inflation deviates from the rates assumed at its enactment. CBO has built these adjustments into its projections. Thus, of the $5 billion in outlay savings (other than interest spending) traced to the new economic forecast in 1993, $1 billion comes from benefit programs and $4 billion from discretionary programs. By 1997, of the $21 billion in total savings, over half comes from discretionary programs, as the act's ceilings are adjusted downward in 1993 through 1995, with continued repercussions for later years.

**Technical Reestimates.** Technical revisions are any that are not ascribed to a new economic forecast or to legislation. Typically, they are spurred by the stream of new budgetary information--about tax collections, agencies' spending plans, benefit programs' caseloads, crop outlooks, and so forth.

Deposit insurance, a notoriously volatile spending category, contributes an uneven stream of technical reestimates. Such spending is now expected to be down by $45 billion in 1992 from earlier estimates, but up by anywhere from $3 billion to $20 billion in later years, as shown in Table 2-2. The Resolution Trust Corporation (RTC), responsible for the savings and loan cleanup, had to slow its work to a trickle for several months while it awaited necessary spending authority. Ultimately, it received just enough funds to continue operations at full steam until April 1992. It accounts for nearly all of the downward reestimate in 1992. Revisions to expected RTC spending in 1993 through 1996 are jagged, but sum virtually to zero over the period. In contrast, projections for Bank Insurance Fund outlays on behalf of commercial banks have been raised in every year except 1992. The upward revision totals about $30 billion over the 1992-1996 period and is concentrated in 1993 and 1994. About half of the revision, though, reflects greater needs for working capital--money that is expected to be recovered eventually from liquidations.

Clearly, deposit insurance outlays are volatile and hard to predict. But the deposit insurance revisions are not critical to CBO's message. As further explained in Chapters 1 and 3, current deposit insurance outlays lack the economic impacts of other deficit financing. That is why CBO and others stress the deficit excluding deposit insurance.

Other technical revisions are more clear-cut, boosting the deficit in every year. Revenues suffer by an average of $16 billion a year, with reduced capital gains taxes accounting for roughly four-fifths of the total. In the case of revenues, the "technical" label covers a broad range of revisions, including some that are related to the state of the economy. In other words, the distinction between economic and technical revisions is inexact. Cap-

ital gains realizations offer a prime example. These realizations are obviously related to economic factors, but are not an explicit part of CBO's economic forecast. CBO must glean whatever clues it can from stock market and real estate activity, actual tax collections, and so forth. When newly released data from tax returns (now available for 1990 returns) indicate that realizations were much lower than CBO assumed, the resulting revisions in revenues are classified as technical. Because capital gains are so hard to forecast--and, adding to the difficulty, must be guessed even for the past year--they have dominated CBO's technical revisions in some recent baselines.

Technical revisions attributable to capital gains taxes total $11 billion to $13 billion per year. Preliminary data show that capital gains realizations fell by more than 20 percent between 1989 and 1990, despite continued economic growth and only a small drop in the stock market. The big losses occurring in the real estate market and among closely held corporations and partnerships have clearly had an effect. Lower-than-expected tax collections in April 1991, which at that time could not be attributed to any particular income source, led CBO to reduce its revenue projections last summer by $6 billion to $8 billion annually. Those adjustments partially corrected for 1990's low level of realizations but left the projected post-1990 growth unchanged. It now appears that problems in real estate will persist, and baseline revenues have been further trimmed.

Technical revisions on the outlay side are clustered in just a few key areas. Deposit insurance has already been discussed. Defense spending is down in 1992 (by about $12 billion) but changes negligibly thereafter. Delayed contributions for Operation Desert Storm account for $5 billion of the revision, and slower spending for most of the rest. Upward revisions to the fast-growing Medicaid program, ranging from $6 billion to $9 billion a year, are more fully discussed in Chapter 3. Several billion dollars a year have been added to projections of other benefit programs, most prominently Social Security and Supplemental Security Income; both are expected to add large numbers of disabled beneficiaries. And net interest spending is up mainly because other technical reestimates boost the government's borrowing. In sum, technical changes other than for deposit insurance worsen the deficit by about $9 billion in 1992 and by $30 billion to $40 billion a year thereafter.

## How Should the Deficit Be Measured?

Federal budget accounting should help policymakers allocate resources and make sound economic decisions. Objective observers have long favored comprehensive measures of the government's revenues, outlays, and deficit for this purpose. Such measures, they argue, most accurately represent the government's overall importance in the economy and its claim on national saving in the form of deficit financing. This belief was most clearly stated by the President's Commission on Budget Concepts in 1967, and has guided budget presentation since that time.

CBO emphasizes such a comprehensive measure. Today, the government drains a large share of national saving because its deficit is so big. In analyzing the government's appetite for credit, there is justification aplenty for focusing on the deficit excluding deposit insurance--because deposit insurance's surge is temporary, and because the associated borrowing lacks the damaging effects on saving that typifies other deficit financing. As a rule, however, there is no good reason to hide any government spending or revenues by arbitrarily excluding them from the official totals.

Policymakers and voters have long considered Social Security special. The program collects payroll taxes from workers and interest on its investments in Treasury securities, and pays benefits to retirees, the disabled, and some of their dependents. In isolation, Social Security runs a surplus because its earmarked income exceeds current benefits and administrative costs. Legislation adopted in 1983 formally placed Social Security off-budget. Since

that time, both CBO and the Office of Management and Budget have presented Social Security totals separately, while continuing to stress the usefulness of a total, comprehensive budget. Table 2-1 showed a division of the deficit between its on-budget and off-budget components. (Besides Social Security, the Postal Service is also officially off-budget.) The on-budget deficit has no useful economic meaning. Any number that ignores about one-fourth of the government's taxes and one-fifth of its spending--Social Security's contributions to the totals--is sorely defective.

Social Security has not been immune from the recent deterioration in the budget outlook. The program, viewed in isolation, is expected to run continued surpluses, but they are smaller than previously expected. Weaker payroll tax collections are hurting the trust fund, and trends in benefit payments are mixed. Box 2-2 discusses the outlook for the Social Security trust funds.

The Social Security funds--Old Age and Survivors Insurance and Disability Insurance--are just two of more than 150 trust funds run by the federal government. Most are tiny, in comparison with giants like Social Security, Medicare, and the government's civilian and military retirement programs. Combined, trust funds run surpluses that are estimated to climb from $105 billion in 1992 to $156 billion in 1997 (see Table 2-3).

But trust fund surpluses have dubious meaning, and efforts to portray the federal funds deficit--the name given to the deficit excluding all trust funds--as the "true deficit" are ill-founded. The programs shown in Table 2-3 are among the biggest run by the government. (In fact, virtually the only big

**Table 2-3.**
**CBO Projections of Trust Fund Surpluses (By fiscal year, in billions of dollars)**

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|
| Social Security | 53 | 65 | 76 | 86 | 98 | 110 |
| Medicare | 14 | 11 | 9 | 8 | 5 | a |
| Military Retirement | 12 | 12 | 12 | 11 | 11 | 10 |
| Civilian Retirement[a] | 24 | 26 | 29 | 31 | 30 | 31 |
| Unemployment | -3 | 1 | 4 | 4 | 4 | 4 |
| Highway and Airport | 2 | 2 | b | -1 | -1 | -1 |
| Other[c] | 2 | 1 | 2 | 1 | 1 | 1 |
| Total Trust Fund Surplus[c] | 105 | 120 | 130 | 141 | 148 | 156 |
| Federal Funds Deficit[d] | -457 | -446 | -391 | -335 | -327 | -382 |
| Total Deficit | -352 | -327 | -260 | -194 | -178 | -226 |
| **Memorandum:** | | | | | | |
| Net Transfers from Federal Funds to Trust Funds | 190 | 201 | 216 | 237 | 258 | 283 |

SOURCE: Congressional Budget Office.

a. Civil Service Retirement, Foreign Service Retirement, and several smaller funds.

b. Less than $500 million.

c. Primarily Railroad Retirement, employees' health insurance and life insurance, Hazardous Substance Superfund, and various veterans' insurance trust funds.

d. Assumes that discretionary spending reductions are made in non-trust-fund programs.

## Box 2-2.
## The Changing Outlook For Social Security

Ten years ago, both the short-term and the long-term outlook for Social Security appeared bleak. A blue-ribbon panel, the National Commission on Social Security Reform, had been appointed but had not yet made its recommendations. The trust funds faced imminent depletion: by July 1983, the Old-Age and Survivors Insurance fund would not have enough reserves to pay benefits on time. Even if the short-run crisis could be averted, the program faced long-run funding problems beginning around 2025.

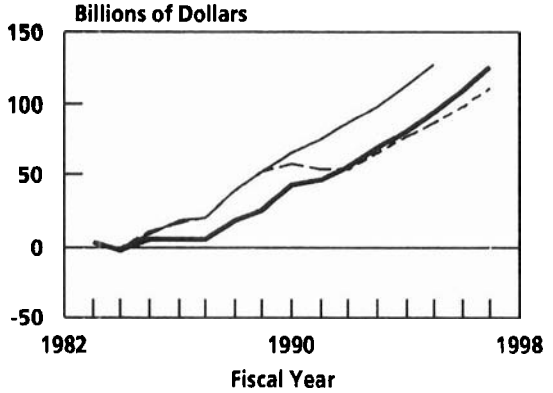
The Social Security Amendments of 1983 changed all that. The amendments helped the trust funds over the immediate hump through infusions from the general fund--chiefly payments for past military wage credits and a credit for uncashed checks. The new law bolstered the medium-term outlook by delaying annual cost-of-living adjustments for six months, subjecting a portion of benefits to income tax, accelerating already scheduled tax increases on wage and salary workers, hiking taxes on the self-employed, and expanding coverage. And in the long run, the trust funds were further strengthened by a gradual increase in the retirement age.

Today the trust funds are flush with reserves. In the 1983-1991 period, they actually grew faster than was expected when the 1983 amendments were passed. At the end of calendar year 1990, trust fund balances totaled $225 billion, compared with the $124 billion projected in the 1983 *Social Security Trustees' Report.* Moreover, these actual reserves amounted to 82 percent of 1991 outlays (a measure dubbed the trust fund ratio), compared with the 46 percent that was projected in the 1983 report.

But the better-than-expected performance of the Social Security trust funds appears to be past. As pictured below, surpluses in the 1990s are likely to be smaller than those projected back in 1983 and significantly smaller than CBO projected just two years ago in its 1990 annual report. Start-of-year balances in the funds are now expected to top 100 percent of outlays in 1993 and 150 percent in 1996. Two years ago, CBO thought these ratios would be attained in 1992 and 1994, respectively.

The recent recession has dampened trust fund revenues and certainly is one cause of these revisions. But the longer-run outlook for Social Security has deteriorated even after the economy's expected recovery. The 1983 trustees' report foresaw that the combined Social Security funds would be solvent at least through 2060. The 1991 report projected that the trust funds would be exhausted in 2041.

**Social Security Trust Fund Surpluses**




NOTE: Projected surpluses from the 1983 *Social Security Trustees' Report* for 1988 through 1997 are CBO interpolations.

programs *not* under the trust fund aegis are defense, interest on the public debt, and means-tested entitlements.) Arguing that trust fund programs should be excluded from official totals is tantamount to arguing that much of what government does should be ignored.

Furthermore, trust funds get a surprising amount of their income from intrabudgetary transfers. Such transfers simply move money from the general fund (boosting the federal funds deficit) to trust funds (swelling the trust fund surplus). These intrabudgetary transfers total $190 billion in 1992 and even larger amounts later (see Table 2-3). Chief among them are interest paid to trust funds (about $79 billion in 1992), government contributions to retirement funds on behalf of its own employees ($67 billion), and the general fund contribution to Supplementary Medical Insurance ($38 billion), which finances three-quarters of that program's costs.

Clearly, most of these transfers were instituted for sound policy reasons--for example, to show the cost of funding future retirement benefits as part of federal agencies' budgets. But equally clearly, transferring money from one part of the government to another does not change the total deficit or borrowing needs by one penny. Without such transfers, the trust funds would exhibit deficits, not surpluses.

Because trust funds encompass much of the budget, they attract their share of policy proposals. Proponents put forth ideas as varied as cutting payroll taxes, relaxing limitations on retirees' earnings (allowing them to collect greater benefits), spending more on highways and airports, and so forth. Whatever the merits of such proposals, they should succeed or fail on their own strengths and not on the specious notion that they do not really affect the deficit.

## How Does the Economy Affect the Budget?

The federal budget is highly sensitive to the economy. Revenues depend largely on wages and salaries, corporate profits, and other taxable incomes. Many benefit programs are pegged directly (like Social Security) or indirectly (like Medicare) to the inflation rate; others (like unemployment compensation) are closely linked to the unemployment rate. And market interest rates are a key determinant of the government's cost of servicing its debt.

CBO has long capsulized these relationships using simplified rules of thumb to depict the budgetary effects of four key economic variables: real growth, unemployment, inflation, and interest rates. Table 2-4 shows the estimated changes in budget totals if any of these variables were to differ from CBO's baseline assumptions by 1 percentage point in each year, starting in January 1992.

**Real Growth.** Real economic growth has powerful effects on the budget, chiefly on revenues and on interest costs. In its baseline, CBO assumes that real economic growth (as measured by GDP) will climb from 1.6 percent in 1992 to 3.6 percent in 1993, as the economy recovers from recession, and average about 2.6 percent in 1994 through 1997. The first rule of thumb shows the estimated budgetary effects of drastically slower economic growth. Subtracting 1 percentage point from real growth beginning in January 1992 amounts to assuming a pallid recovery in 1992, growth of 2.6 percent in 1993, and an expansion averaging just 1.6 percent in the next four years. By 1997, total GDP lies more than 5 percent below CBO's baseline assumptions. Meanwhile, the unemployment rate climbs to 7.8 percent in 1997, more than 2 percentage points above the baseline.

This scenario severely retards the growth in taxable incomes, leading to revenue losses estimated at $7 billion in 1992 and $100 billion by 1997 (see Table 2-4). In 1997, the revenue loss is about 7 percent of baseline revenues, slightly greater than the loss in GDP. Slow growth implies a weak labor market and swells outlays for some benefit programs, notably Unemployment Insurance. But over time, the chief spending impact is felt in net interest: as revenues falter, the government must borrow more and incur greater debt service costs.

**Unemployment.** The second rule of thumb shows the simplified effects of higher unemployment on the budget. Obviously, economic growth and unemployment are related. A handy generalization summarizing this relationship is Okun's law, which states that an extra percentage point of unemployment is linked to a 2½ percent loss in GDP.

This second rule of thumb simply states the relationship among unemployment, economic growth, and the budget from another angle. The unemployment rate in the baseline gradually drops from 6.9 percent in 1992 to 5.6 percent in 1997. This rule of thumb assumes instead that unemployment averages 7.9 percent in 1992 and 6.6 percent in 1997. In keeping with Okun's law, GDP is 2½ percent below its baseline levels in all six years.

As expected, revenues drop, benefits rise, and interest costs grow relative to the baseline--driving the deficit up by $33 billion in 1992 and $72 billion in 1997. It is useful, too,

**Table 2-4.**
**Effects on CBO Budget Projections of Selected Changes in Economic Assumptions (By fiscal year, in billions of dollars)**

| | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|
| **Real Growth: Effect of One-Percentage-Point Lower Annual Rate Beginning January 1992** | | | | | | |
| Change in Revenues | -7 | -22 | -40 | -58 | -78 | -100 |
| Change in Outlays | 1 | 4 | 8 | 15 | 23 | 34 |
| Change in Deficit | 8 | 26 | 48 | 72 | 101 | 133 |
| **Unemployment: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1992** | | | | | | |
| Change in Revenues | -28 | -42 | -43 | -43 | -43 | -45 |
| Change in Outlays | 4 | 8 | 13 | 17 | 21 | 26 |
| Change in Deficit | 33 | 50 | 55 | 60 | 65 | 72 |
| **Inflation: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1992** | | | | | | |
| Change in Revenues | 6 | 18 | 31 | 46 | 60 | 79 |
| Change in Outlays | 6 | 21 | 35 | 50 | 67 | 87 |
| Change in Deficit | a | 3 | 4 | 5 | 7 | 9 |
| **Interest Rates: Effect of One-Percentage-Point Higher Annual Rates Beginning January 1992** | | | | | | |
| Change in Revenues | 0 | 0 | 0 | 0 | 0 | 0 |
| Change in Outlays | 5 | 16 | 24 | 31 | 37 | 44 |
| Change in Deficit | 5 | 16 | 24 | 31 | 37 | 44 |

SOURCE: Congressional Budget Office.

a. Less than $500 million.

to compare this example with the first rule of thumb, which depicted the effects of prolonged anemic growth. GDP and taxable incomes, in this second scenario, lie below their counterparts in the first rule of thumb for about two and a half years but above them thereafter. The budgetary impacts mirror this pattern.

**Inflation.** Inflation has mixed effects on the federal budget. If inflation is higher than CBO assumes--and if other economic variables (chiefly real growth) are unaffected--taxable incomes and, hence, revenues will be higher. But higher inflation also boosts spending programs. Nearly all benefit programs will pay more. Also, discretionary spending--controlled by caps, which are adjusted with inflation albeit with a lag--will rise. Interest rates would almost surely rise with inflation, fueling higher debt service costs.

The upshot is that higher inflation would hardly change the deficit. If inflation is 1 percentage point higher than CBO assumes--that is, if the consumer price index grows by about 4 percent in 1992 and 4.6 percent annually in 1993 through 1997--higher revenues and higher spending would roughly cancel one another, as shown in Table 2-4. Because inflation swells nominal income, however, the deficit would represent a smaller fraction of GDP.

**Interest Rates.** The final rule of thumb illustrates the budget's sensitivity to interest rates. The Treasury finances the government's large and growing debt at market interest rates. If interest rates for all maturities in each year were 1 percentage point higher than in the baseline, interest costs would be higher by an estimated $5 billion in 1992. The effect grows as more debt is hit by the higher rates. By 1997, almost all the debt is affected: of the marketable debt outstanding, only one-sixth was neither originally financed nor refinanced over the 1992-1997 period. The resulting increase in 1997's deficit is $44 billion. These estimates include small changes in other interest-sensitive spending programs (chiefly Stafford student loans). They do not, however, include any changes in revenues or in deposit insurance spending, since the impact of higher interest rates on these is murky.

Rules of thumb are roughly symmetric. Lower real growth, lower interest rates, and so forth would also affect the budget--in each case, changing the deficit by roughly the same amount but in the opposite direction as their counterparts in the table.

Although rules of thumb are a good, simple way to illustrate the links between economic performance and budget outcomes, they have their limitations. Errors of 1 percentage point are used for simplicity; they do not represent typical forecasting errors. Some variables (such as interest rates) are notoriously more volatile and harder to predict than others. And economic variables are related to one another, so that changes do not occur in isolation. Finally, many revisions to budget projections are technical in nature--not directly related to economic forecasting--but there is no similarly easy way to capsulize the variability in budget outcomes that can stem from technical uncertainty.

# The Budget Enforcement Act: One Year Later

In the fall of 1990, the Congress and the President reached agreement on a five-year budget package covering fiscal years 1991 through 1995. How has the budget agreement stood up so far, now that action on the 1992 budget is largely complete? In brief, surprisingly well.

## What Did the Budget Enforcement Act Do?

The budget agreement comprised two equally important parts. First, substantive changes in spending and tax policies were designed to reduce the deficit by a total of almost $500 billion over five years. Second, dollar limits on

discretionary spending and a pay-as-you-go requirement for most direct (mandatory) spending and revenues were intended to guarantee that these budgetary savings not be eroded by later legislation. Although the Budget Enforcement Act contains deficit targets, these targets are irrelevant through at least 1993, and the law contains no requirement that the deficit will fall to any specified level.

Discretionary spending is that which is controlled by annual appropriations. For 1991, 1992, and 1993, there are separate budget authority and outlay limits for each of three components of discretionary spending--defense, international, and domestic. For 1994 and 1995, budget authority and outlay caps are set for discretionary spending as a whole. Adjustments to the discretionary spending limits are made twice each year--at the beginning and at the end of a session of Congress. This year the initial adjustments reflect (1) changes in budgetary concepts and definitions, (2) differences between actual and estimated inflation for fiscal year 1991, and (3) reestimates of the subsidy cost of federal direct loans and loan guarantees.

CBO's sequestration preview report for 1993 (see Appendix A) provides CBO's current estimates of the discretionary spending limits. After the Congress adjourns, the caps will be adjusted again to reflect any additional amounts appropriated for enforcement activities of the Internal Revenue Service (up to a specified limit), quota increases for the International Monetary Fund, and designated emergencies. In addition, the international and domestic discretionary limits will be increased by a specified percentage amount, termed a special budget authority allowance.

Unlike discretionary appropriations, spending for entitlements and other mandatory programs (also called direct spending) does not require annual decisions on funding levels. Instead, these programs (of which the largest are Social Security, Medicare and Medicaid, and federal civilian and military retirement) continue making payments to eligible recipients unless the underlying laws are changed. The pay-as-you-go requirement of the Budget Enforcement Act provides that changes in direct spending programs and in tax laws combined must not increase the deficit in any year. Social Security has its own separate pay-as-you-go rule, and spending necessary to meet the government's existing deposit insurance commitments is not limited in any way.

The Budget Enforcement Act establishes deficit targets through 1995. The targets are not meaningful through fiscal year 1993, however, as long as the discretionary spending limits and pay-as-you-go requirement are met. And the President to be elected in November 1992 has the option of making the targets nonbinding in 1994 and 1995 as well.

Strengthened Congressional procedures are designed to assure that any new legislation conforms to the discretionary spending limits and pay-as-you-go requirements. If these procedures fail, automatic across-the-board cutbacks (termed sequestration) will be called into play. CBO and OMB issue final sequestration reports 10 and 15 days, respectively, after a session of Congress ends. The CBO report is only advisory. If sequestration is required, the Presidential order will be issued 15 days after the end of the session, based on the OMB report.

The Budget Enforcement Act leaves open two avenues for relaxing these requirements if circumstances dictate. First, a spending item or a tax change may be exempted from the discretionary spending limits or pay-as-you-go rule if it is designated as an emergency requirement. The law provides that the incremental costs of Operations Desert Shield and Desert Storm are to be treated as such. Other emergencies--for example, a natural disaster--must be so designated by both the President and the Congress.

Second, many of the act's enforcement provisions--including automatic sequestration--may be suspended in the event of a recession or slow economic growth. The slow-growth provisions are triggered when either CBO or

OMB projects real economic growth to be less than zero, or when the Commerce Department reports an actual growth rate of less than 1 percent for two consecutive quarters. If any of these triggering events occurs, CBO must notify the Congress, and the Senate must consider promptly a resolution suspending certain requirements of the Balanced Budget Act and other laws. In the House, the Majority Leader is free to choose whether or not to introduce a similar resolution. In any event, suspending the Balanced Budget Act requires approval by both Houses of Congress and the President.

## What Happened Last Year?

In their action on the fiscal year 1992 budget, as they had done for 1991, the Congress and the President hewed closely to the terms of the Budget Enforcement Act. First, discretionary spending in all three categories has been held to the legal limits, according to both the estimates used in the Congressional budget process and those of OMB. Although current CBO estimates show defense and domestic discretionary outlays exceeding the caps, the estimates originally provided at the time of enactment are used to assess compliance with the law. Defense discretionary outlays now seem likely to exceed the cap by about $4½ billion because more Desert Storm spending will occur in 1992 than CBO and OMB expected when the 1991 supplemental appropriation was enacted. Outlays for domestic discretionary programs will be less than $1 billion over the cap, well within the margin of error (called a special outlay allowance) permitted by the Budget Enforcement Act.

Contrary to the predictions of some cynics, the Congress and the President made little use of the emergency designation to avoid the strictures of the new law. Aside from $10 billion in additional appropriations for Operation Desert Storm, the only significant items so far designated as emergencies by both the President and the Congress for 1992 are $800 million in disaster relief and $995 million in disaster assistance for farmers. Funds to help dismantle Soviet nuclear weapons and to transport humanitarian assistance to the former Soviet Union were not exempted from the spending limits but were provided through a transfer from other defense accounts. The Congress tried to use the emergency mechanism to exempt spending from the discretionary and pay-as-you-go limits in several other instances, but the President held the line, notably in blocking the Congressional desire to declare the extension of unemployment assistance an emergency.

*The Congress and the President have hewed closely to the terms of the Budget Enforcement Act.*

The Congress and the Administration, however, found it possible to meet the limits on domestic discretionary spending only by including obligation delays in several appropriation bills. As will be the case for 1993, the limit on domestic discretionary outlays for 1992 was more constraining than the limit on budget authority. The straightforward way of meeting the outlay caps would be to refrain from appropriating the maximum possible amount of budget authority. But the temptation to appropriate the full amount of budget authority allowed by the caps is nearly irresistible. Thus, the appropriators can provide budget authority up to the cap but require that obligation of the funds be delayed until the end of the fiscal year, thereby pushing the resulting outlays into the next fiscal year. For example, $406 million of the 1992 appropriation for low-income home energy assistance cannot be obligated until September 30, 1992; this delay reduces 1992 outlays by about $250 million but increases 1993 outlays by the same amount. In total, delayed obligations in 1992 will add $1.4 billion to domestic discretionary outlays in 1993.

On the mandatory side of the budget, the most noteworthy item is not what has happened, but rather that very little has happened. The pay-as-you-go provisions of the Budget Enforcement Act require that any new spending be paired with increases in taxes or cuts in other programs sufficient to cover the additional outlays. Many observers expected that the Budget Committees, with many of their functions set in abeyance, would become marriage brokers that arranged unions between pay and go. The budget resolution for 1992, however, contained no specific pay-as-you-go initiatives. It did provide that if a revenue or mandatory spending bill is enacted that reduces the deficit, the freed-up resources may be used for certain specified purposes. But, as one would expect, no significant deficit reduction materialized. After all, what committee would cut programs or raise taxes under its jurisdiction, only to have the fruits of its labor plucked by another committee? As a result, few major changes in direct spending or receipts were enacted in 1991.

In total, legislation affecting direct spending or receipts increased the 1992 deficit by $0.8 billion in CBO's estimation (see Appendix A), although OMB estimates that the reduction was about $1.1 billion. The difference in estimates stems primarily from two bills providing about $5 billion in payments to workers who had exhausted their regular or extended unemployment benefits. This additional spending was financed by improving collection of guaranteed student loans and other debts owed the federal government and increasing the quarterly estimated tax payments made by certain high-income taxpayers. (Under credit reform accounting, which was part of the 1990 act, decreases in the subsidy cost of outstanding direct and guaranteed loans reduce budget outlays immediately by the present value of the change, even though the improvement in the government's cash flow will occur over many future years.) OMB estimated that the financing provisions were sufficient to cover the benefit payments in 1992, but CBO estimated that they would fall short by $1.7 billion. CBO estimated a total of $0.9 billion less in proceeds from debt collection and $0.5 billion less in quarterly tax payments.

The Intermodal Surface Transportation Act reduced outlays by $0.6 billion in 1992, $1.8 billion in 1993, and $0.3 billion in 1994, according to CBO estimates. (OMB showed smaller outlay reductions.) These reductions in the deficit arise from the interaction of a last-minute amendment providing for the lease-purchase of a courthouse in Brooklyn with a complex provision designed to keep the bill from increasing spending in any year. Several Members of Congress, however, have suggested that this result is unintended and have indicated that they will attempt to remove the last-minute amendment, thereby making the act deficit neutral in all years.

The Tax Extension Act paid for a six-month extension of certain expiring tax preferences in fiscal year 1992 by accelerating corporate tax payments, largely from 1997 to 1992. The bill is deficit neutral over the 1992-1996 period, but it reduces the deficit by $0.4 billion in 1992, leaves the deficit virtually unchanged in 1993, and adds $0.3 billion to the deficit in 1994. In 1997, however, the act loses $2.7 billion in revenues.

Despite the recession, the Congress and the President chose not to invoke the low-growth provisions of the Budget Enforcement Act. In January, April, and July 1991, CBO notified the Congress of forecasts or reports of low economic growth. Each time, the Senate decisively rejected a joint resolution suspending enforcement of the Balanced Budget Act, and the House did not take it up. At present, neither CBO nor OMB is forecasting two consecutive quarters of negative growth. It is possible, however, that CBO will have to issue another low-growth report in April 1992, if growth in the last quarter of 1991 and the first quarter of 1992 proves to be less than 1 percent.

In terms of protecting the reserves of the Social Security trust funds, the record is mixed. In April the Senate tabled, by a vote of 60 to 38, an amendment to the budget reso-

lution that would have trimmed payroll taxes and returned Social Security to a pay-as-you-go basis. In early November, however, the Senate adopted by voice vote an amendment to the Older Americans Act that would eliminate the Social Security earnings test for people aged 65 to 69. The amendment provides no offsetting tax increase or benefit reduction and would add about $28 billion to Social Security benefits and the deficit over five years. The bill is currently in conference, and the final disposition of the provision is uncertain.

## What's Ahead for This Year?

Three major issues face the Administration and the Congress as they grapple with the 1993 budget. How should the discretionary spending limits be met? Should the existing categorical limits be changed? And should some sort of countercyclical tax cut or spending increase be enacted?

Meeting the discretionary spending limits for fiscal year 1993 will require holding defense and domestic appropriations below their 1992 levels, after allowing for inflation. Table 2-5 shows CBO's estimates of the discretionary limits for 1993, the levels needed to maintain appropriations at their inflation-adjusted 1992 levels, and the required reductions. OMB's estimates, which are used for the automatic enforcement procedures, will be contained in the President's budget submission. By CBO's calculations, the required cuts in defense budget authority amount to $15 billion, or 5 percent below the 1992 level. For domestic discretionary programs, the budget authority must be cut by $6 billion, or 3 percent. The outlay limit for domestic discretionary programs, however, is much more constraining than the budget authority cap. Required outlay reductions total almost $9 billion, which is 4 percent of total domestic discretionary outlays and 8 percent of outlays from new budget authority.

In the international category, the estimated limits in 1993 allow for real increases over the 1992 level, but only because the 1992 appropriations are currently below the 1992 caps. When the Congress recessed in late November, it had not enacted a full-year appropriation for foreign operations. Instead, foreign assistance was covered by a continuing appropriation extending through March 31. Total international discretionary appropriations, including some activities covered by the appropriations for Commerce-Justice-State and for Agriculture, were below the caps by $1.4 billion in budget authority and $0.4 billion in outlays. This difference provides leeway for the housing loan guarantees requested by Israel, whose consideration was deferred until 1992 at the President's request.

As the Budget Enforcement Act now stands, funds cannot be shifted from one category of discretionary spending to another in 1993. If spending in any category is held below the legal limit, the shortfall must be applied to deficit reduction. Since October 1990, however, when the act was adopted, the world has changed in ways that no one could have foreseen. The probability of an intentional nuclear strike has decreased, and international cooperation shows new promise of helping to avert or solve regional conflicts. These rapid changes in the world situation have called into question the existing allocation of discretionary funds.

Arguments are now heard that the caps on defense spending in 1993 are too high, in light of the emerging new world order. Some would like to shift money from defense to domestic purposes in the form of higher government spending or lower taxes. Others would like to use defense money to provide additional assistance to the countries of the former Soviet Union. On September 12 the Senate called upon the President and the Congressional leadership to reconsider the discretionary spending limits in light of the new world situation. In the House, the Committee on Government Operations has held hearings on a bill to replace the three separate limits on defense, international, and domestic discretionary spending in 1993 with a single limit on total discretionary spending, as is already in place for 1994 and 1995.

One alternative to adjusting or eliminating the separate 1993 discretionary caps would be to fund certain marginal items from the defense budget, as was done to some extent in 1992. But this tactic stretches the law and distorts the functional categories used in the budget. Another approach would be to hold defense spending below the defense discretionary caps and to enact an emergency, domestic discretionary appropriation equal to the savings in defense. This second alternative would be more visible than the first and also more flexible because it would not require pretending that certain types of domestic spending were being undertaken for reasons of national security. In either case, a wide variety of spending plans for 1993 could be fit into the existing caps.

The third, and perhaps greatest, issue for the 1993 budget is whether to take fiscal initiatives to stimulate a recovery and give a boost to a long-run economic expansion. At the very least, the further extension of unem-

**Table 2-5.**
**CBO Estimates of Discretionary Spending Limits for 1993 (In billions of dollars)**

| | Budget Authority | Outlays |
|---|---|---|
| **Defense** | | |
| Limit as of January 22, 1992 | 287.4 | 294.4 |
| 1992 Level (Excluding Emergencies) Adjusted for Inflation | 302.0 | 306.7 |
| Required Reductions | 14.6 | 12.3 |
| **International** | | |
| Limit as of January 22, 1992 | 21.3 | 19.9 |
| Adjustment | | |
| Special allowance for discretionary new budget authority | 1.2 | 0.6 |
| Estimated End-of-Session Limit | 22.5 | 20.5 |
| 1992 Level (Excluding Emergencies) Adjusted for Inflation | 21.5 | 20.3 |
| Allowable Increases | 1.1 | 0.2 |
| **Domestic** | | |
| Limit as of January 22, 1992 | 203.4 | 222.6 |
| Adjustments | | |
| Special allowance for discretionary new budget authority | 1.6 | 0.8 |
| Internal Revenue Service funding above the June 1990 baseline | 0.2 | 0.2 |
| Estimated End-of-Session Limit | 205.1 | 223.6 |
| 1992 Level (Excluding Emergencies) Adjusted for Inflation | 211.3 | 232.4 |
| Required Reductions | 6.2 | 8.8 |

SOURCE: Congressional Budget Office.

ployment benefits will be on the agenda because the current extension expires in June. The Congress in April may also be required to consider suspending the automatic enforcement of the Budget Enforcement Act if the Department of Commerce reports two consecutive quarters of low growth.

Chapter 5 considers the pros and cons of providing fiscal stimulus to the economy. Although the costs and benefits of countercyclical policies are subject to dispute, one thing is clear: no changes in fiscal policy can provide major stimulus to the economy unless they increase the budget deficit. Therefore, no significant countercyclical steps can be taken without relaxing the requirements of the Budget Enforcement Act or further changing budgetary accounting rules.

One way of allowing a countercyclical increase in the deficit would be to suspend enforcement of the act, as provided in the low-growth procedures. This approach would be the most far-reaching because it would suspend the issuance of any sequestration report and most Congressional budget enforcement procedures through the end of fiscal year 1993. A more limited alternative would be to designate any countercyclical tax cut or spending increase as an emergency requirement, and therefore exempt it from the discretionary spending limits and pay-as-you-go regime. In this case, all other legislation would remain subject to the requirements of the Budget Enforcement Act, including the caps and pay-as-you-go.

## What Are the Longer-Term Issues?

Even if no major changes are made in the Budget Enforcement Act in 1992, three features of the law are certain to put the budget at the top of the political agenda in 1993. First, at the current rate of borrowing, the public debt will reach its statutory limit by early 1993. The need for legislation to raise the limit may once again force a revision of the budget process, as it did in 1985, 1987, and 1990. Second, in January 1993, the newly elected President must decide whether to adjust the deficit targets for updated estimating assumptions. If the outlook for the deficit becomes worse, a decision not to adjust the targets would be tantamount to convening a new budget summit because it would once again raise the threat of a large sequestration, even if the budget satisfies the caps and pay-as-you-go. Third, the discretionary spending limits will become extremely tight. In fiscal year 1994, defense, international, and domestic discretionary spending will have to compete for their share of a discretionary total almost 2 percent smaller than 1993's dollar level.

Although the Budget Enforcement Act does not require any additional deficit reduction until at least fiscal year 1994, the budget deficit remains a serious economic and social problem. Excluding deposit insurance, the deficit is likely to exceed $200 billion for the foreseeable future and may well move higher toward the end of the 1990s. Such large budget deficits impair economic growth by reducing national saving and capital formation. Deficits also create a vicious cycle of more federal borrowing and higher debt service costs, which in turn make it still more difficult to reduce the deficit.

Particularly striking is the way in which the rise in interest costs has undone the hard-fought reductions in discretionary spending. In 1981, defense and nondefense discretionary spending amounted to 10.4 percent of GDP. In 1991, after a decade of restraint, discretionary spending has shrunk to a postwar low of 9.5 percent of GDP. But the decline in discretionary spending is more than offset by the increase in interest costs stemming from the deficits of the 1980s. Together, discretionary spending and net interest spending are about as large as they were 10 years ago, but a larger portion is consumed by interest and a smaller portion is being devoted to programs that provide services and satisfaction to the public.

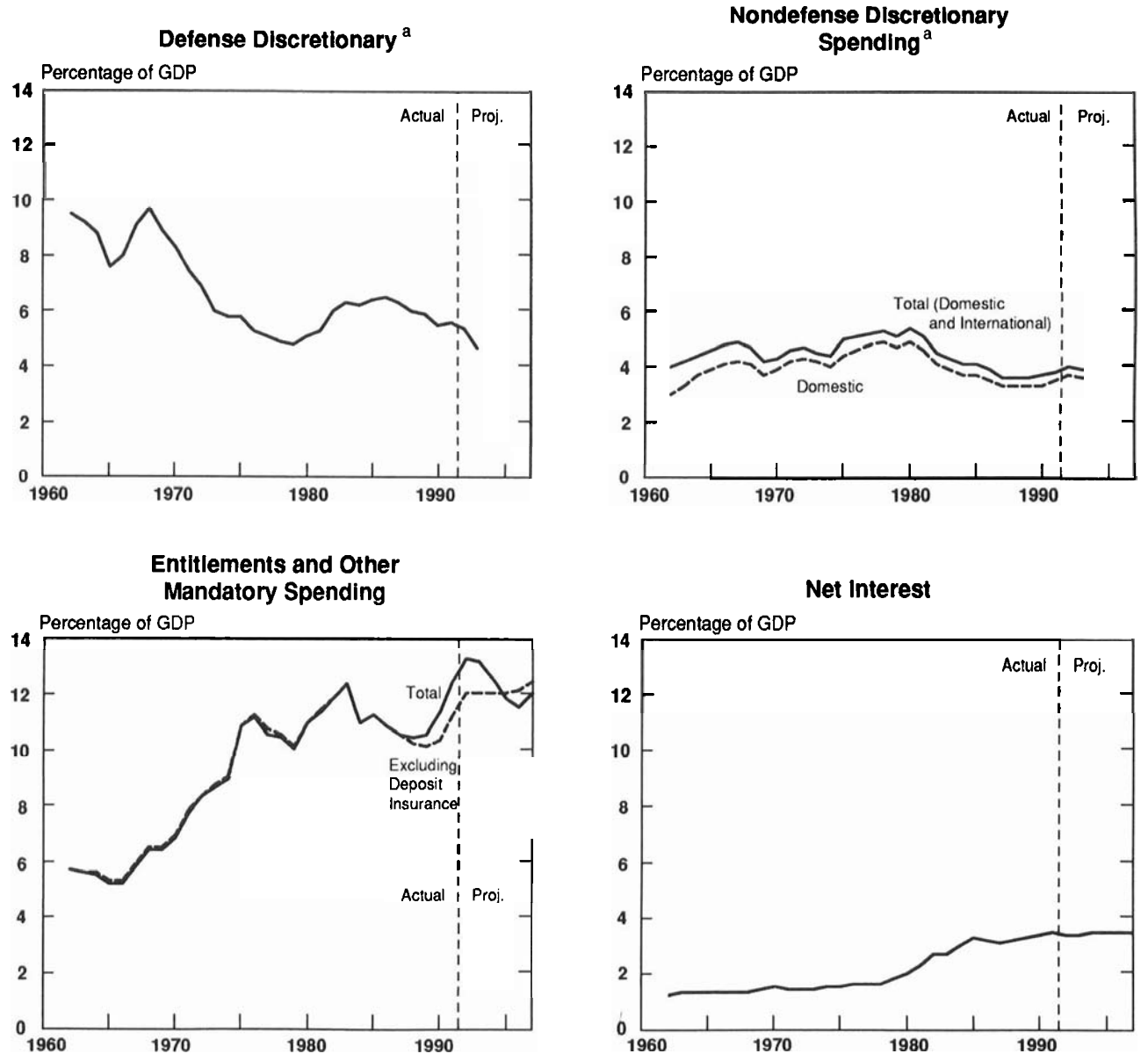
Because discretionary spending was held on a short leash during the 1980s, the possibilities of further cutbacks in this area are correspondingly limited. (See Box 3-1 for a discussion of the peace dividend.) In fact, some analysts are now worried that the efforts to limit discretionary spending have gone too far, and that investments in infrastructure, education, and other forms of public capital that could increase long-term growth are being shortchanged. Spending on interest, another major category of spending, is largely beyond direct governmental control. That leaves only two ways of making a significant dent in the deficit--raising taxes and fees or cutting entitlement programs.

According to CBO's long-range extrapolation (see Box 2-1), non-Social Security entitlement spending could balloon from 7.2 percent of GDP in 1992 to 8.9 percent of GDP by 2002 under current policies. All of this growth is concentrated in Medicare and Medicaid, which are propelled by the rapid rise in the cost and use of medical care. Yet, at the same time the costs of health care are gobbling up an increasing share of national output (see Box 3-2), 16 percent of the U.S. population under age 65 has no health insurance. Thus, solving the deficit problem may not be possible without dealing with the problems of health care costs and access as well.

suming that current laws and policies remain unchanged.

- *Deposit insurance* spending reflects commitments that the government made to protect depositors in insolvent financial institutions, promises that now must be honored.
- *Offsetting receipts*--fees and similar charges that are recorded as negative outlays--are controlled indirectly.
- *Net interest* spending is subject to no direct control, as its growth is wholly driven by the government's deficits and by market interest rates.

**Figure 3-1.**
**Outlays by Category as a Share of GDP**




SOURCE: Congressional Budget Office.

a. Assumes compliance with discretionary spending caps in the Budget Enforcement Act. Caps are not specified in detail after 1993.

Throughout this chapter, trends in federal spending are compared and contrasted with the experience of recent decades. Figure 3-1 shows how major categories of spending have waxed and waned since the early 1960s. More detailed historical data are contained in Appendix D, which lists annual spending for each of these broad categories as well as for some of the biggest entitlement programs.

# Discretionary Spending: Defense, International, and Domestic

Each year, the Congress revisits discretionary programs afresh in the appropriation process. Discretionary programs cover virtually the entire defense and international affairs budgets, but only about a quarter of domestic spending. In 1992, discretionary spending is expected to total $547 billion, over half of it for defense (see Table 3-1).

Relative to the size of the economy, discretionary spending is well down from typical levels of the 1960s and 1970s, though the fortunes of defense and domestic programs have shifted several times over the past few decades. The share of GDP devoted to defense has gradually shrunk, with two major interruptions (the Vietnam War of the late 1960s and the Reagan-era defense buildup of the early 1980s). Today, defense is about 5½ percent of GDP. Domestic discretionary spending, in contrast, climbed slowly as a share of GDP in the 1960s and 1970s before its rise was abruptly braked in the early 1980s. Today, it totals less than 4 percent of GDP, about two-thirds of its peak levels in the mid-1970s. Comparisons with GDP merely express how much a society devotes to public spending in relation to its resources. They tell nothing about the adequacy of such spending, especially as the needs and threats faced shift markedly.

## Defense Discretionary Spending

All but a few hundred million dollars of the defense budget is discretionary. Such appropriations cover not only the functions of the Defense Department--for active and reserve personnel, operations and maintenance, procurement of major weapons, research and development, and so forth--but also several billion dollars in defense spending by other agencies (primarily the atomic weapons programs of the Department of Energy).

In real terms, defense budget authority peaked in 1985 and has been on a downward path since then. This slide was temporarily interrupted by spending for Operation Desert Storm, deemed an emergency and thus a permissible adjustment to the caps originally contained in the Budget Enforcement Act. (Desert Storm costs, in turn, are almost wholly covered by allied contributions of $43 billion in 1991 and another $5 billion in 1992.)

The caps will push defense spending further along its downward path. CBO now estimates that in 1993, the final year in which caps are set separately by category, the defense lid will be $287 billion in budget authority--well below this year's level--and $294 billion in outlays. And beyond 1993, when all discretionary spending must vie under a single cap, there will be little room for growth anywhere.

## International Discretionary Spending

The international affairs budget covers security and humanitarian assistance to other nations, international financial programs, and the conduct of diplomacy. The smallest category of discretionary spending, international programs total just $20 billion in 1992. The caps hold real international discretionary spending virtually flat over the 1991-1993 period.

## Domestic Discretionary Spending

Domestic discretionary spending is about two-thirds the size of the defense budget and pales next to the leading category of domestic spending: entitlements and mandatory programs. The $214 billion in domestic discretionary outlays in 1992 covers a wide range of activities. Nearly half addresses social needs: $33 billion for education, training, and social services; $21 billion for certain health care and health research (not including Medicare and Medicaid); and $47 billion for income security and veterans' programs. Other leading claimants are space, science, and energy ($22 billion); environmental and natural

**Table 3-1.**
**Outlays by Category, Assuming Compliance with Discretionary Spending Caps (By fiscal year)**

| Spending Category | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| | | | **In Billions of Dollars** | | | | |
| Defense Discretionary | 317 | 313 | 294 | a | a | a | a |
| International Discretionary | 19 | 20 | 21 | a | a | a | a |
| Domestic Discretionary | 196 | 214 | 224 | a | a | a | a |
| Subtotal | 532 | 547 | 538 | 531 | 532 | 550 | 569 |
| Mandatory Spending, Excluding Deposit Insurance | 636 | 708 | 752 | 798 | 848 | 903 | 977 |
| Deposit Insurance | 66 | 67 | 68 | 33 | -16 | -44 | -28 |
| Offsetting Receipts | -65 | -64 | -67 | -70 | -74 | -76 | -78 |
| Desert Storm Contributions | -43 | -5 | 0 | 0 | 0 | 0 | 0 |
| Net Interest | 196 | 201 | 213 | 231 | 245 | 260 | 278 |
| Total | 1,323 | 1,454 | 1,505 | 1,523 | 1,536 | 1,593 | 1,718 |
| On-budget | 1,081 | 1,202 | 1,241 | 1,249 | 1,251 | 1,296 | 1,408 |
| Off-budget[b] | 242 | 252 | 264 | 274 | 285 | 297 | 310 |
| | | | **As a Percentage of GDP** | | | | |
| Defense Discretionary | 5.6 | 5.4 | 4.7 | a | a | a | a |
| International Discretionary | 0.3 | 0.3 | 0.3 | a | a | a | a |
| Domestic Discretionary | 3.5 | 3.7 | 3.6 | a | a | a | a |
| Subtotal | 9.5 | 9.4 | 8.6 | 8.0 | 7.6 | 7.4 | 7.2 |
| Mandatory Spending, Excluding Deposit Insurance | 11.3 | 12.1 | 12.1 | 12.1 | 12.1 | 12.2 | 12.5 |
| Deposit Insurance | 1.2 | 1.1 | 1.1 | 0.5 | -0.2 | -0.6 | -0.4 |
| Offsetting Receipts | -1.1 | -1.1 | -1.1 | -1.1 | -1.1 | -1.0 | -1.0 |
| Desert Storm Contributions | -0.8 | -0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Net Interest | 3.5 | 3.4 | 3.4 | 3.5 | 3.5 | 3.5 | 3.5 |
| Total | 23.5 | 24.9 | 24.1 | 23.0 | 21.9 | 21.5 | 21.9 |
| On-budget | 19.2 | 20.6 | 19.9 | 18.9 | 17.9 | 17.5 | 17.9 |
| Off-budget[b] | 4.3 | 4.3 | 4.2 | 4.1 | 4.1 | 4.0 | 4.0 |

SOURCE: Congressional Budget Office.

a. Discretionary spending caps are specified by category through 1993 and in the aggregate for later years. Projections for 1997 represent a CBO extrapolation.

b. Social Security and the Postal Service.

resource programs ($20 billion); and transportation ($33 billion). The rest finances activities as varied as operations of the Internal Revenue Service and Customs Service, the administration of justice, and community development, among others.

*The caps will push discretionary spending further on its downward slope.*

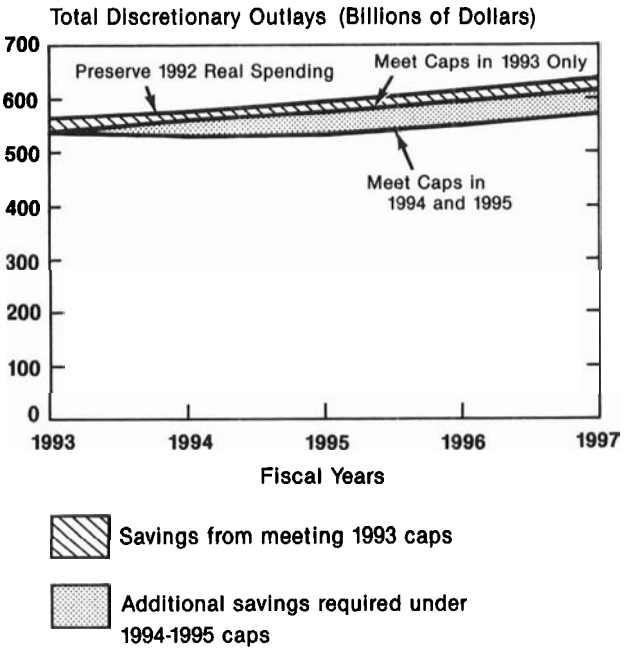
In relation to GDP, domestic discretionary programs leveled off in the early 1990s after a decade-long slide. They bore the brunt of budget cuts in the early 1980s, and slipped from more than 5½ percent of GDP at the start of the decade to less than 4 percent at the end. The caps set in the budget summit agreement will crimp lawmakers' latitude in appropriating money for domestic programs in 1993. As noted in Chapter 2, such a squeeze was not really intended when the Budget Enforcement Act was passed. But the 1993 caps have been ratcheted downward because of lower-than-expected inflation in 1991 (an adjustment, mandated by the act, that inevitably occurs with a lag). And language in appropriation bills that postpones some obligations until late 1992 helped policymakers meet the 1992 caps but makes compliance tougher in 1993. After 1993, domestic programs compete with defense and international programs within a stringent dollar cap.

## How Tight Are the Caps?

Traditionally, CBO has published projections that hold discretionary spending constant in real terms. That is, for annually appropriated programs, CBO took the most recently enacted appropriation and simply increased it for inflation. But the ground shifted with the 1990 budget summit agreement. Though silent on many details, the summit negotiators agreed to multiyear caps on total discretionary spending. In its baseline, CBO assumes compliance with these caps, which will push discretionary spending further on its downward slope. Figure 3-2 shows how much the caps will pinch spending in relation to a traditional, inflation-adjusted path.

As Figure 3-2 makes clear, the Congress will have to carve significant chunks out of discretionary spending in each of the next three years--1993 through 1995--to live within the Budget Enforcement Act's caps. Each round of cuts makes the later years' job easier. Fiscal year 1993 is the last year in which the caps are specified by category. In that year, most of the pruning takes place in defense, which must be pared by about $15 billion, or 5 percent. Domestic discretionary spending must be trimmed by about 3 per-

**Figure 3-2.**
**Required Reductions in Discretionary Spending**




SOURCE: Congressional Budget Office.

NOTE: Calculations exclude 1992 spending designated as emergencies.

cent, roughly equivalent to freezing 1992 spending for another year.

Again in 1994 and 1995, policymakers must take a knife to discretionary spending, cutting it altogether by a further 5 percent in 1994 and another 3 percent in 1995. Although the act is silent on the composition of the 1994-1995 caps, the collapse of the Soviet Union has led many analysts to assume that the defense budget will absorb most of the cuts. The so-called peace dividend has been eagerly claimed to pay for domestic needs, tax cuts, deficit reduction, or all three.

The size of the peace dividend cannot be known for sure because it depends on what would have happened to defense spending had the Cold War continued. As explained below, it is easy to come up with a wide range of figures for the peace dividend--anywhere from $100 billion to well over $400 billion in the 1991-1997 period, if the Administration's February 1991 budget is used as a yardstick. But these calculations miss an important point. Most of this dividend is already locked in place, the upshot of decisions reached in the last few years. It is working to keep the deficit from spiraling even more. Only additional cuts can reduce the deficit further or forestall cuts in domestic spending. Such additional cuts may well materialize as policymakers take stock of a changed situation in the world.

## Swords into Plowshares: Measuring the Peace Dividend

The lowering of the Soviet flag on Christmas Day, 1991, symbolized an end to an era of superpower rivalry and sparked hopes that resources might be shifted from military to domestic uses. How large might the peace dividend be? The problems of measuring such a dividend are twofold. First, one must have an idea of where defense spending was headed if world tensions had remained high. Second, one must guess where spending will end up now that the threat has receded. The gap between the "before" and "after" paths measures the peace dividend.

**Where Was the Defense Budget Headed?** One plausible starting point for measuring the dividend is the real level of defense spending in 1990--the last year of the Cold War. If real defense budget authority had stayed at its 1990 level of just over $300 billion, appropriations would have climbed with inflation to about $400 billion by 1997. Pressures to pay for sophisticated new weapons would have helped fuel such increases. A similar starting point, in fact, was assumed by the budget summit participants when they negotiated their historic deficit reduction agreement in the fall of 1990. This path is depicted as the steepest, costliest line on Figure 3-3.

Maintaining 1990's spending, however, might overstate the likely defense budget even if Cold War tensions had not abated. The Congress had in fact cut the defense budget, in real terms, in every year from 1986 through 1990, by an average of 3 percent a year. And the legislators may not have been through cutting. Indeed, the Bush Administration's own 1991 budget request, submitted in early 1990, asked for five-year growth in the defense budget that fell short of projected inflation by about 2 percent a year.

Thus, another plausible starting point for measuring the peace dividend assumes that defense spending was likely to be shaved after 1990 in any event. In such a scenario, defense spending might have been cut 3 percent a year in 1991 through 1995 (the last year of the budget summit agreement) and then resumed growing in step with inflation. On these assumptions, defense budget authority would have reached $334 billion in 1997. This path is also depicted in Figure 3-3.

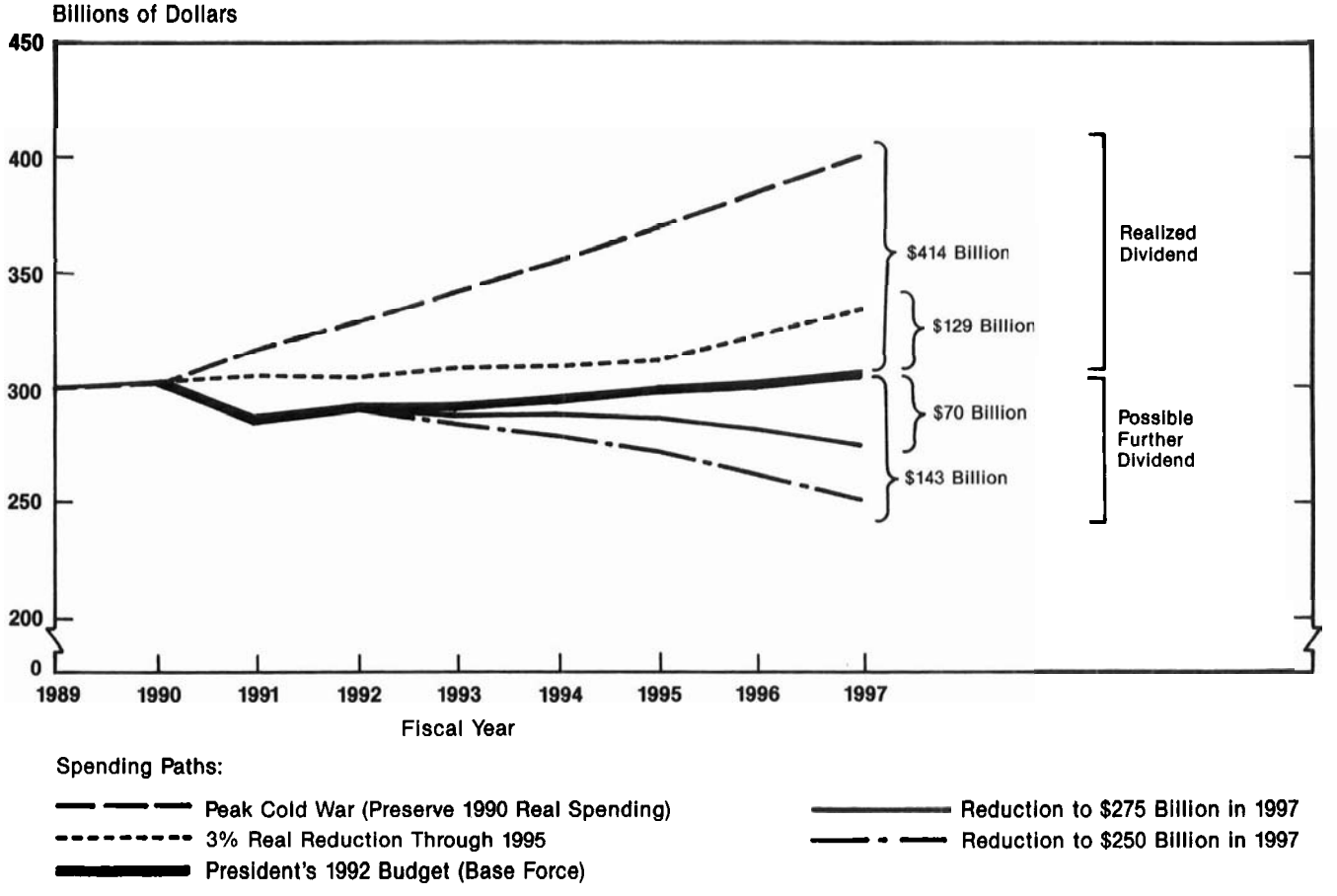
**Where Is the Defense Budget Now?** In the last few years, the Defense Department has canceled or scaled back many weapons programs. The most dramatic effects of the Cold War's end, though, can be seen in planned changes for military forces. A year ago, the Administration submitted its 1992 budget and

strove to comply with the summit's caps on discretionary spending. Its long-range plan for defense spending featured a new, smaller structure for military forces, dubbed the base force. Under the base force proposal, active-duty military personnel would decrease from the 1990 level of over 2 million to 1.6 million by 1997, a 21 percent reduction. Twelve active Army divisions would remain in the base force (down from 18), and Air Force tactical fighter wings would be reduced from 36 to 26. The number of active and reserve Navy combatant ships would fall from 545 to 448 in 1997. The Administration's plan for the base force enabled its 1992 budget to come very close to the discretionary caps in the budget summit agreement. The base force request, as extrapolated by CBO, envisioned defense spending of $291 billion in 1993, inching up to $305 billion in 1997. It is pictured as a heavy black line in Figure 3-3.

**How Big Is the Dividend Now?** Regardless of the starting point for measurement, a hefty peace dividend is already assumed in current budget projections, which--like the Administration's budget itself--are driven by 1990's budget summit agreement.

The Administration's proposal provides a handy yardstick for the amount of the peace dividend realized to date. The gap between the Administration's request and a Cold War path measures this saving. Depending on which Cold War spending path is assumed, the realized peace dividend through 1997

**Figure 3-3.**
**Measuring the Peace Dividend: Defense Discretionary Budget Authority**




SOURCE: Congressional Budget Office.

NOTES: Excludes budget authority for Operations Desert Shield and Desert Storm.
Peace dividend is measured as cumulative savings through 1997.

ranges from a huge $414 billion to a more modest $129 billion.

The single cap that governs all discretionary programs in 1994 and 1995 is a stringent one. The Administration's proposal almost exactly tracked the discretionary spending caps. It actually treated defense more sparingly than domestic programs in those years; neither category, however, grew as fast as inflation. The obvious question, then, is whether more savings can be achieved.

**How Much Bigger Could the Peace Dividend Be?** To the extent that the Administration's 1992 budget reflects the realized peace dividend, a bigger dividend can be reaped only by cutting deeper. This implies shrinking the military below the Administration's proposed base force. In fact, the caps for 1994 and 1995 (under which defense and domestic spending compete) are so tight that defense cuts below the base force in those years would be necessary just to spare domestic programs from real reductions.

At the request of the Chairman of the Senate Committee on the Budget, CBO examined two options for defense spending: one that would take it to $275 billion in 1997 and another that would further pare it to $250 billion by 1997. These options would add about $70 billion and $143 billion, respectively, to the peace dividend through 1997, as shown in Figure 3-3. Clearly, they would also have repercussions for the military's force structure. Table 3-2 depicts some hypothetical implications, assuming that forces of various kinds are reduced proportionately.

Some cuts below the base force would be essential merely to shield domestic programs from real reductions while honoring the caps. Simply preserving domestic and international spending at 1993's real levels, for example, would involve cutting about $20 billion and $30 billion from the President's defense requests in 1994 and 1995, respectively--very close to the bottom path depicted in Figure 3-3.

The world situation has already changed greatly since the Administration's 1992 budget request less than a year ago. The Administration's February 1991 request was prepared after the disintegration of the Warsaw Pact but before the splintering of the Soviet Union

**Table 3-2.**
**Active Force Size in 1997 Under Alternative Paths for Defense Spending Compared with Force Size in 1990**

| | | 1997 Force | | |
|---|---|---|---|---|
| | 1990 Force | Base Force: Administration's 1992 Budget Request | Alternative 1: Defense Spending of $275 Billion in 1997 | Alternative 2: Defense Spending of $250 Billion in 1997 |
| Active-Duty Personnel (Millions) | 2.07 | 1.63 | 1.44 | 1.34 |
| Army Divisions | 18 | 12 | 10⅔ | 10 |
| Navy Combatant Ships (Active and Reserve) | 545 | 448 | 396 | 368 |
| Equivalent Air Force Tactical Fighter Wings | 24 | 15½ | 13½ | 12½ |

SOURCE: Congressional Budget Office, "Implications of Additional Reductions in Defense Spending," CBO Staff Memorandum (October 1991).

itself. The Administration's 1993 budget, due later this month, will reveal whether it now envisions a larger peace dividend and will set the stage for a discussion of U.S. military needs in a post-Cold War world. Important though they are, dollars are not the true measure of the peace dividend; the prospect of a more secure world is paramount.

## Entitlements and Mandatory Spending

About half of federal spending goes for entitlement and mandatory programs. Such programs make payments to recipients--usually people, but sometimes businesses or state and local governments--who are eligible and apply for funds. Payments are governed by formulas set in law and are not constrained by annual appropriation bills.

*Four-fifths of entitlement spending, led by the government's big retirement-related programs, are not means-tested and fuel most of the growth in dollar terms.*

The Budget Enforcement Act lumped mandatory programs together with revenues and subjected them to pay-as-you-go discipline. That is, liberalizations in mandatory programs are supposed to be matched, at a minimum, by cutbacks in other mandatory spending or by tax increases. (Similarly, tax cuts can be funded by other tax increases or by savings in mandatory spending.) In the first year of this regime, as noted in Chapter 2, there was little action on the pay-as-you-go front. The CBO baseline depicts the likely path of entitlement and mandatory spending under current laws. In the baseline, entitlement spending and net interest are the only two major categories of spending that fail to decline in relation to GDP.

Only about a fifth of entitlement and mandatory spending is means-tested, going to people who must document their need based on limited income or assets (and in many cases other criteria, such as family status). One such program is Medicaid, the single fastest-growing entitlement. But the rest, led by the government's big retirement-related programs, are not means-tested and fuel most of the growth in dollar terms. Table 3-3 presents more information about this huge category of spending.

### Means-Tested Programs

Medicaid, the joint federal and state program providing medical care to some of the poor, makes up half of means-tested entitlements and fuels two-thirds of their growth over the 1992-1997 period. Medicaid has grown sharply over the last several years: after climbing an average of about 13 percent annually in 1985 through 1990, the program jumped by 28 percent in 1991 and an estimated 30 percent in 1992. After 1992, double-digit growth is likely to continue, driving federal spending to $126 billion in 1997 (see Table 3-3). The states' share of Medicaid outlays, meanwhile, is projected to climb from $51 billion in 1992 to $95 billion in 1997.

Rapid growth in Medicaid spending is driven by population and cost pressures, liberalizations in recent years' legislation, and the fiscal pressures that push state and local governments to maximize funds from the federal government. In the short term, the extraordinarily high growth between 1990 and 1993

**Table 3-3.**
**CBO Baseline Projections for Mandatory Spending, Excluding Deposit Insurance (By fiscal year, in billions of dollars)**

| | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| **Means-Tested Programs** | | | | | | | |
| Medicaid | 53 | 68 | 80 | 89 | 100 | 112 | 126 |
| Food Stamps[a] | 20 | 22 | 22 | 22 | 23 | 24 | 25 |
| Supplemental Security Income | 15 | 16 | 18 | 21 | 22 | 21 | 25 |
| Family Support | 14 | 16 | 17 | 17 | 18 | 19 | 19 |
| Veterans' Pensions | 4 | 4 | 4 | 4 | 4 | 4 | 4 |
| Child Nutrition | 6 | 6 | 6 | 7 | 7 | 8 | 8 |
| Earned Income Tax Credit | 5 | 7 | 8 | 8 | 11 | 12 | 12 |
| Stafford Loans[b] | 5 | 1 | 3 | 3 | 3 | 3 | 3 |
| Other | 2 | 3 | 3 | 3 | 4 | 4 | 5 |
| Total, Means-Tested Programs | 122 | 142 | 160 | 175 | 192 | 206 | 227 |
| **Non-Means-Tested Programs** | | | | | | | |
| Social Security | 267 | 285 | 301 | 318 | 336 | 354 | 374 |
| Medicare | 114 | 128 | 142 | 158 | 176 | 196 | 218 |
| Subtotal | 381 | 413 | 443 | 476 | 511 | 550 | 592 |
| Other Retirement and Disability | | | | | | | |
| Federal civilian[c] | 37 | 38 | 40 | 42 | 45 | 50 | 55 |
| Military | 23 | 24 | 26 | 27 | 28 | 30 | 32 |
| Other | 4 | 5 | 5 | 5 | 5 | 5 | 5 |
| Subtotal | 64 | 68 | 70 | 74 | 78 | 85 | 91 |
| Unemployment Compensation | 25 | 33 | 26 | 25 | 26 | 26 | 27 |
| Other Programs | | | | | | | |
| Veterans' benefits[d] | 14 | 15 | 16 | 18 | 17 | 16 | 18 |
| Farm price supports | 10 | 10 | 12 | 11 | 10 | 10 | 10 |
| Social services | 6 | 5 | 6 | 5 | 5 | 5 | 5 |
| Credit reform liquidating accounts | 0 | 10 | 7 | 4 | 1 | -5 | -3 |
| Other | 13 | 11 | 12 | 10 | 8 | 9 | 10 |
| Subtotal | 43 | 53 | 54 | 47 | 41 | 35 | 41 |
| Total, Non-Means-Tested Programs | 514 | 566 | 593 | 622 | 657 | 697 | 750 |
| **Total** | | | | | | | |
| All Mandatory Spending, Excluding Deposit Insurance | 636 | 708 | 752 | 798 | 848 | 903 | 977 |

SOURCE: Congressional Budget Office.

NOTE: Spending for major benefit programs shown in this table includes benefits only. Outlays for administrative costs of most benefit programs are classified as nondefense discretionary spending, and Medicare premium collections as offsetting receipts.

a. Includes nutrition assistance to Puerto Rico.

b. Formerly known as guaranteed student loans.

c. Includes Civil Service, Foreign Service, Coast Guard, and other retirement programs, and annuitants' health benefits.

d. Includes veterans' compensation, readjustment benefits, life insurance, and housing programs.

stems partly from so-called disproportionate share payments and from states' establishment of tax and donation programs. *Disproportionate share payments* go to hospitals that serve unusually large numbers of indigent and uninsured patients. Legislation enacted in 1990 expanded these payments and gave states great latitude to designate hospitals that qualify, and states have moved to take advantage of those provisions. Most states, too, have discovered a mini-bonanza in *tax and donation programs* since 1990. Such programs involve boosting Medicaid reimbursements while simultaneously levying special charges on providers, a portion of which is subsequently rebated to the providers. States have used such arrangements as a tool to maximize federal matching payments. These complicated tactics, described in detail in CBO's summer report, were modestly curtailed this past autumn--by requiring that any such levies be broad-based and by capping the proportion of state Medicaid spending that they can finance.[1]

But even after these extraordinary growth rates taper off, longer-run pressures persist. Recent expansions in eligibility, particularly for poor children, will continue to boost the number of people eligible. States will keep shifting formerly state-funded programs for mental health, testing, and so forth into Medicaid to gain the federal match. Many states now run outreach programs to alert potential beneficiaries of their eligibility. Future impacts of provisions for nursing home reform (enacted in 1987 but only recently effective) remain uncertain. And finally, a rash of lawsuits has resulted in sharply higher reimbursements under a 1980 amendment requiring that Medicaid payments to providers be "reasonable and adequate."

Although Medicaid is the biggest and fastest-growing of the means-tested programs, several others in this cluster are also experiencing rapid growth. Prominent among them are Supplemental Security Income for the aged, blind, and disabled, which is expected to add particularly large numbers of disabled persons to its rolls; and the refundable portion of the earned income tax credit (EITC) for low-income working families with children, twice liberalized since 1986. (Direct EITC payments to families who otherwise owe no income taxes are treated as an outlay, since they are tantamount to benefit payments.) Growth in the Food Stamp and family support programs, in contrast, is expected to be modest--the latter particularly so as financially squeezed state governments limit eligibility and benefits.

## Non-Means-Tested Programs

Social Security, Medicare, and other retirement and disability programs dominate non-means-tested entitlements; Social Security, in fact, is expected to overtake the defense budget in 1993 as the government's single biggest spending program. Most Social Security beneficiaries participate in Medicare as well. Medicare's enrollment is about one-sixth less than Social Security's, however, for several reasons: retirees can collect Social Security beginning at age 62 but must wait until age 65 for Medicare eligibility; disabled Social Security recipients face a two-year wait before qualifying for Medicare; and some spouses and children of Social Security beneficiaries qualify for cash but not medical benefits.

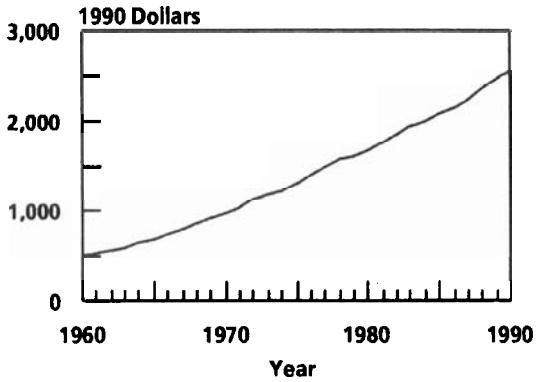
Although Social Security is the larger program, Medicare has grown much faster despite repeated efforts to control costs. Over the past decade, Medicare grew by an average of 10 percent a year versus Social Security's 6 percent, and similar growth rates are projected for the next five years. Neither program faced acute demographic pressure during this period: only a fraction of their growth was driven by beneficiary populations, which generally grew between 1 percent and 2 percent a year. The remainder is accounted for by greater benefits per enrollee, fomented--in the case of Medicare--by unusually high medical care inflation and greater use of covered services.

1. Congressional Budget Office, "The Surge in Medicaid Spending," Box II-2 in *The Economic and Budget Outlook: An Update* (August 1991).

## Box 3-1
## The Boom in Health Care Spending

Spending on health care continues to climb rapidly, both in the federal budget and the nation as a whole. Spending for health care per person in 1990 reached $2,566--a 54 percent real increase since 1980. Annual increases in real per capita spending averaged about 4½ percent a year over the decade, substantially outstripping the 1½ percent annual increase in real per capita GDP over the period. Health care spending in 1990 accounted for about 12 percent of GDP, up from just 7 percent in 1970. Under relatively conservative assumptions, it has been projected to top 16 percent of GDP by the year 2000.

**Real Per Capita Health Expenditures, 1960-1990**




The increase in health care spending has serious implications for the budget. The federal government spends money on Medicare, Medicaid, and several smaller programs (such as veterans' medical care and health insurance for its own workers and retirees). In 1970, health care was 7 percent of the federal budget. That share mounted to more than 10 percent by 1980 and to 13½ percent by 1990. CBO's latest projections suggest that, under current policies, health care would climb to nearly 22 percent of the budget by 1997 and to 28 percent in 2002. The projected increase in health care spending outpaces the growth in any other major component of the budget.

The federal government is not alone in facing such cost pressures. Similar growth rates for health care spending, and particularly for the state share of Medicaid, are observed in state budgets. State and local spending for health care reached $87 billion in 1990, $32 billion for Medicaid alone; and the latter figure is expected to triple by 1997, paralleling the growth in federal spending. Nor is government spending just replacing private spending by consumers and businesses. Private spending--comprising out-of-pocket payments for care and the cost of private insurance--has risen almost as fast as public spending.

Some consequences of continued growth in health care spending are clear. Generally, the more an advanced industrial nation spends on health care, the less income--both private and public--is available to spend on other goods and services or to invest in physical or human capital. Furthermore, it is unlikely that the federal deficit can be tamed in the absence of effective controls on spending under health care entitlement programs. Finally, continuing increases in health care spending also make it tougher to address the problems faced by nearly 35 million uninsured people--almost 16 percent of the population under the age of 65--since most of the proposed remedies would result in even higher spending, whether public, private, or both.

Over the past two decades, a variety of policies to control health care spending have been tried, both in the private sector and in public programs. These strategies have included managed care and other controls over use of services; price controls; encouragement of competition among insurers and providers; health planning and certificate-of-need requirements; and hospital rate-setting programs. The Medicare program, in particular, has been a magnet for cost-containment efforts. In Supplementary Medical Insurance (Part B), physicians' fees have been frozen for extended periods, the deductible has been increased, and volume performance standards--which set an acceptable growth rate for spending on doctors' services each year, with penalties if the target is breached--have been put in place. In Hospital Insurance (Part A), the prospective payment system helped reduce the growth rate of real spending per enrollee from 5.4 percent annually between 1980 and 1985 to just 1 percent annually between 1985 and 1990.

But despite these measures, the average annual real growth of per capita health spending in the United States did not drop. This pattern illustrates a major stumbling block in efforts to gain better control over health care spending. Experts lay much of the blame on the multiple-payer system, in which various government programs, private insurance, and consumers all pay some costs. Successful efforts to reduce one payer's costs in such a system seem to be offset by faster increases in costs for other payers.

Thus, greater control over health spending probably cannot be achieved without significant changes in the health care system--changes that may limit desirable features such as freedom of choice of insurance plans and providers, rapid access to new technologies and treatments, and sustained levels of research and development. The priority the nation places on these other goals will partly determine how effectively cost containment is pursued.

The rapid growth in Medicare and in Medicaid (as previously discussed) are just two faces of the nation's fast-mounting health care tab, an explosion that has pressed the federal government, states and localities, businesses, and households. Box 3-1 discusses this phenomenon and some of the trade-offs confronting the nation as it pursues conflicting goals in the health care area.

Other retirement and disability programs--together, less than one-fourth the size of Social Security--are dominated by benefits for the federal government's civilian and military retirees and railroad retirees. Fast-climbing health care costs for civil service annuitants, another face of the government's growing health care bill, are included in this category.

Unemployment compensation is one of the few entitlement programs expected to shrink in the next few years, as the nation emerges from recession and as the temporary extension of benefits (granting workers up to 20 weeks of extra benefits) expires in June 1992. Unemployment insurance benefits are expected to total $33 billion in 1992, a new record, before subsiding. Spending in 1992 is nevertheless just 10 percent greater than the previous mark set in fiscal year 1983, when the total unemployment rate topped 10 percent. In both recessions, insured unemployment (the number of people eligible for benefits) has hovered at just under half of total unemployment.

Other non-means-tested entitlements encompass a diverse set of programs, mainly veterans' benefits, farm price supports, and certain social service grants to the states. An unusual (and fast-fading) member of this category was created by the credit reform provisions of 1990's Budget Enforcement Act. The act dictated that, beginning in 1992, new loans obligated by the government are to be measured on a subsidy basis--that is, the amount that the government expects to lose over the loan's lifetime--rather than on a cash flow basis. Old loans, obligated before the switchover in 1992, are unaffected by the accounting change but are moved wholesale into the mandatory category, because only a narrow range of legislative actions (such as beefed-up collection efforts or decisions to forgive debts) can alter their future path.

# Deposit Insurance

For years, deposit insurance hardly disturbed the spending totals. The government collected premiums from insured institutions and covered a few failures, usually registering a small surplus on balance. The first tremor occurred in the early 1980s, as savings and loan institutions--then straitjacketed by limitations on their investments and on the interest they could pay to depositors--faced big losses. In response, the government loosened the restrictions on investments and interest rates and relaxed its regulation of the industry. In the late 1980s, these decisions came back to haunt policymakers. Deposit insurance outlays began soaring and are expected to approach $70 billion a year in 1991 through 1993. Although attention was formerly riveted almost entirely on the wreckage of the savings and loan industry, more and more concern is now expressed about the health of the nation's commercial banks.

## Savings and Loans

Although policymakers have pledged to honor the commitment to protect depositors, the actual cleanup has been chronically underfunded. The task was hampered first by overly optimistic estimates and then by decisions to provide only short-term funding. An initial bill enacted in 1987 proved woefully inadequate. A more ambitious package--the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA)--was passed in 1989 and was said by the Administration to be sufficient to finish the job. In fact, the Administration has twice come back for additional funds. In the second such episode, the Congress last fall enacted $25 billion in spending

authority that cannot be obligated after March 1992, necessitating at least one more return trip for additional funds. CBO and the Office of Management and Budget both present unconstrained estimates--that is, projections of outlays that assume uninterrupted funding. Failure to grant resources serves only to delay (and deepen) the ultimate costs. Recognizing this, the Budget Enforcement Act also contains special treatment for deposit insurance. Any funding measure that merely enables the government to meet its current promises is outside the pay-as-you-go rules.

Getting the cleanup over with quickly and efficiently will temporarily swell the deficit, but the associated borrowing is viewed with equanimity by economists and participants in financial markets. Some of today's budgetary outlays will eventually be recouped through the sale of assets from failed institutions; these outlays are clearly *working capital* and do not increase the long-run borrowing of the government. Paradoxically, even those deposit insurance outlays that represent *losses* reflect the transfer of existing assets and liabilities and therefore do not stimulate the economy. Current payments to depositors do not make them richer, since the payments merely make good on existing obligations. The same is true in the more typical case in which payments go to acquirers of failed institutions; in this case, the payments simply reimburse the acquirer for the inadequate capital base of the defunct institution. Unlike working capital, losses are money that the government will not recover. But these sums were mostly squandered in the past, when bad loans and investments were made; only now are they belatedly recognized, as the government makes good on its promise to depositors.[2] In sum, although deposit insurance has clearly turned out to be an expensive pledge for the government, current-period cash outlays are a very poor proxy for its economic impact.

Future losses, of course, are at least partly avoidable. Ironically, the most practical way to avoid them is to accelerate the resolution of failed or sick institutions. This would appear to worsen the deficit because it would increase current outlays. But in reality, it would reduce the long-run deficit by cutting the cost of delay.[3]

*Although deposit insurance has clearly turned out to be an expensive pledge for the government, current-period cash outlays are a very poor proxy for its economic impact.*

The greatest volatility and uncertainty in CBO's deposit insurance projections belong to savings-and-loan-related costs (see Table 3-4). The Resolution Trust Corporation (RTC) was created by FIRREA in 1989 to take over insolvent institutions that its predecessor, the depleted Federal Savings and Loan Insurance Corporation (FSLIC), could not afford to tackle. Initially, the RTC was expected to complete its task in late 1992, bequeathing a smaller but healthier industry to the Savings Association Insurance Fund (SAIF). In fact, the cleanup is taking longer and costing more than planned. Legislation last fall tacked an

2. Congressional Budget Office, *The Economic Effects of the Savings & Loan Crisis* (January 1992).

3. Congressional Budget Office, "The Cost of Forbearance During the Thrift Crisis," CBO Staff Memorandum (June 1991).

extra year onto RTC's original life, extending it through September 1993. CBO assumes that the RTC stays in business even longer, through early 1995, to finish its job.

Projected RTC outlays include outright losses, working capital, and interest paid to the Treasury's Federal Financing Bank. Losses and working capital disbursements continue only as long as the RTC stays in business, through early 1995. Proceeds from the sale of assets are picking up steam and turn total outlays negative by mid-decade. (The RTC's inventory is vast, ranging from

**Table 3-4.**
**Outlays for Deposit Insurance in the Baseline (By fiscal year, in billions of dollars)**

| | Estimate 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| **Savings-and-Loan-Related** | | | | | | | |
| Resolution Trust Corporation | | | | | | | |
| Insurance losses[a] | 37 | 29 | 33 | 30 | 14 | b | b |
| Working capital | | | | | | | |
| Disbursements | 58 | 51 | 67 | 53 | 23 | 0 | 0 |
| Receipts | -34 | -44 | -56 | -64 | -60 | -42 | -20 |
| Interest costs | 3 | 4 | 5 | 6 | 6 | 4 | 1 |
| Receipts from Resolution Funding Corporation (REFCORP) | -12 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total Budget Outlays | 51 | 40 | 50 | 25 | -18 | -38 | -19 |
| Total Including REFCORP | 63 | 40 | 50 | 25 | -18 | -38 | -19 |
| FSLIC Resolution Fund | 9 | 13 | 2 | 1 | 1 | b | b |
| Savings Association Insurance Fund | b | 0 | -1 | -1 | b | 1 | b |
| **Bank-Related and Other** | | | | | | | |
| Bank Insurance Fund | | | | | | | |
| Losses | 7 | 10 | 13 | 11 | 9 | 6 | 5 |
| Working capital | 10 | 15 | 20 | 17 | 14 | 9 | 8 |
| Liquidations | -5 | -7 | -10 | -14 | -16 | -16 | -16 |
| Net interest | 0 | 1 | 2 | 2 | 3 | 2 | 2 |
| Premiums and other | -4 | -5 | -6 | -7 | -8 | -8 | -9 |
| Total | 7 | 15 | 17 | 9 | 2 | -7 | -10 |
| Other[c] | b | b | b | b | b | b | b |
| **Total** | | | | | | | |
| Total Budget Outlays for Deposit Insurance | 66 | 67 | 68 | 33 | -16 | -44 | -28 |
| Total Including REFCORP | 78 | 67 | 68 | 33 | -16 | -44 | -28 |

SOURCE: Congressional Budget Office.

NOTE: Budget outlays reflect the treatment of the Resolution Funding Corporation and a predecessor, the Financing Corporation, shell corporations created solely to borrow funds for savings and loan resolutions, as government-sponsored enterprises. This treatment permits their borrowing to reduce the deficit. CBO has long viewed this treatment as inappropriate. The estimates assume the provision of additional resources to the Resolution Trust Corporation and the Bank Insurance Fund beyond those available under current law.

a. Includes up to $500 million per year in administrative costs.

b. Less than $500 million.

c. Primarily National Credit Union Share Administration.

easy-to-sell securities and home mortgages to tougher assets like uncompleted office buildings.) Although CBO is constantly revising its expectations about the composition and timing of RTC outlays, for two years it has hardly changed its estimate of the cleanup's ultimate cost. Eventually, the RTC will probably close or merge about 1,500 institutions. Slightly fewer than half of them are already resolved or in government conservatorship, but they account for about two-thirds of the expected costs. Recent evidence, in fact, contains the first glimmers of hope that the purge of reckless institutions is leaving behind a more profitable industry.

Two other agencies have distinct roles in the savings and loan cleanup. The FSLIC Resolution Fund pays the costs for failed institutions that were already in government hands by early 1989, before the RTC was created. As Table 3-4 shows, CBO expects that 1992 will witness this fund's last big burst of spending. And CBO assumes that the SAIF, which insures the remnants of the savings and loan industry, will inherit any institutions that fail after the RTC has ceased doing resolutions.

## Commercial Banks

Commercial banks are expected to swell the deposit insurance totals for the next few years, although they pale next to savings and loan institutions in their demands. Furthermore, unlike savings and loans, the commercial banking industry appears able to finance its own requirements, needing a short-term infusion of loans from the government but capable of repaying them through premiums and sales proceeds. CBO projections for the Bank Insurance Fund (BIF) are depicted in the bottom panel of Table 3-4. The estimates incorporate the impacts of recent legislation. The 1990 reconciliation bill permitted BIF to hike premiums, and CBO assumes that premiums increase from 23 cents per $1,000 of insured deposits now to 27 cents next July and to 30 cents in July 1993. And legislation passed in the fall of 1991--though disappointing to those who had sought fundamental reform, such as broader powers for commercial banks--nevertheless removed several roadblocks facing bank regulators. Most notably, the new law sanctioned earlier intervention before an institution's assets are wholly depleted and ensured BIF's ability to borrow to cover both losses and working capital. CBO projects that the fund's outlays will reach $15 billion this year and $17 billion in 1993 before falling.

# Offsetting Receipts and Desert Storm Contributions

Offsetting receipts are income that the government records as negative spending. They are either intrabudgetary (reflecting payment from one part of the federal government to another) or proprietary (reflecting a voluntary payment from the public). The revenue side of the ledger is generally reserved for receipts that stem from the government's taxing power. Because these receipts do not meet that description, they are traditionally recorded as negative outlays.

A decision to collect more (or less) in offsetting receipts generally requires a change in the underlying laws generating such collections. Thus, offsetting receipts are more like mandatory spending and revenues than like discretionary appropriations; and, like the former, they are subject to the pay-as-you-go discipline.

Over half of offsetting receipts are intrabudgetary transfers representing agencies' contributions for their employees' retirement (see Table 3-5). Failing to charge agencies for these costs would clearly let them understate their personnel costs, as future retirement benefits are an important part of federal workers' compensation. Thus, the payments are part of agency budgets, and the corresponding deposits in retirement funds (principally Social Security, Military Retirement, and

Civil Service Retirement) are offsetting receipts. This intragovernmental flow cancels, and only actual benefit payments (an entitlement) and current administrative costs boost total outlays.

Voluntary Medicare premiums collected from the elderly and disabled grow from an estimated $13 billion in 1992 to $22 billion in 1997, as the monthly premium climbs from $31.80 now to an estimated $49.60 in five years. Despite this growth, the premiums fund less than one-quarter of the Supplementary Medical Insurance program (Part B of Medicare), which mainly covers physician and outpatient charges. (The rest is covered from general revenues, whereas the Hospital Insurance program, Part A of Medicare, is financed entirely by payroll taxes on active workers and their employers.) Other offsetting receipts come mostly from charges for energy, minerals, and timber and from various fees levied on users of government property or services.

Not included in the offsetting receipts category are *offsetting collections*. These collections (such as deposit insurance premiums) are traditionally counted as offsets within particular spending programs, and the programs for which they are earmarked are simply recorded on a net basis in the budget.

An unusual category of offsetting receipts made its debut in 1991. Contributions from foreign nations to help finance Operation Desert Storm totaled $43 billion in 1991 and are expected to bring in a final $5 billion in 1992. Leading contributors are Kuwait, Saudi Arabia, and Japan. The contributions cover nearly all of the estimated costs of the United States' military operations, though the associated defense spending--much of it to

**Table 3-5.**
**Offsetting Receipts and Desert Storm Contributions in the Baseline (By fiscal year, in billions of dollars)**

| Category | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| **Offsetting Receipts** | | | | | | | |
| Employer Share of Employee Retirement | | | | | | | |
| Social Security | -6 | -6 | -7 | -7 | -7 | -8 | -9 |
| Military Retirement | -17 | -16 | -16 | -16 | -15 | -15 | -15 |
| Other[a] | -13 | -14 | -14 | -15 | -16 | -16 | -17 |
| Subtotal | -36 | -36 | -37 | -38 | -39 | -40 | -41 |
| Medicare Premiums | -12 | -13 | -15 | -17 | -19 | -21 | -22 |
| Energy-Related Receipts[b] | -5 | -5 | -5 | -5 | -5 | -5 | -5 |
| Natural Resource-Related Receipts[c] | -3 | -3 | -3 | -3 | -3 | -3 | -3 |
| Other | -8 | -7 | -7 | -7 | -7 | -7 | -7 |
| Total | -65 | -64 | -67 | -70 | -74 | -76 | -78 |
| **Desert Storm Contributions** | | | | | | | |
| Total Contributions | -43 | -5 | 0 | 0 | 0 | 0 | 0 |

SOURCE: Congressional Budget Office.

a. Primarily to Civil Service Retirement.

b. Includes proceeds from sales of power, various fees, and receipts from the Naval Petroleum Reserves and Outer Continental Shelf.

c. Includes timber receipts and various user fees.

replace items consumed in the conflict--is stretched out over a longer period.

# Net Interest

Short-term interest rates today are at their lowest levels in two decades, and long-term rates are low by the standards of recent years. But net interest costs, at about 3½ percent of GDP, are two to three times the typical levels of the 1960s and 1970s. Clearly, net interest's growing share can be traced directly to the burgeoning federal debt.

Interest costs are not governed by any provisions of the Budget Enforcement Act because they are not directly controllable. Rather, interest depends on the government's debt and on interest rates. The Congress and the President influence the former by making decisions about taxes and spending and, hence, borrowing. They exert no direct control over interest rates, which are determined by market forces and Federal Reserve policy.

## Sensitivity to Interest Rates and the Link to Debt Management

The importance of interest rates was illustrated in Chapter 2. If interest rates are 1 percentage point higher in 1992 through 1997 than CBO assumes, net interest costs will be greater--by about $5 billion in 1992 and $44 billion in 1997. In fact, for better or worse, the Treasury's debt management strategy over the past decade has somewhat dampened the budget's sensitivity to movements in interest rates. The Treasury has financed about three-quarters of the marketable debt in medium-and long-term securities, with maturities ranging from two to 30 years, and CBO assumes that this policy will continue. By doing so, the Treasury locks in its interest costs and mitigates its refinancing load.

Recent scandals in the government securities market have focused attention on auction procedures and--more compelling from a budgetary standpoint--on debt management strategy. The Treasury believes that it should follow a predictable strategy for financing the debt to avoid surprising the financial markets and thus ensure a smooth reception for its securities. Therefore, the Treasury does not change its mix of financing in response to movements in interest rates. More specifically, the Treasury's strategy emphasizes medium- and long-term securities.

Some critics charge that the Treasury's reliance on medium- and long-term debt is excessive. The government, they argue, should borrow more of its money in short maturities, which typically carry interest rates well below those on long-term instruments, and simply accept the greater volume of refinancing and the budget's heightened sensitivity to interest rates. Historically, short-term rates (such as Treasury bills) are roughly 2 percentage points below very long-term rates (such as 30-year Treasury bonds). Thus, moving about $50 billion in financing--the approximate amount of 30-year bonds that the Treasury now sells each year--into short-term maturities would save roughly $1 billion in interest annually, savings that would cumulate as more debt is sold.

Some analysts worry that shortening the debt's maturity would drive up short-term rates, thus dissipating any budgetary savings. Others fear that shortening the debt's maturity could make it harder for the Federal Reserve to conduct monetary policy. Neither of these concerns, however, appears to be very well grounded--especially if the Treasury is open about its strategy. The fundamental question, then, seems to be whether the potential bud-

getary payoffs are worth subjecting the budget to the volatility of interest rates.

## Interest and Debt: Net or Gross?

Some budget-watchers claim interest is now the second-largest category of federal spending, but that statement is misleading. It would be true only if gross interest--a poor gauge of interest costs--is used. Table 3-6 lays out the components of government interest costs and the corresponding measures of debt.

The government has sold trillions of dollars of debt to finance the deficit. But it also

**Table 3-6.**
**CBO Projections of Interest Costs and Federal Debt (By fiscal year)**

| | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| **Net Interest Outlays (Billions of dollars)** | | | | | | | |
| Interest on Public Debt (Gross interest)[a] | 286 | 297 | 317 | 343 | 365 | 386 | 411 |
| Interest Received by Trust Funds | | | | | | | |
| Social Security | -20 | -24 | -28 | -33 | -38 | -44 | -51 |
| Other trust funds[b] | -51 | -55 | -56 | -58 | -61 | -65 | -69 |
| Subtotal | -71 | -79 | -84 | -91 | -99 | -109 | -120 |
| Other Interest[c] | -19 | -17 | -20 | -21 | -20 | -17 | -13 |
| Total, Net Interest Outlays | 196 | 201 | 213 | 231 | 245 | 260 | 278 |
| **Federal Debt, End of Year (Billions of dollars)** | | | | | | | |
| Gross Federal Debt | 3,599 | 4,039 | 4,483 | 4,880 | 5,224 | 5,559 | 5,950 |
| Debt Held by Government Accounts | | | | | | | |
| Social Security | 269 | 322 | 387 | 463 | 549 | 647 | 757 |
| Other government accounts[b] | 643 | 682 | 736 | 793 | 850 | 902 | 949 |
| Subtotal | 912 | 1,004 | 1,123 | 1,256 | 1,400 | 1,549 | 1,706 |
| Debt Held by the Public | 2,687 | 3,033 | 3,360 | 3,624 | 3,824 | 4,010 | 4,244 |
| Debt Subject to Limit[d] | 3,569 | 4,011 | 4,455 | 4,852 | 5,196 | 5,532 | 5,924 |
| **Federal Debt as a Percentage of GDP** | | | | | | | |
| Debt Held by the Public | 47.8 | 51.9 | 53.9 | 54.7 | 54.6 | 54.1 | 54.1 |

SOURCE: Congressional Budget Office.

NOTE: Projections of interest and debt assume compliance with the discretionary spending caps in the Budget Enforcement Act.

a. Excludes interest costs of debt issued by agencies other than the Treasury (primarily deposit insurance agencies).

b. Principally Civil Service Retirement, Military Retirement, Medicare, Unemployment Insurance, and the Highway and the Airport and Airway trust funds.

c. Primarily interest on loans to the public and to the Resolution Trust Corporation and the Bank Insurance Fund.

d. Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury (currently about $30 billion) is excluded from the debt limit.

issues securities to its own trust funds (mainly Social Security and the other retirement funds) and collects interest on loans and on its cash balances. Broadly speaking, *net interest* is interest paid by the government to outsiders. *Gross interest*, in contrast, ignores all interest income and exaggerates the debt service burden. The exaggeration is easily illustrated. In 1992, the government will pay $297 billion in gross interest costs, but $79 billion of this amount is simply credited to trust funds and does not leave the government or add to the deficit. And the government will also collect about $17 billion in other interest income. Net interest costs thus total $201 billion. Even measured on a net basis, net interest is the third-largest category of spending in the budget (behind Social Security and defense) and is growing fast. The burden of interest costs, which represent money siphoned from current needs to meet the bills of the past, can be documented quite adequately by using net interest.

Net interest costs are driven by the government's borrowing. Debt held by the public is projected to grow from $2.7 trillion at the end of 1991 to $4.2 trillion in 1997 as the government runs $1.5 trillion in deficits over the six-year period. As a share of GDP, the debt peaks at almost 55 percent in mid-decade. Not since the late 1950s, when most of the debt was still left over from World War II, has the federal debt been so large in relation to the economy.

## Debt Subject to Limit

Debt held by the public represents the government's appetite for credit and is the most useful measure of federal debt. But many observers are better acquainted with a larger figure, the gross federal debt. The gross debt includes the securities (about $1 trillion and climbing) issued to government trust funds. As explained above, the interest on these securities is both paid and collected by the government and adds nothing to net interest or the deficit. The chief reason the gross debt is so familiar is that its close cousin, the debt subject to limit, is the focus of periodic legislative wrangling. The statutory limit is $4,145 billion, last raised in the 1990 budget summit agreement. As suggested by Table 3-6, the Congress is sure to face the need to increase the debt limit sometime early in fiscal year 1993, most likely in January or February.

Chapter Four

# The Revenue Outlook

The recession will keep revenue growth below par for another year. The Congressional Budget Office expects growth in federal revenues to be 4.6 percent this year, up from the anemic 2.2 percent growth rate of last year and well on the road toward the 6.4 percent average rate projected for 1993 through 1996. The recession virtually removed revenue growth from the system last year. Tax increases mandated by the Omnibus Budget Reconciliation Act of 1990 (OBRA-90) account for almost all of the modest 1991 revenue gain.

## Baseline Projections

In the CBO baseline projections, revenues total $1,102 billion this year, $48 billion above the 1991 level (see Table 4-1). The second-year boost in revenues from the OBRA-90 tax increases accounts for about one-third of the growth. Even without further tax increases, revenues in 1993 are expected to reach a healthy $76 billion above their 1992 level as the economic recovery takes hold. Increasing employment and a rebound in profits will keep revenue growing slightly faster than gross domestic product (GDP) over the 1993-1995 period.

Baseline revenues reach $1,342 billion in 1995 and constitute a 19.2 percent claim on GDP; that would be the highest claim since 1989, the year before the recession. After 1995, baseline revenue growth slackens, as OBRA-90 tax increases go off the books and speedups in income tax payments enacted last session reduce 1997 receipts. The speedups partially paid for expanded unemployment insurance benefits and the extension of expiring tax preferences. Baseline revenues total $1,492 billion in 1997 and constitute a temporarily low 19.0 percent claim on GDP. The effects of expiring provisions aside, the underlying growth in revenues reflects the elasticity of the federal tax structure in place since the mid-1980s. (Growth in revenues tends to slightly exceed growth in GDP.)

Relative to the August CBO baseline projections, revenues have been lowered by $39 billion in 1992, $45 billion in 1993, and decreasing amounts in 1994 through 1996. In 1992 and 1993, two-thirds of the revision in the baseline is attributable to the weaker economic forecast. In 1994 through 1996, eco-

*Relative to August baseline projections, revenues have been lowered by $39 billion in 1992 and $45 billion in 1993.*

nomic and technical revisions are roughly equal. New legislation was not a major factor in the revisions.

The first session of the 102nd Congress enacted three major pieces of legislation affecting taxes (only two of them affected the baseline):

- The *Tax Extension Act of 1991* funded a six-month extension of expiring tax preferences by accelerating corporate tax payments into the 1992-1996 period, but $2.7 billion of those payments will be forgone in 1997 because the acceleration provision expires on December 31, 1996.
- The *Federal Supplemental Compensation Act of 1991* enacted a similar provision that raised $2.6 billion from individual taxpayers. That, too, will be forgone in 1997 because the provision expires on December 31, 1996. The act also extended the Federal Unemployment Tax Act surcharge by one year, until December 31, 1996.
- The *Intermodal Surface Transportation Efficiency Act of 1991* extended the Highway Trust Fund taxes by four years, to September 30, 1999.

The effect on the baseline of the first two acts is to reduce revenues by about $2 billion

**Table 4-1.**
**CBO Baseline Revenue Projections by Source (By fiscal year)**

| Source | Actual 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| | | | **In Billions of Dollars** | | | | |
| Individual Income | 468 | 491 | 518 | 557 | 596 | 634 | 674 |
| Corporate Income | 98 | 98 | 109 | 119 | 125 | 129 | 131 |
| Social Insurance | 396 | 415 | 449 | 480 | 509 | 540 | 570 |
| Excise | 42 | 46 | 49 | 50 | 51 | 49 | 50 |
| Estate and Gift | 11 | 12 | 12 | 12 | 13 | 14 | 14 |
| Customs Duties | 16 | 17 | 18 | 20 | 21 | 22 | 24 |
| Miscellaneous Receipts | 23 | 24 | 23 | 25 | 26 | 27 | 28 |
| Total Revenues | 1,054 | 1,102 | 1,179 | 1,263 | 1,342 | 1,415 | 1,492 |
| On-budget Revenues | 760 | 798 | 851 | 912 | 970 | 1,020 | 1,072 |
| Off-budget Revenues | 294 | 305 | 328 | 350 | 372 | 395 | 420 |
| | | | **As a Percentage of GDP** | | | | |
| Individual Income | 8.3 | 8.4 | 8.3 | 8.4 | 8.5 | 8.6 | 8.6 |
| Corporate Income | 1.7 | 1.7 | 1.8 | 1.8 | 1.8 | 1.7 | 1.7 |
| Social Insurance | 7.0 | 7.1 | 7.2 | 7.2 | 7.3 | 7.3 | 7.3 |
| Excise | 0.8 | 0.8 | 0.8 | 0.8 | 0.7 | 0.7 | 0.6 |
| Estate and Gift | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 | 0.2 |
| Customs Duties | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 | 0.3 |
| Miscellaneous Receipts | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 | 0.4 |
| Total Revenues | 18.7 | 18.9 | 18.9 | 19.1 | 19.2 | 19.1 | 19.0 |
| On-budget Revenues | 13.5 | 13.6 | 13.6 | 13.8 | 13.8 | 13.8 | 13.7 |
| Off-budget Revenues | 5.2 | 5.2 | 5.3 | 5.3 | 5.3 | 5.3 | 5.3 |

SOURCE: Congressional Budget Office.

over the 1992-1997 period, including a $5 billion decrease in 1997. The extension of the fuel tax had no effect on the baseline because, under the procedures of the Budget Enforcement Act, the $20 billion per year in highway tax revenues from the extension was already included in the August 1991 baseline.

Although the last session of the Congress produced little new legislation, that of the previous Congress played an important role in 1991 revenues, and it will contribute even more to current-year receipts. OBRA-90 tax increases added about $20 billion to 1991 receipts (about what was expected), accounting for most of the revenue gain since 1990. The increases are expected to contribute $35 billion to $40 billion to 1992 receipts.

Baseline revenue projections assume that the tax law remains unchanged. Under current law, some provisions are scheduled to change or expire during the 1992-1997 period, either on a specified date or when a statutory

**Table 4-2.**
**1997 Effect of Extending Tax Provisions That Expire in 1992 Through 1997**

| Tax Provision | Expiration Date | Revenue Effect in Fiscal Year 1997 (Billions of dollars) |
|---|---|---|
| **Provisions Expiring in 1992** | | |
| Low-Income Housing Credit | 6/30/92 | -0.9 |
| Deduction for Health Insurance Premiums Paid by the Self-Employed | 6/30/92 | -0.5 |
| Exclusion for Employer-Provided Educational Assistance | 6/30/92 | -0.4 |
| Exclusion for Employer-Provided Legal Assistance | 6/30/92 | -0.1 |
| Exemption for Earnings on Mortgage Revenue Bonds | 6/30/92 | -0.3 |
| Exemption for Earnings on Small-Issue Manufacturing Bonds | 6/30/92 | -0.2 |
| Minimum Tax Exemption for Gifts of Appreciated Tangible Property | 6/30/92 | a |
| Credit for Research and Experimentation | 6/30/92 | -2.0 |
| Rules for Allocation of Expenses for Research and Experimentation | 6/30/92 | -0.7 |
| Targeted Jobs Credit | 6/30/92 | -0.5 |
| Business Energy Credits | 6/30/92 | -0.1 |
| Orphan Drug Credit | 6/30/92 | a |
| Nonconventional Fuels Credit | 12/31/92 | -1.2 |
| **Provisions Expiring in 1995 or 1996** | | |
| Motor Fuels Taxes Remaining in the General Fund | 9/30/95 | 2.6 |
| Coal Mining Reclamation Fees | 9/30/95 | 0.2 |
| Internal Revenue Service User Fees | 9/30/95 | b |
| Phaseout of Personal Exemptions and Limitation on Itemized Deductions | 12/31/95 | 6.2 |
| Corporation Tax Dedicated to Superfund | 12/31/95 | 0.6 |
| Accelerated Individual Income Tax Payments | 12/31/96 | 2.6 |
| Accelerated Corporate Income Tax Payments | 12/31/96 | 2.8 |
| Federal Unemployment Tax Act 0.2 Percent Surtax | 12/31/96 | 0.9 |

SOURCE: Joint Committee on Taxation.

a. Loss of less than $50 million.

b. Increase of less than $50 million.

requirement is met. The baseline assumes that those changes and expirations occur on schedule. One category of taxes--excise taxes dedicated to trust funds--is an exception to that rule. Even though scheduled to expire, these excise taxes have been extended: aviation, Superfund, vaccine injury compensation, and levies to clean up oil spills and leaking underground storage tanks. By 1997, the extension of those expiring excise taxes will constitute $9 billion of total baseline receipts.

The expiration of provisions enacted in OBRA-90 and other recent legislation depresses baseline revenues in 1996 and 1997. Eight revenue-raising provisions expire in 1995 or 1996 (see Table 4-2). If all eight were made permanent, revenues in 1997 would be about $16 billion higher than in the baseline.

## Revenue Issues in 1992

The Congress faces a number of revenue issues in 1992. Unless extended, 12 income tax preferences will expire at the end of June, and another expires in December. One excise tax expires in December, although the baseline assumes its extension. The Congress must also decide whether it should try to reduce taxes temporarily to provide short-term stimulus to the economy (see Chapter 5). It may address such longer-term concerns as tax relief for the middle class and for families with children, encouraging saving and investment, expanding health insurance coverage, and simplifying the tax code. Because most proposals to achieve those goals reduce revenue, the Budget Enforcement Act would force the Congress to finance them with other tax increases or entitlement cuts. Alternatively, the Congress could suspend the act and allow the deficit to increase, or it could modify the act to allow reductions in discretionary spending to offset tax cuts.

All of the tax preferences scheduled to expire in 1992 have been extended at least once, and some as many as eight times. Twelve would have expired at the end of 1991, but they were extended for six months in the Tax Extension Act of 1991. The extension reduced revenue by about $1 billion in 1992 and smaller amounts in 1993 through 1996. Permanent extensions would reduce revenues by about $6 billion in 1997 (see Table 4-2). Another provision, the nonconventional fuels credit, scheduled to expire in December, is also shown. In addition, the vaccine injury compensation tax, which generates about $0.1 billion in trust fund revenues per year, will expire in December.

## Revenue Trends in the Longer-Term Perspective

Viewed from the perspective of 1960 to the present, the 19.0 percent average revenue share of GDP expected for the 1993-1997 period is relatively high (see Figure 4-1). In the 1960s, the share increased from around 18 percent to 20 percent, as social insurance taxes grew and a temporary income tax surcharge was enacted during the Vietnam War. A recession intervened, taxes were cut, and the revenue share fell to about 18 percent in the early 1970s. Rapid inflation during the late 1970s pushed incomes into higher tax

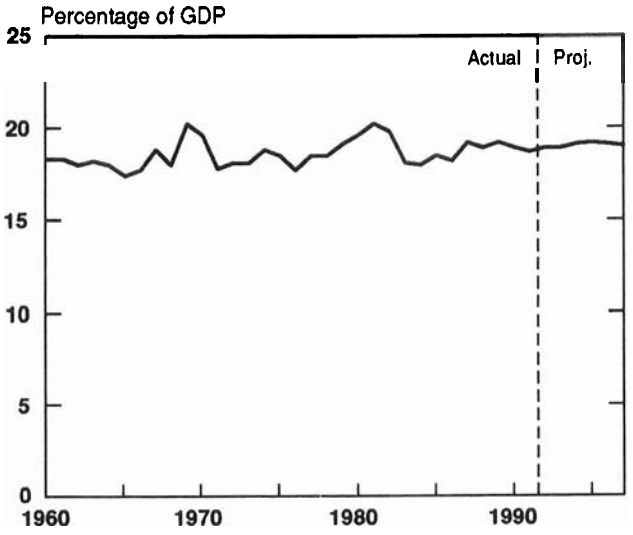
brackets ("bracket creep"). By 1981, that share of GDP had returned to 20 percent.

At least partly in response to the historically high revenue claim, large tax cuts were enacted in the Economic Recovery Tax Act of 1981 (ERTA). These cuts, combined with the back-to-back 1980-1982 recessions, brought the revenue share down to 18 percent in 1983. (In addition to lowering tax rates, ERTA reduced the elasticity of the federal tax system. Effective in 1985, ERTA also indexed for inflation the bracket amounts for the personal income tax, the standard deduction, and the personal exemption. The indexing removed most of the inflationary bracket creep from the personal income tax.) Beginning in 1984, the revenue share, bolstered by sustained economic growth and deficit reduction measures, climbed intermittently; it reached 19 percent before sliding back under the faltering economic growth that became a recession in the second half of 1990.

In CBO's economic forecast, moderate economic growth resumes before the end of 1992. With no significant changes in tax law assumed, the baseline revenue share of GDP increases from 18.9 percent this year to 19.2 percent in 1995. If the revenue-raising provisions that expire in 1995 and 1996 were extended, the revenue share of GDP would hold at 19.2 percent through 1997. Because of these expirations, the baseline revenue share drops slightly to 19.0 percent in 1997.

*CBO projects, in terms of federal revenue shares of GDP, that individual income tax and social insurance tax will rise slightly, while corporate tax holds steady.*

**Figure 4-1.**
**Total Revenue as a Share of GDP**




SOURCE: Congressional Budget Office.

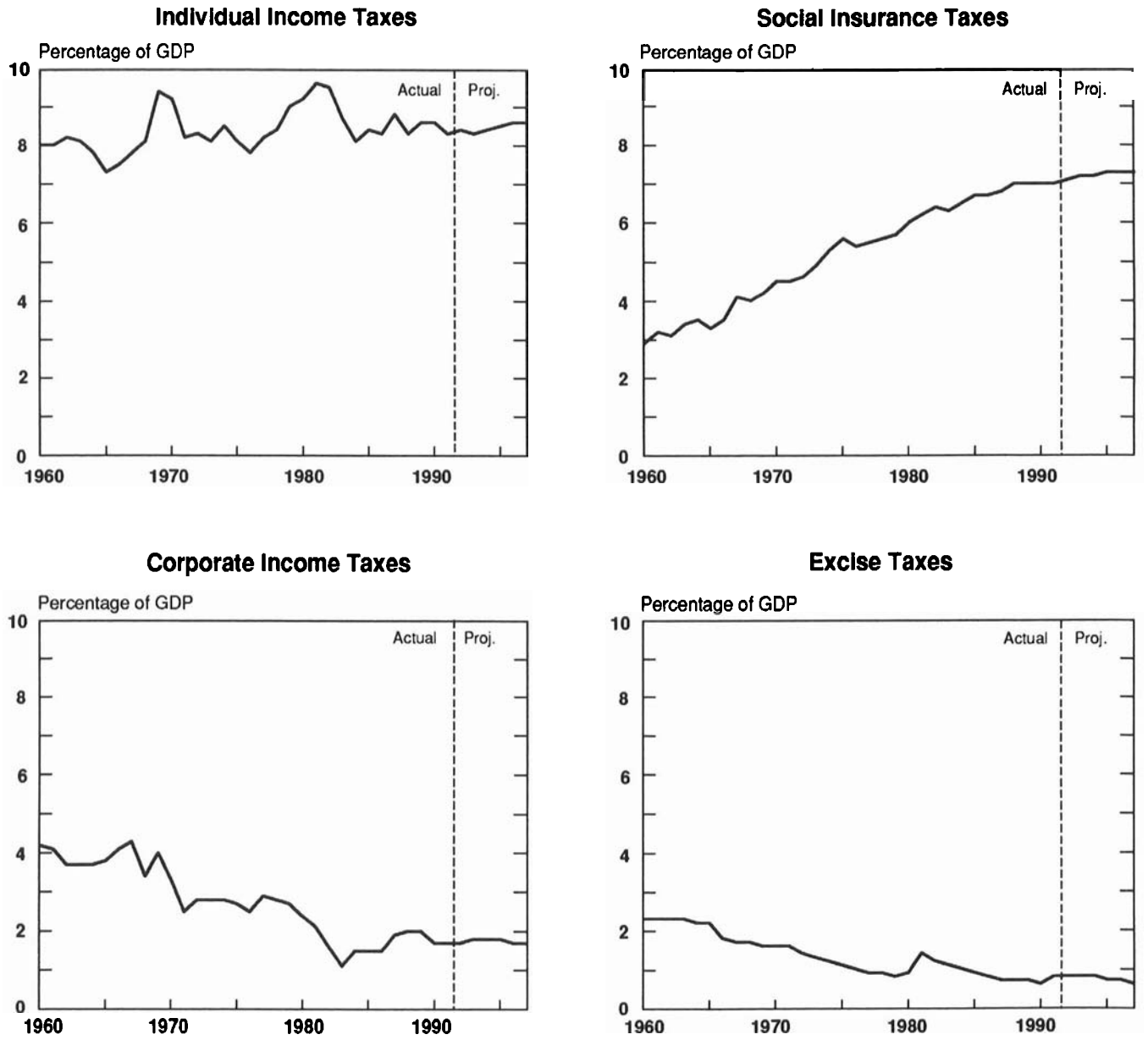
The fluctuation of the federal revenue share of GDP over the past 30 years mirrors the fluctuation in the individual income tax share. The social insurance tax share has increased steadily over the period, and the corporate income tax and excise tax shares have decreased (see Figure 4-2). The individual income tax has maintained its prime importance as a federal revenue source, contributing 45 percent of federal revenues in 1990, hardly different from its 44 percent contribution in 1960. From 1960 through the mid-1980s, the individual income tax share tended to grow rapidly because of bracket creep. The increases were partially offset by periodic tax cuts. The Tax Reform Act of 1986 cut tax rates. Subsequent legislation enacted some tax increases. Those events have imparted the saw-toothed pattern to the income tax share of GDP. In the CBO baseline, the individual income tax share increases slightly because of

real income growth and an increase in the wage share.

The GDP share claimed by social insurance taxes (mostly Social Security taxes) has increased steadily since 1960 because tax rates, coverage, and the share of wages covered have increased. These revenues have financed benefits provided to current retirees and promised to future retirees. The GDP share of social insurance taxes has risen from 3 percent in 1960 to 7 percent in 1991. In the CBO baseline, it continues to rise slightly, reflecting the increase in the wage share.

The GDP shares claimed by corporate income taxes and excise taxes have declined since 1960. The corporate revenue share fell

**Figure 4-2.**
**Revenue by Source as a Share of GDP**




SOURCE: Congressional Budget Office.

until the mid-1980s because of legislated reductions in tax liability and a decline in the profit share of GDP. The Tax Reform Act of 1986 increased corporate taxes. After claiming a temporarily higher share from 1987 to 1989, the corporate share has held steady for the past two years. It is expected to continue to do so through 1997.

Excise taxes are the smallest of the four major tax sources. They have claimed a decreasing share of GDP since 1960. The enactment in 1980 of the windfall profit tax on oil produced the only large break in the trend. Rate increases have kept the growth of excise taxes close to that of GDP in recent years. In the CBO baseline, those taxes increase somewhat more slowly than GDP. Excise revenues reflect transactions; the latter grow more slowly than cash incomes, on which income and social insurance tax revenues depend.

Chapter Five

# Using Monetary and Fiscal Policies to Promote a Recovery

The failure of the expected economic recovery to materialize during the second half of last year has prompted the Congress to consider new fiscal policies aimed at strengthening the economy. Until now, the nation has relied on the Federal Reserve's monetary policy to stimulate a turnaround. Although the central bank's policies are likely to spur a mild recovery by the middle of this year without additional fiscal actions, risks remain. One danger is that the economy could slide during the first months of 1992 from its pattern of little or no growth into a significant new downturn. Another risk is that while a solid recovery may get under way by midyear, its pace may be too modest to alleviate unemployment and other economic hardships quickly enough to suit the nation.

New policy measures can be of only limited help in minimizing these risks. No policy can work fast enough to affect the outlook for the first several months of 1992. But additional fiscal and monetary actions could bolster the economic expansion late this year and next.

At the same time, both fiscal and monetary policies must contend with constraints related to their long-term effects. If monetary policy becomes too stimulative, it may awaken fears of an eventual resurgence of inflation. Allowing this to happen could increase long-term interest rates and reduce the possibility of deriving short-term benefits from monetary measures. If new fiscal measures are not designed carefully, they could permanently undermine recent efforts to reduce the federal deficit, thus worsening a serious long-term economic problem. The chronically large federal deficits of this era are among the main causes of the relatively slow long-term growth in incomes and living standards that menace the nation's future economic health.

## Monetary Policy

The reductions in short-term interest rates that the Federal Reserve has engineered since the middle of 1989 are likely to spur a mild economic recovery by the middle of this year. Still, most economists argue that additional cuts in rates would help to reduce the risks of continued weak economic activity without seriously threatening to increase inflation. Of course, monetary actions take some months to work, so new measures are unlikely to affect the economy soon. But lower rates could bolster recovery later this year by helping to overcome the effects of several developments that seem likely to weaken the pace of an upturn.

### Indicators of Monetary Policy

Analysts usually consider a variety of indicators before deciding whether the central bank's policy has been stimulative enough to encourage recovery from a recession. Although they present a complex picture, these

indicators suggest that monetary policy began to ease its stance before the recession started.

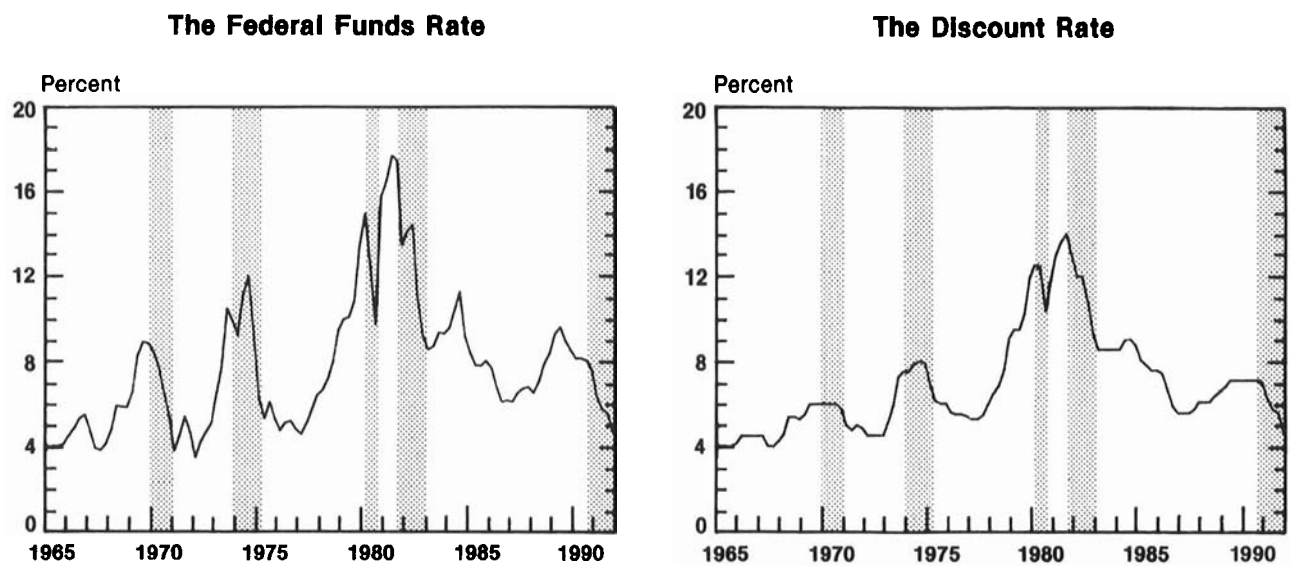
**The Federal Funds and Discount Rates.** Recent reductions in the federal funds rate and the discount rate are the most important indication that monetary policy has been stimulative. The federal funds rate, the most closely watched indicator of monetary policy, is the interest rate that depository institutions charge on loans to each other. This rate is sensitive to changes in the reserves that the central bank makes available to banks and other depository institutions. As a result, the Federal Reserve can control its level precisely. In addition to the federal funds rate, economists closely follow the discount rate, the charge that the central bank levies on its own loans of reserves. Cuts in both the federal funds rate and the discount rate affect market rates of interest, and thereby stimulate interest-sensitive spending.

Reductions in the federal funds rate suggest that the central bank's stance, starting a year before the recession began, has been easier than during similar periods in the past (see Figure 5-1). Between the middle of 1989 and the end of 1991, the Federal Reserve lowered the federal funds rate by 5 percentage points. Declines in the discount rate were equally large. The declines in both rates were larger, on average, than the cuts that the Federal Reserve has engineered during past recessions. Substantial reductions in short-term market interest rates, and lesser (though still significant) declines in long-term rates, accompanied the declines in the federal funds and discount rates (Figure 5-2).

Although the amount by which the Federal Reserve reduced short-term rates may have been impressive by historical standards, the way in which they were reduced was not. The central bank lowered rates by smaller steps than in past recessions and spread the cuts over a longer period. The slow and cautious easing during the second and third quarters of 1991 primarily reflected the fact that the central bank, along with most forecasters, anticipated only a short and mild recession, and expected recovery to begin in the second half of 1991.

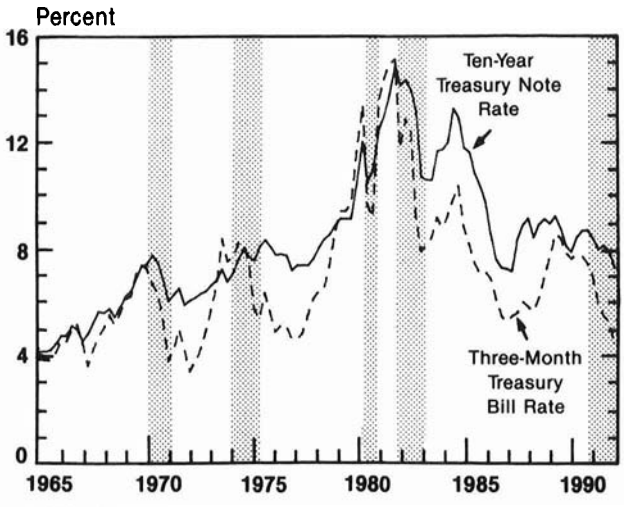
As the recession deepened, the Federal Reserve tried to compensate for its earlier caution. Its most significant action was a large cut in both the federal funds and discount rates at

**Figure 5-1**
**Short-Term Interest Rates**




SOURCES: Congressional Budget Office; Federal Reserve Board.

**Figure 5-2.**
**Yields on Three-Month Treasury Bills and Ten-Year Treasury Notes**




SOURCES: Congressional Budget Office; Federal Reserve Board.

the end of 1991. But because monetary policy's impact on economic activity tends to be spread out over several quarters, the easing late last year could not entirely overcome the earlier delay.

The gradual pace of monetary easing may have eroded its stimulative effect. The small, repeated easing measures may have created expectations of further moves, possibly causing some businesses and individuals to delay spending in hopes of getting even lower interest rates later on. Although it is difficult to judge the significance of this possibility, it may have helped to delay the recovery.

**The Yield Curve.** Another monetary indicator, the yield curve, also suggests that the Federal Reserve's policy has stimulated the economy in recent months. The yield curve shows the relationship between the levels of short-term and long-term interest rates. Economists believe that when the central bank pushes short-term rates well below long-term rates, financial conditions are encouraging households and businesses to spend, thereby stimulating the economy.

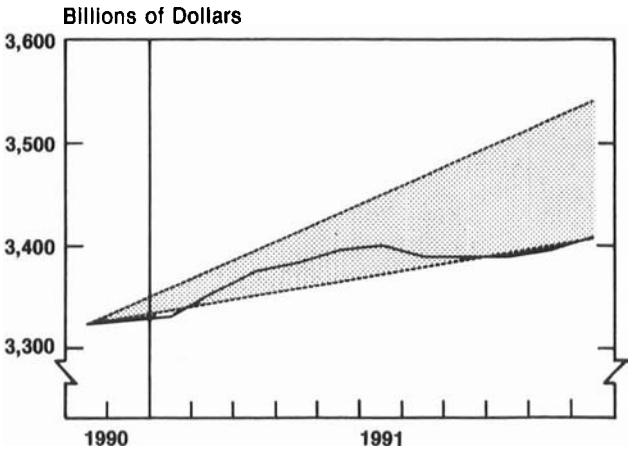
The amount of recent monetary easing reflected in the yield curve looks substantial. The yield on three-month Treasury bills, which was nearly equal (on a bond-equivalent basis) to the rate on 10-year Treasury notes in mid-1989, had dropped to a level 3 percentage points lower than the 10-year rate by the end of last year. The drop made the yield curve nearly as steep as it has been at any time in the post-World War II period.

**Real Short-Term Interest Rates.** One sign that the Federal Reserve's recent measures may not have been strongly stimulative until late in 1991 is that real short-term interest rates--those adjusted for inflation--appear to have declined less quickly in response to the central bank's easing measures than did nominal rates. Measurement of real rates is difficult because it involves gauging peoples' expectations of inflation; there is no objective way to do this. Nevertheless, because actual inflation as well as short-term nominal interest rates were falling during the first half of 1991, real rates--the difference between nominal rates and expected inflation--probably fell gradually. Of course, real interest rates have probably declined more significantly since mid-1991, when the Federal Reserve began to ease its stance more aggressively. Still, most indicators suggest that real rates remain higher than during most earlier recessions.

**Indicators Based on Money and Credit.** In addition to interest rate indicators, economists look to gauges of growth in the total amounts of money and credit to help them judge the status of monetary policy. Important indicators of money and credit have grown relatively slowly during the recession, suggesting to some that the Federal Reserve could ease policy further.

The most closely watched gauge of the money supply is M2--the total of all cash held by the public, all accounts on which checks can be written, small savings and time deposits, and a few other assets. M2 grew by only 2.4 percent during 1991 and remained for much of the year at or below the bottom

**Figure 5-3.**
**M2 Money Growth and Targets in 1991**




SOURCES: Congressional Budget Office; Federal Reserve Board.

NOTE: Shaded area indicates target range. The target range for M2 was 2½ percent to 6½ percent in 1991. M2 includes M1 (currency in the hands of the public, traveler's checks, checkable deposits) plus small time and savings accounts, money-market deposit accounts, most money-market mutual funds, overnight repurchase agreements, and overnight Eurodollars held by U.S. residents.

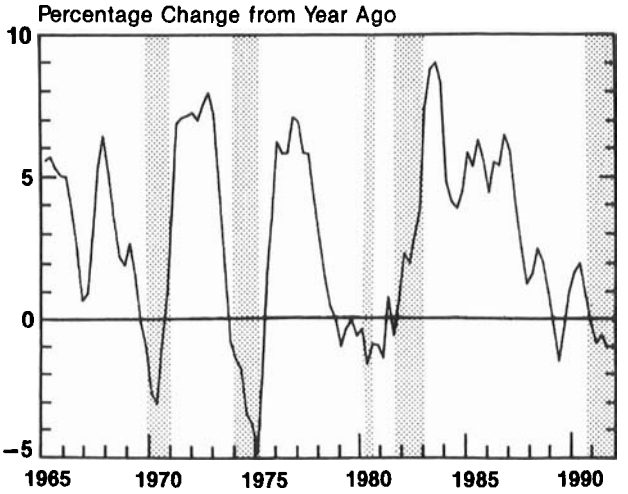
of the "target range" showing the levels of the money supply that the Federal Reserve considered acceptable (see Figure 5-3). After adjustment for inflation, M2 has actually shrunk through much of the recession (see Figure 5-4). Some economists are particularly concerned about this slow growth because it appears insufficient to satisfy the demand for money that the economy generates, even at the reduced levels of activity that the recession has produced. Such a shortfall in the money supply from amounts demanded by the economy normally restrains economic growth.

But closer analysis reveals that the recent stagnation in M2 may stem in part from reduced demand for such financial balances. As a result, it may not indicate that monetary policy is restraining the economy. Much of the slow growth in M2 in recent months probably results from the large declines in interest rates on deposits at banks and thrift institutions. These declines have convinced depositors to move their funds into investments offering higher returns, such as bond and equity mutual funds. Since much of the slow growth of M2 may simply reflect shifts in financial portfolios in response to changes in yields, it does not necessarily portend continued weak economic activity.

Thus far in the downturn, the real growth of credit extended to nonfederal borrowers has been slow. In recent months, credit outstanding to these borrowers from banks, thrift institutions, and nondepository financial institutions has contracted after the figures are adjusted for inflation (see Figure 5-5).

But this, too, may be a misleading indication of restrictive monetary policy. The slow growth of nonfederal credit largely reflects reduced demand for credit among businesses and consumers. As is true with the money supply, slow growth in credit that stems from

**Figure 5-4.**
**Growth of the Real Money Supply (M2)**




SOURCES: Congressional Budget Office; Federal Reserve Board; Department of Commerce, Bureau of Economic Analysis.

NOTE: M2 includes M1 (currency in the hands of the public, traveler's checks, checkable deposits) plus small-time and savings accounts, money-market deposit accounts, most money-market mutual funds, overnight repurchase agreements, and overnight Eurodollars held by U.S. residents.

Data for the money supply are in 1987 dollars.

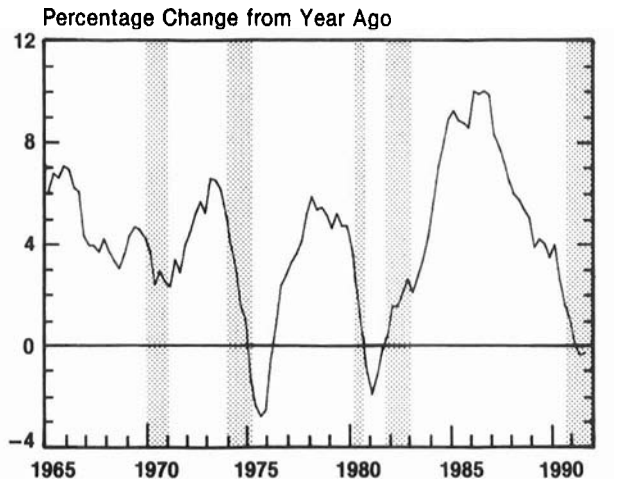
slack demand is not a sign that monetary policy is tight. Still, reduced lending by banks has also played a role in the slowdown in the growth of credit, and this may be slightly retarding economic recovery. At various times during the economic downturn, the slow growth in credit has played a significant role in persuading the Federal Reserve to ease its monetary policy.

## Roadblocks to Short-Term Monetary Stimulus

Although indicators suggest on balance that monetary policy is stimulative by the standards of past recessions, most economists now forecast only a modest economic recovery this year. As a result, many argue that further monetary easing is warranted.

Some calls for additional monetary actions arise because of unusual economic conditions that seem to be conspiring to limit the prospects for economic recovery. As Chapter 1 pointed out, for example, federal fiscal policy is less stimulative than it has been during most other recessions; this places a greater burden on monetary policy. Similarly, budgetary problems among many state and local governments are causing tax increases and cuts in spending that represent an unusual drag on economic growth. Because many households and corporations are attempting to reduce their debts and improve the state of their financial balance sheets, they are probably reluctant to borrow even to take advantage of the lower interest rates that the Federal Reserve has devised. If so, this could rob monetary policy of some of its impact.

**Figure 5-5.**
**Growth of Real Credit to Nonfederal Borrowers**




SOURCES: Congressional Budget Office; Federal Reserve Board; Department of Commerce, Bureau of Economic Analysis.

NOTE: Data for credit are in 1987 dollars.

Banks and other lending institutions, under pressure to shore up their own financial condition, are reluctant to lend in some areas, and this at least slightly dilutes the impact of stimulative monetary policies. A number of industries are shrinking in order to improve efficiency and adapt to long-term competitive pressures. Finally, in other countries economic growth remains slow and interest rates are rising, again exerting a drag on expansion in the United States.

Other reasons for which the current degree of monetary stimulus appears insufficient to some analysts have to do with monetary policy itself. Some stem from the fact that a few monetary indicators suggest that recent stimulation has been limited. These indicators include the relatively slight recent decline and persistently high level of the real interest rate. In addition, some analysts argue that the gradual pace at which the Federal Reserve reduced nominal interest rates during much of the recession period may have undermined the stimulative impact of its policies.

**Uncertainty Over Monetary Actions.** Using a different set of arguments, some economists point out that the size and timing of the economic impact resulting from any change in monetary policy is inherently uncertain. Given the importance of stimulating a strong economic expansion, they argue, it is therefore appropriate to err on the side of a strong change in policy to guard against the risk that

*Uncertainty in predicting just how monetary policies will affect the economy has long plagued economists, but changes in the financial system during the 1980s appear to have made it worse.*

the recovery could turn out to be too weak or too long delayed.

Uncertainty in predicting just how monetary policies will affect the economy has long plagued economists, but changes in the financial system during the 1980s appear to have made it worse.[1] Monetary policy now appears to have a less stimulative effect on housing and a more stimulative effect on net exports than was true in earlier decades. But these changes have made the strength of the overall impact of policy, and its timing, more unclear than ever.

Three changes during the 1980s appear to have made the demands for housing and residential construction less sensitive to movements in short-term interest rates and consequently to monetary policy. First, new federal laws removing legal ceilings on the rates that banks and thrift institutions can pay on deposits have wiped out the dramatic swings in housing construction that changes in interest rates formerly brought about. With the removal of ceilings, rising and falling interest rates affect credit availability and investment in housing less abruptly.

A second change that may have softened the impact of shifts in monetary policy on housing is the spread of mortgage-backed securities--bonds that are sold to the public, with the proceeds being invested in home mortgages. These securities accounted for 35 percent of residential mortgage debt in 1989, compared with 12 percent in 1980 and only 1 percent in 1970. As a result, changes in interest rates may have less effect on flows of credit to housing. The highly flexible yields on mortgage-backed securities allow housing to compete more effectively for funds when interest rates change.

A third structural change that could have affected the response of housing to monetary policy is the recent availability and popularity of adjustable-rate mortgages (ARMs). Financial deregulation at the start of the 1980s spurred the use of ARMs, and they now account for about 30 percent of outstanding residential mortgages. These instruments allow individuals to qualify more easily for home mortgages when interest rates are high because rates on ARMs are typically well below those on fixed-rate mortgages. Consequently, less "pent-up" demand for housing may be released when interest rates decline.

By contrast, recent changes in financial markets may have increased the influence of monetary policy on net exports. Normally, easier monetary policy increases net exports by affecting the international exchange value of the dollar. Although this has long been true, the strength of this economic impact may have grown recently because greater integration of international capital markets has in-

1. For further discussion of these changes, see Barry Bosworth, "Institutional Change and the Efficacy of Monetary Policy," *Brookings Papers on Economic Activity*, issue 1 (Washington, D.C.: Brookings Institution, 1989), pp. 77-123; George Kahn, "The Changing Interest Sensitivity of the U.S. Economy," in Federal Reserve Bank of Kansas City, *Economic Review*, vol. 74, no. 9 (November 1989), pp.13-34; and Eileen Mauskopf, "The Transmission Channels of Monetary Policy: How Have They Changed?" *Federal Reserve Bulletin*, vol. 76, no. 12 (December 1990), pp. 985-1008.

creased the sensitivity of exchange rates to fluctuations in interest rates.[2] At the same time, because it takes longer for the effects of lower interest rates to be transmitted through the net export channel, monetary policy may take longer to do its work.

All of these changes in the way monetary policy works have only made its effectiveness in helping to bring on a recovery in 1992 still more uncertain. As a result, a number of analysts recommend stronger actions to help ensure that the strength of the recovery will be adequate.

**Risks of Higher Inflation.** Recommendations of stronger monetary actions raise questions about the risks of an increase in inflation. If they are sustained, stimulative monetary actions can eventually increase inflation by raising demand for goods and services beyond the economy's capacity to meet them. Because market participants anticipate this effect, prices and interest rates may rise quickly in response to new monetary policies that are judged to be inflationary.

However, most economists discount the risk that strong monetary actions to strengthen the recovery in 1992 will provoke fears of an upsurge in inflation. They point out that the underlying rate of inflation has recently fallen below 4 percent, a low level by recent standards. Moreover, a margin of excess productive capacity is likely to persist for some time. Unemployment will remain relatively high, and enough factory capacity will remain unused to offer scope for increases in output. As a result, businesses should be able to produce goods to meet rising demands, forestalling increases in prices. Partly for this reason, some forecasts call for continued reductions in the rate of inflation over the next two years.

In any case, economists seem confident that the Federal Reserve can tighten its policy in time to head off any increase in inflation that might loom later in the recovery. Indeed, most expect that the central bank will start raising interest rates again in order not only to keep inflation from rising, but also to begin reducing it further.

*Any measures that the Congress enacts are not likely to strengthen the economy during the first half of 1992.*

## Fiscal Policy

Because the Federal Reserve has not yet succeeded in stimulating the economy, policymakers are considering a variety of fiscal policy actions aimed at accomplishing the task. At present, however, fiscal policy is handicapped in its ability to provide a quick boost to total demand. As a result, any measures that the Congress enacts are not likely to strengthen the economy during the first half of 1992. Nevertheless, quickly adopting a program of fiscal stimulus could strengthen the economy later this year and next. The need for long-term encouragement of saving implies that if fiscal policy measures are enacted, they should be designed to minimize the risk of persistently larger federal deficits.

Three types of fiscal actions that could strengthen the economy later this year and next include personal tax reductions to stimulate consumption, tax incentives for business investment, and financial assistance to the ailing state and local government sectors. In each case, the most effective type of fiscal stimulus is one that can be put in place quick-

2. For a discussion of the evidence on the increased sensitivity of exchange rates to interest rates, see Eileen Mauskopf, "The Transmission Channels of Monetary Policy: How Have They Changed?"

ly, acts rapidly, and promotes spending rather than saving. Fiscal measures that raise the federal deficit temporarily are generally less effective than those that raise it permanently, but such temporary measures are less likely to trouble financial markets and to conflict with the long-term policy goals of raising the national saving rate, the stock of productive capital, and future living standards.

## How Fiscal Policy Affects the Economy in the Short Term

The most straightforward tool for fiscal stimulus is an increase in federal purchases of goods and services, though this approach does not yield significant results quickly. These purchases add nearly dollar for dollar to the demand for domestic production (only a small amount typically goes on imported goods) and are thus a particularly effective form of fiscal stimulus, once they are established. Two factors limit the possibilities for increased purchases in the short run: the caps on discretionary purchases imposed by the Budget Enforcement Act of 1990, and the difficulty of quickly increasing spending beyond the levels that are already planned. The Congress and the President can agree on emergency spending programs beyond the confines of the act, but planning delays are still likely to be a hindrance.

In principle, accelerating already planned spending would avoid these planning delays (and can be ordered by the President alone, without any action by the Congress), but the scope for such action has proved minimal. In December 1991, the President ordered that about $10 billion in federal funds be made available for obligation more quickly. In most cases, however, this earlier availability is likely to have no significant effect on the timing of cash outlays. Moreover, even in the one case in which outlays will be more rapid--Department of Defense payments to contractors--spending will be advanced by no more than a week.

Increases in spending by state and local governments would add to total demand in the same way as increases in federal spending. In principle, the federal government could stimulate such spending by making restricted or unrestricted grants-in-aid. Some economists argue that state and local government spending could be increased without the planning delays inherent in raising federal spending. The states' grant and budget processes may, however, add their own delays. Moreover, some portion of added federal grants-in-aid may be used to finance purchases that would have been made anyway, thus reducing state and local taxes or adding to their cash balances.

Fiscal policy can also raise total demand by increasing after-tax personal income, which in turn stimulates private consumption. When the federal government lowers personal taxes or raises transfer payments to individuals, it increases the amount of after-tax income in the hands of households. Most of an increase in after-tax income usually is spent rather than saved and thus raises total demand and boosts economic growth in the short run.

The effectiveness of changes in taxes or transfer payments depends in part on who gets the money and on whether it is temporary or permanent. Generally, households spend a larger proportion of a tax cut or transfer payment when it mostly benefits those with relatively little current income and less ability to borrow against future income. A recent example of such an action is the extension of unemployment insurance benefits in November 1991, which is estimated to raise income for those who qualify by roughly $5 billion in fiscal year 1992. Most of these transfer payments are likely to be spent quickly, because they will be received by households who have experienced a long-term reduction in earned income.

By contrast, when those who are not so financially strapped benefit from a fiscal action, the impact on total demand is more likely to depend on whether the action is permanent or temporary. Permanent actions generally produce greater effects on total demand, unless they sharply raise expectations of future deficits and thus trigger a large increase in interest rates.

Another way in which fiscal policy can increase short-term economic growth is by reducing the cost of capital to stimulate business investment. In the past, the cost of capital has been lowered through such measures as a reduction in the corporate tax rate, accelerated tax depreciation schedules, and tax credits for investment. The cost of capital also declines when interest rates fall. Although it may be difficult for businesses to revise their investment plans quickly in response to new reductions in the cost of capital, they may be able to accelerate the timing of investments that they have already planned. As yet, investment has not responded to the lower interest rates caused by stimulative monetary policy. But this may simply reflect the fact that the cost of capital for long-term investments is less closely related to short-term interest rates, which are sharply lower than before the recession, than to long-term rates, which have fallen more moderately. Fiscal measures thus offer an opportunity to reduce capital costs further for long-lived as well as short-lived investments.

In general, fiscal policy actions must increase the federal deficit substantially in order to have much of an effect on total demand and short-term growth in output. When stimulative measures are combined with restrictive measures to produce a deficit-neutral package, the net effect on total demand is likely to be small and to depend on the differences between the effects of the separate measures. For example, since it is generally agreed that federal purchases have a larger impact than tax reductions on demand as a whole, a reduction in federal taxes financed by a decrease in current defense purchases would work to contract, rather than expand, the economy in the short run, although only by a little.

Changes in federal purchases, taxes, and transfer payments not only have different impacts on the level of output, but also achieve their maximum impacts at different speeds. Most large-scale, quarterly, statistical models of the national economy indicate that it takes a year or two for a fiscal policy change to exert its maximum effect on the level of output, although most of this impact is realized in the first year. After six months, federal purchases reach roughly three-quarters of their maximum impact. Nearly the same result holds true for transfer payments. By contrast, a somewhat more uncertain result is that personal tax reductions reach only about one-half of their maximum impact by the end of six months, but this pace might be accelerated somewhat if the change in personal taxes is anticipated before it is carried out.

Changes in fiscal policy affect total supply as well as demand. For example, a reduction in payroll or income tax rates can increase the overall supply of labor by raising the wage rate after taxes. In practice, however, most people do not have the option of deciding how many hours they will work in a week. Individuals who are financially responsible for the well-being of others may have little practical choice about whether or not to work and thus may not be particularly responsive to changes in payroll taxes. In fact, the effect of changes in tax rates on the number of hours worked by males in the prime of their working years seems to be negligible. By contrast, the group most affected seems to be people whose earnings tend to supplement the family income.[3]

3. See Robert K. Triest, "The Effects of Income Taxation on Labor Supply in the United States," *Journal of Human Resources*, vol. 25, no. 3 (Summer 1990), pp. 491-516. See also Robert K. Killingsworth, *Labor Supply* (New York: Cambridge University Press, 1983).

## The Stance of Fiscal Policy Now and in the Past

Fiscal policy during the current business cycle has not been the beneficial countercyclical force it was in most past periods following downturns. As discussed in Chapter 1, it is currently about neutral from the standpoint of several policy measures, including the standardized-employment deficit. This deficit is expected to be about the same share of GDP in the four quarters following mid-1991 (when a recovery seemed to be developing) as it was in the preceding four quarters. By contrast, fiscal policy stimulus averaged 0.8 percent of potential GDP during similar periods in the six preceding business cycles, even taking into account a small amount of fiscal restraint following the 1980 recession.

In large part, the lack of a stimulative fiscal stance now reflects the budgetary impact of the Omnibus Budget Reconciliation Act and Budget Enforcement Act of 1990. The reconciliation act lowers the federal deficit by about $500 billion during the 1991-1995 period. In addition, the Budget Enforcement Act places annual caps on discretionary spending and requires that entitlement and tax policy changes not raise the federal deficit. Without the deficit reductions resulting from the acts, and assuming no other fiscal policy changes, fiscal policy would now be slightly stimulative, although still less so than during most previous recessions.

## Factors Limiting the Effectiveness of Fiscal Policy Stimulus

Several factors limit the ability of fiscal policy to provide a quick boost to the weak recovery. They are:

- The inevitable time lags between a fiscal policy initiative and its ultimate impact on total demand;
- The restrictions imposed on fiscal policy changes by the Budget Enforcement Act;
- The possibility of an unusually sharp rise in interest rates that reflects uneasiness in financial markets about future fiscal policy if a fiscal stimulus is enacted into law; and
- The conflict between short-term economic gains and long-term economic costs.

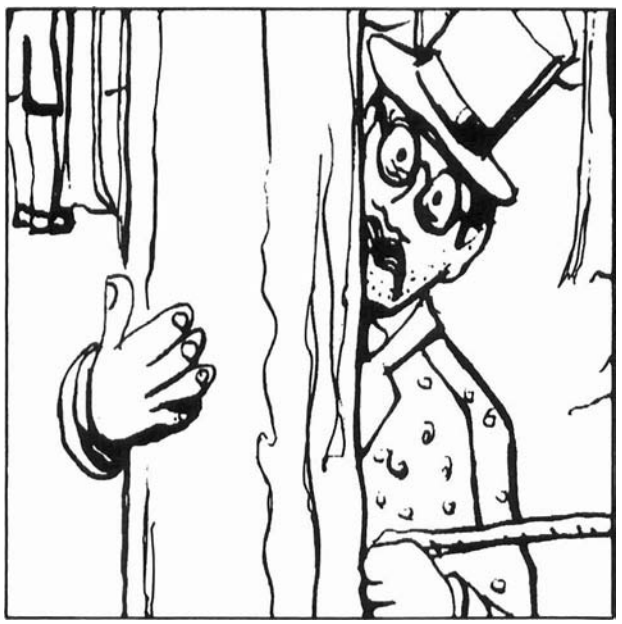
**Time Lags Affecting Fiscal Policy Effects.** All shifts in fiscal policy take time to make an impact. It takes time for the Congress and the Administration to agree on specific policy measures, for these policy changes to be carried out, and for the economy to respond fully to them. Because of these lags--especially those involving legislation--fiscal policy is unlikely to increase employment significantly during the first half of 1992. People still suffering from the recession may realize only a small amount of the fiscal stimulus in the few months immediately after enactment of a new fiscal policy, and the economy might not respond fully for one or two years. Once enacted, however, changes in fiscal policy affect total demand more rapidly than do monetary policy changes.[4]

To be sure, fiscal policy can sometimes affect the economy swiftly. This can happen when many people are convinced that a specific shift in policy will be made, and individuals respond in anticipation of the change. For example, people who expect a tax rebate may spend the money before they actually receive it by borrowing or drawing down savings.

4. Estimates of time lags are offered in Flint Brayton and Eileen Mauskopf, "Structure and Uses of the MPS Quarterly Econometric Model of the United States," *Federal Reserve Bulletin* (February 1987), pp. 93-109.

**The Budget Enforcement Act of 1990.** In order for a change in fiscal policy to stimulate short-term economic growth effectively, it must usually produce an increase in the federal deficit. But under the constraints of the Budget Enforcement Act of 1990, a change in fiscal policy cannot effectively increase the deficit. These constraints involve caps on discretionary spending as well as a requirement that changes in entitlement and tax policy not increase the deficit. Because of the caps on discretionary spending, any increase in a particular type of discretionary spending must be offset by action that holds total discretionary spending beneath its cap. The constraint on changes in entitlements and taxes means that if taxes are reduced or entitlements increased for some group or sector of the economy, the effect on the deficit must be offset by increases in taxes on other groups or reductions in entitlements. As a result of these provisions, a change in fiscal policy that conforms with the act is unlikely to stimulate the economy appreciably on a short-term basis.

Although the Budget Enforcement Act focuses mainly on long-term objectives, it does contain provisions that specifically address the potential need for fiscal policy actions that act in a countercyclical fashion. In particular, one provision enables the Congress, with the approval of the President, to waive the act's spending and deficit restrictions temporarily under two circumstances: when the growth of output has been less than 1 percent for two consecutive quarters, or when CBO or OMB projects that output in the upcoming year will decline for two consecutive quarters. The emergency provisions of the act are a less drastic route that would permit deficit-increasing fiscal policy measures. Together, the President and the Congress can declare specific fiscal actions on an emergency basis, thus exempting their budgetary impacts from the restrictions that the act imposes.



**Possible Jump in Interest Rates.** The ability of fiscal policy to stimulate short-term growth is also limited by the risk that financial markets might respond in an unusually adverse way, causing interest rates to rise precipitously. It is normal for a fiscal stimulus to be accompanied by some increase in interest rates, which partly offsets the effect of the policy change on short-term economic growth. Now, however, there is a chance that fiscal stimulus could produce an unusually large increase in interest rates, because of fears in financial markets that such an action could indicate abandonment of the long-term budgetary goals of the Budget Enforcement Act. If interest rates do rise sharply because of such fears, whatever stimulative impact the fiscal action may have had could be substantially reduced or even eliminated. The risk of a jump in interest rates is much less if investors are convinced that the increase in the federal deficit is only temporary.

**Short- Versus Long-Term Goals.** Stimulative policies, if allowed to persist beyond the immediate period of economic weakness, also risk conflict with long-term objectives. In good economic times, the government's taxing and spending policies should be designed so as to promote, rather than to retard, long-term economic growth and to promote efficiency in the use of resources. Policies that are undertaken for the purpose of short-term stimulus can undermine efforts to achieve these goals, although the problem is minimal if the policies are restricted to periods of weak total demand.

If stimulative policies are continued too long, they can reduce national saving, crowding out capital formation or increasing borrowing from abroad. One of the major problems affecting the long-term outlook for growth in productivity and living standards in the United States is the size of the federal deficit. When the federal government's spending exceeds what it collects in revenues, it must borrow, thus absorbing some of the nation's saving. But this saving is needed to finance the capital formation that helps to supply goods and services to future generations--what is not available from national saving must be supplied by borrowing from abroad, or capital formation must be reduced.

*One of the major problems affecting the long-term outlook for growth in productivity and living standards in the United States is the size of the federal deficit.*

When the economy is weak, however, increasing the federal deficit is not likely to reduce capital formation. Indeed, capital formation is likely to rise with fiscal stimulus in a weak economy, since increased total demand makes purchases of new capital equipment more profitable (a process known as the "accelerator"). This induced investment raises incomes and saving as well. The impact of federal borrowing on capital formation and growth therefore will not become a problem until the nation's economy has recovered from the recession.

Another way in which policies undertaken for short-term stimulus can undermine long-run objectives is by distorting the decisions of private firms and households. The objective of providing firms and investors with a "level playing field," and thus promoting efficiency in the use of capital resources, was at the heart of the Tax Reform Act of 1986. Some current proposals for immediate stimulus, however, favor certain types of investments or industries over others. Examples are investment tax credits or homebuying subsidies. If these distortions are temporary, their effects on efficient allocation of resources are probably not serious drawbacks.

From these points of view, it is desirable that any fiscal stimulus be temporary and that it not extend beyond the period of economic weakness (that is, it can extend into the recovery, but should cease before high levels of use of capacity are reached). Whether some kinds of stimulative measures are temporary or permanent can affect their potency. Personal tax cuts designed to increase consumption are usually less effective if they are temporary, although the degree of permanence matters less if the tax cut goes mostly to those with poor access to credit. In contrast, investment incentives can be more effective if they are temporary, since they encourage businesses to take advantage of the incentive and invest earlier than they had planned.

## Fiscal Policy Options for Promoting a Recovery

Despite these limitations on the ability of fiscal policy to restore the health of the economy quickly without compromising long-term economic objectives, promptly adopting some appropriate form of fiscal stimulus could bolster the strength of the recovery late in 1992 and in 1993 with perhaps only minimal adverse long-term effects.

The most effective fiscal policy actions are those that can be applied quickly, stimulate the economy rapidly rather than gradually, and encourage spending rather than saving. Examples of measures that could come close to meeting the criteria are personal tax rebates on 1991 tax liabilities, temporary investment tax credits for additional investment, and temporary unrestricted assistance to states and localities.

**Reducing Taxes to Stimulate Consumption.** A temporary reduction in personal taxes that is aimed at stimulating consumption can be carried out in several ways, including cutting personal tax rates; increasing allowable deductions, exemptions, and credits; or providing a rebate of taxes already accrued or paid. Of these, the tax rebate probably would be the fastest way of stimulating consumption, and is probably more convincingly a temporary measure in the viewpoint of financial markets. In addition, a tax rebate does not distort future decisions about work versus leisure and consumption versus saving, as some of the other options might.

Most of the fiscal stimulus of a tax rebate would occur in the first few months after it is enacted and put into effect, as taxpayers file their returns and receive refund checks. The stimulus might occur even sooner if consumers spend more in anticipation of a tax rebate.[5] In principle, a reduction in income or payroll taxes carried out through a reduction in tax withholding could boost consumption just as quickly by increasing expected after-tax income for the whole year. In practice, however, many individuals may not have the financial resources to respond to an increase in after-tax income that is spread throughout the year. They may respond more readily to a lump-sum boost from a tax rebate.

Because a broad-based tax rebate is a one-time boost to income after taxes, it would encourage consumption only about half as much as a permanent reduction in taxes.[6] The effectiveness of a rebate would be increased, however, if it could be targeted toward people who lack credit and have had to cut back consumption. As a result, rebates for taxpayers with relatively low-to-moderate incomes might be more effective than a broad-based rebate.

**Reducing Taxes to Stimulate Saving.** Although most types of personal tax reductions stimulate consumption, some--such as tax preferences for Individual Retirement Accounts (IRAs)--attempt mainly to stimulate saving. Tax incentives for saving do not contribute to total demand and thus do not promote short-term economic growth. In fact, tax incentives that are effective for saving would even be counterproductive for boosting short-term economic growth. Increases in personal saving would detract from rather than add to consumption, thus weakening rather than strengthening the recovery. When the economy has recovered, however, incentives that are effective in raising the rate of saving will once again become relevant for achieving long-term economic objectives.

Some proposals for IRAs, however, could boost total demand because they include provisions that enable taxpayers to withdraw money from savings accounts with little or no penalty for such purposes as purchasing a first home or financing a college education. In general, these options increase the liquidity of taxpayers because they offer access to money that was previously restricted. This increase in liquidity could help to boost total demand in the short term. In addition, withdrawals of funds for these purposes would raise federal revenues because they would be subject to

5. David W. Wilcox, "Income Tax Refunds and the Timing of Consumption Expenditures," Board of Governors of the Federal Reserve System (unpublished, 1987).

6. See Alan S. Blinder and Angus Deaton, "The Time Series Consumption Function Revisited," *Brookings Papers on Economic Activity*, issue 2 (Washington, D.C.: Brookings Institution, 1985), pp. 465-511.

income tax. The increase in revenue would not, however, squeeze the economy, since it would result from additional private spending, not from a higher tax on income.

**Tax Credits for Investment.** An investment tax credit is another fiscal measure that could strengthen economic recovery, especially if the credit is temporary and applies only to increases in investment. In general, a tax credit for investment, such as the one that was repealed by the Tax Reform Act of 1986, increases the demand for capital by reducing the cost of capital. It is generally recognized that an investment tax credit distorts the pattern of investment by favoring investment in equipment over investment in structures, and by favoring short-lived over long-lived equipment. But some analysts argue that a tax credit is still desirable because it lowers the overall tax on capital.

Making an investment tax credit temporary could increase its short-term impact on total demand. For example, if a credit was made available for only one year, firms would have an incentive to shift planned purchases of capital goods into the year in which the investment tax credit applies. Consequently, this fiscal measure would help to strengthen economic performance in the short term without detracting from capital formation over the long term.

The short-term effectiveness of a temporary investment tax credit per dollar of lost revenue could be enhanced if it applied only to increases in investment above some base period, such as the average of investment during the preceding three years. This restriction avoids rewarding some businesses--and thereby incurring a larger federal deficit--for making investments that they would make anyway. But a credit for additional investment would discriminate in favor of new and fast-growing businesses that invest in short-lived capital assets such as automobiles and computers. At the same time, it would discriminate against others: slow-growing businesses, those that have recently undertaken major investments, use mostly long-lived capital, and have experienced losses and thus do not expect to pay taxes anyway. In addition to these complications, making the credit apply only to investments above a base level would significantly add to administrative problems.

**Reducing Capital Gains Taxes.** Various proposals have been offered to reduce capital gains taxes. For the most part, these proposals have been viewed as means of raising investment and saving in the long run and channeling investment into high-growth sectors rather than boosting total demand in the short run. Nevertheless, a reduction in taxes on capital gains could have a positive effect on total demand if it stimulates investment without reducing consumption. If a reduction in capital gains taxes raises saving in the short run, however, it could even reduce rather than raise total demand.

**Grants to State and Local Governments.** Fiscal stimulus might take the form of increased federal aid to states and localities. Such aid could be general--without restrictions on how it is used--or restricted to specific purposes such as infrastructure repair and development, or the education and training of those in the labor force who are most apt to suffer underemployment.[7]

Proponents of unrestricted assistance argue that it is especially suited for quickly strengthening the economy because of the acute but temporary financial needs many states and localities face. Unrestricted aid could be used to avoid further reductions in state and local government spending or additional increases in taxes that might be needed to cope with budget deficits at state and local levels. Both of these results would help to keep total demand from falling further, and their stimulative effects could be dispensed

7. Countercyclical federal aid to states is discussed in Department of Labor, Office of Assistant Secretary for Policy Evaluation and Research, "Conference Report on Evaluating the 1977 Economic Stimulus Package" (1978). Also see Congressional Budget Office, *Temporary Measures to Stimulate Employment: An Evaluation of Some Alternatives* (September 1975).

immediately, avoiding the delays that normally accompany fiscal changes.

A similar argument was made for the countercyclical revenue-sharing program enacted in 1976, but in that case much of the money was not spent quickly. As they did in 1976, some states have already coped with their budget problems, and additional assistance to them might be used to reduce borrowing or to retire outstanding debt, neither of which would directly boost total demand. There seem to be far fewer states now than in 1976, however, that have already found a way to resolve their budget problems, so that federal assistance might be more effective now than it was 16 years ago.

An increase in grants to state and local governments that is restricted to specific purposes, such as the repair and development of infrastructure, or the education and training of disadvantaged groups in the labor force, generally would not be as effective as unrestricted aid in quickly boosting short-term growth. Attaining the long-term benefits that the restrictions are intended to serve would depend on the programs that were undertaken. Some analysts claim that restricting federal aid to education, training, or infrastructure projects would reduce the conflict between short-term and long-term economic objectives because improvement of the labor force and of the infrastructure adds to the national stock of productive resources.[8]

Aid tied to infrastructure projects may lack immediate impact because the time lag between the passage of legislation and the beginning of construction can be lengthy. The time lag could be shorter if states and localities have projects on the shelf that are simply awaiting funding. But many projects are still in the planning stage. Experience with local public works programs in 1976 indicates that anticipation of funds from a federal matching program can even slow short-term growth. State and local governments sometimes postpone projects they would otherwise fund to enable them to qualify for federal aid.[9]

By contrast, providing federal money for education, training, and related programs for the disadvantaged could have a fairly fast impact on total demand in the short term, depending on the design of the program. For example, the public-employment programs under Title VI of the Comprehensive Employment and Training Act of 1973 receive good marks for speed.[10] Given the stringent budgets now faced by most school districts, additional money here would probably be spent quickly for programs that have been or could be cut. Training programs that involve a lot of additional planning, however, are less likely to help the economy in the short run. Instead, they are most useful in resolving the structural problems in labor markets. Usually there are conflicts between setting up programs that quickly supply economic stimulus and those that will make significant structural improvements.

## Conclusions

Although the different indicators of monetary policy present a complex picture, the Federal Reserve has been easing its policy since before the recession began. But in view of a variety of factors now retarding economic recovery, more than the usual amount of monetary stimulus may be needed to get the economy going. The Federal Reserve has recognized this, and its further easing of monetary policy at the end of last year should begin to boost the economy's recovery in 1992.

8. Congressional Budget Office, *How Federal Spending for Infrastructure and Other Public Investments Affects the Economy* (July 1991).

9. See Edward Gramlich, "State and Local Budgets the Day After It Rained: Why Are the Surpluses So High?" *Brookings Papers on Economic Activity*, issue 1 (Washington, D.C.: Brookings Institution, 1978), pp. 191-216.

10. See Michael Wiseman, "Public Employment As Fiscal Policy," *Brookings Papers on Economic Activity*, issue 1 (Washington, D.C.: Brookings Institution, 1976), pp. 67-115.

Fiscal measures cannot do much to stimulate short-term economic growth during the next few months and are fraught with the danger that they might undermine long-term goals of economic policy. At most, such measures could strengthen the recovery in the latter half of 1992 and in 1993. The most effective type of fiscal action would be one that acts quickly, promotes spending rather than saving, and increases the federal deficit only temporarily. Fiscal measures that might satisfy these criteria include personal tax rebates, temporary income and payroll tax rate reductions, a temporary credit for new investment, and temporary, unrestricted financial assistance to states and localities.

# Appendixes

Appendix A

# Sequestration Preview Report

The Budget Enforcement Act of 1990 requires the Congressional Budget Office to issue a sequestration preview report five days before the President's budget submission. This year's preview report must contain estimates of the following items:

- The discretionary spending limits for fiscal years 1992 through 1995 and any adjustments to those limits,
- The amount by which direct spending or receipt legislation enacted after the Budget Enforcement Act has increased or decreased the deficit, and
- The maximum deficit amount.

Chapter 2 of this volume includes a brief summary of the provisions of the Budget Enforcement Act.

## Discretionary Sequestration Report

CBO's estimates of the limits on discretionary spending in the three categories--defense, international, and domestic--for fiscal years 1992 and 1993 are shown in Table A-1. Table A-2 provides CBO's estimates of the limits on total discretionary spending for fiscal years 1994 and 1995.

The Budget Enforcement Act states that certain adjustments must be made at specified times to the discretionary spending limits. In its final sequestration report for fiscal year 1992, issued on January 6, 1992, CBO revised the limits published in previous reports to reflect the adjustments required at the end of a Congressional session, as listed in section 251 (b)(2) of the Balanced Budget Act. These adjustments comprised appropriations designated as emergency needs in the Disaster Supplemental Appropriation (Public Law 102-229), Internal Revenue Service funding above the June 1990 baseline, and the special allowances for international and domestic discretionary new budget authority.

In this report, CBO further revises the limits to reflect the adjustments required at the beginning of a Congressional session, as listed in section 251(b)(1). These adjustments stem from reestimates of the subsidy cost of discretionary credit programs, changes in budgetary concepts and definitions, and differences between actual and expected inflation for fiscal year 1991.

### Subsidy Reestimates

The Federal Credit Reform Act of 1990 ended cash flow accounting and instituted subsidy-cost accounting for federal credit programs. Starting in fiscal year 1992, subsidy costs for discretionary credit programs are subject to annual appropriations and are included in the discretionary spending limits.

Before credit reform, federal credit activities were controlled by limits on the volume of new direct loans and loan guarantees. Now, loan programs are controlled not by volume limits but by appropriations; no direct loan obligation or loan guarantee commitment may be made unless budget authority has been appropriated to cover the government's long-run cost. To smooth the transition to the new system, the Federal Credit Reform Act provided that the appropriations committees would be protected against changes in subsidy cost estimates in 1993 and 1994. To the extent that the subsidy cost of discretionary loan

**Table A-1.**
**CBO Estimates of Discretionary Spending Limits for Fiscal Years 1992 and 1993 (In millions of dollars)**

| | 1992 | | 1993 | |
|---|---|---|---|---|
| | Budget Authority | Outlays | Budget Authority | Outlays |
| **Defense Discretionary** | | | | |
| Limits as of August 20, 1991 | 291,361 | 302,505 | 291,480 | 295,023 |
| Adjustments | | | | |
| Emergency 1992 appropriations | 10,356 | 5,675 | 0 | 1,939 |
| Limits as of January 3, 1992 | 301,717 | 308,180 | 291,480 | 296,962 |
| Adjustments | | | | |
| Change in 1991 inflation | n.a. | n.a. | -4,065 | -2,602 |
| Limits as of January 22, 1992 | 301,717 | 308,180 | 287,415 | 294,360 |
| **International Discretionary** | | | | |
| Limits as of August 20, 1991 | 20,917 | 19,257 | 21,643 | 19,825 |
| Adjustments | | | | |
| Special allowance for discretionary new budget authority | 1,248 | 574 | 0 | 250 |
| Limits as of January 3, 1992 | 22,165 | 19,831 | 21,643 | 20,075 |
| Adjustments | | | | |
| Subsidy reestimates | n.a. | n.a. | -92 | 22 |
| Category changes | | | | |
| P.L. 480 loans | n.a. | n.a. | 0 | -38 |
| Change in 1991 inflation | n.a. | n.a. | -279 | -128 |
| Total | 0 | 0 | -371 | -144 |
| Limits as of January 22, 1992 | 22,165 | 19,831 | 21,272 | 19,931 |

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

(Continued)

programs is estimated to be higher or lower in 1993 than was estimated in 1992, the discretionary spending limits will be increased or decreased, so that the 1992 volume of credit activity may be continued in 1993 without having to affect other discretionary programs.

For the international category, CBO estimates that subsidy rates will be lower in 1993 than in 1992 for the Export-Import Bank (Eximbank) but higher for foreign military credit sales, Public Law 480 food loans, and various smaller programs. Overall, the adjustment to

**Table A-1.**
**Continued**

| | 1992 | | 1993 | |
|---|---|---|---|---|
| | Budget Authority | Outlays | Budget Authority | Outlays |
| **Domestic Discretionary** | | | | |
| Limits as of August 20, 1991 | 198,526 | 211,198 | 205,933 | 223,359 |
| Adjustments | | | | |
| Emergency 1992 appropriations | 2,793 | 1,522 | 0 | 1,068 |
| Internal Revenue Service funding above the June 1990 baseline | 172 | 169 | 0 | 3 |
| Special allowance for discretionary new budget authority | 1,580 | 838 | 0 | 490 |
| Total | 4,545 | 2,529 | 0 | 1,561 |
| Limits as of January 3, 1992 | 203,071 | 213,727 | 205,933 | 224,920 |
| Adjustments | | | | |
| Subsidy reestimates | n.a. | n.a. | 436 | 384 |
| Category changes | | | | |
| Rural electric loans | n.a. | n.a. | 0 | -12 |
| Strategic Petroleum Reserve | n.a. | n.a. | 0 | 43 |
| Wetlands reserve | n.a. | n.a. | -62 | -23 |
| Agricultural Stabilization and Conservation Service | n.a. | n.a. | 746 | 743 |
| Section 202 housing conversions | n.a. | n.a. | 0 | 348 |
| Highway obligations | n.a. | n.a. | 0 | -1,844 |
| Rental rehabilitation grants | n.a. | n.a. | 0 | -80 |
| Bureau of Indian Affairs trust funds | n.a. | n.a. | 0 | -1 |
| Interim assistance to states | n.a. | n.a. | -1,123 | -359 |
| Funds for strengthening markets | n.a. | n.a. | 0 | -22 |
| Assets forfeiture fund | n.a. | n.a. | -50 | -20 |
| Senate pay raise | n.a. | n.a. | -3 | -3 |
| Other changes in concepts | | | | |
| Pension Benefit Guaranty Corporation | n.a. | n.a. | 0 | -30 |
| Offsetting collections | n.a. | n.a. | 242 | 0 |
| Change in 1991 inflation | n.a. | n.a. | -2,752 | -1,459 |
| Total | 0 | 0 | -2,566 | -2,335 |
| Limits as of January 22, 1992 | 203,071 | 213,727 | 203,367 | 222,585 |

budget authority is negative, because Eximbank dominates the totals; the adjustment to outlays is positive, however, because Eximbank loans are disbursed much more slowly than those of Public Law 480 and other international progams.

For the domestic category, the adjustment to subsidy costs is positive, reflecting increases in estimated subsidy rates for modification of Rural Electrification Administration direct loans and for Federal Housing Administration loan guarantees. The defense category contains no credit programs.

**Table A-2.**
**CBO Estimates of Discretionary Spending Limits for Fiscal Years 1994 and 1995 (In millions of dollars)**

| | 1994 | | 1995 | |
|---|---|---|---|---|
| | Budget Authority | Outlays | Budget Authority | Outlays |
| Limits as of August 20, 1991 | 518,098 | 537,511 | 524,980 | 542,903 |
| Adjustments | | | | |
| Emergency 1992 appropriations | 0 | 1,038 | 0 | 407 |
| Special allowance for discretionary new budget authority | 0 | 389 | 0 | 131 |
| Total | 0 | 1,427 | 0 | 538 |
| Limits as of January 3, 1992 | 518,098 | 538,938 | 524,980 | 543,441 |
| Adjustments | | | | |
| Subsidy reestimates | 358 | 398 | 371 | 387 |
| Category changes | | | | |
| P.L. 480 loans | 0 | -38 | 0 | -35 |
| Rural electric loans | 0 | -12 | 0 | -9 |
| Strategic Petroleum Reserve | 0 | 12 | 0 | 0 |
| Wetlands reserve | -62 | -27 | -62 | -32 |
| Agricultural Stabilization and Conservation Service | 773 | 770 | 801 | 798 |
| Section 202 housing conversions | 0 | 348 | 0 | 0 |
| Highway obligations | 0 | -535 | 0 | -161 |
| Rental rehabilitation grants | 0 | -70 | 0 | 0 |
| Bureau of Indian Affairs trust funds | 0 | -1 | 0 | 0 |
| Funds for strengthening markets | -22 | -2 | -22 | 0 |
| Assets forfeiture fund | -30 | -32 | -72 | -51 |
| Senate pay raise | -3 | -3 | -3 | -3 |
| Other changes in concepts | | | | |
| Pension Benefit Guaranty Corporation | 0 | -31 | 0 | -32 |
| Offsetting collections | 251 | 0 | 261 | 0 |
| Change in 1991 inflation | -7,324 | -6,006 | -7,620 | -7,190 |
| Total | -6,059 | -5,229 | -6,346 | -6,328 |
| Limits as of January 22, 1992 | 512,039 | 533,709 | 518,634 | 537,113 |

SOURCE: Congressional Budget Office.

## Changes in Budgetary Concepts and Definitions

The Office of Management and Budget and the Budget Committees have determined that all changes in law made by appropriation bills, even changes in direct spending programs, are to be included in the discretionary spending totals for the budget year. Similarly, all changes in law made by bills reported by authorizing committees, even changes in discretionary programs, are to be shown on the pay-as-you-go scorecard. When appropriation bills affect direct spending or when authorizing legislation affects discretionary spending, however, the discretionary spending limits must be adjusted in later years so that the appropriations committees are held responsible for their actions and are not helped or hurt by the actions of other Congressional committees.

For example, the Intermodal Surface Transportation Act was a direct spending bill reported by the House Committee on Public Works and Transportation and the Senate Committee on Environment and Public Works. But it had the effect of reducing outlays for federal-aid highways, which are considered discretionary. In order to make sure that the appropriations committees do not benefit from the reduction in highway outlays brought about by the authorizing committees, the domestic discretionary spending limits must be reduced in the 1993-1995 period.

Similarly, the Labor-Health and Human Services appropriation bill for 1992 increased 1993 budget authority and outlays for interim assistance to states for legalization of aliens, a direct spending program. In this case, the domestic discretionary spending limits must be reduced in 1993 in order to hold the appropriations committees accountable for the effects of their actions. Other instances in which the 1992 appropriation bills increased direct spending programs in later years involve Public Law 480 agricultural loans, rural electric loans, the wetlands reserve, rental rehabilitation grants, Bureau of Indian Affairs trust funds, funds for strengthening markets, the assets forfeiture fund, and the compensation of Senators.

In three cases--the Strategic Petroleum Reserve, the Agricultural Stabilization and Conservation Service, and section 202 housing conversions--actions by the appropriations committees reduced direct spending programs in 1993 and later years. Such changes require increases in the discretionary spending limits.

Two conceptual changes in the discretionary spending limits correct previous errors. First, the portion of the administrative expenses of the Pension Benefit Guaranty Corporation not limited by appropriations was incorrectly recorded as discretionary in 1992. In future years, this item should be included in direct spending, and the domestic discretionary spending limits should be correspondingly reduced. Second, under the Budget Enforcement Act, budget authority must be scored for legislation permitting additional spending from offsetting collections. The discretionary caps for 1992 and beyond should have been adjusted last year for this new procedure, but they were not, and this omission should now be corrected for 1993 through 1995.

## Change in 1991 Inflation

The discretionary spending limits are also adjusted for differences between actual and expected inflation for the most recently completed fiscal year. The Budget Enforcement Act assumed that the gross national product (GNP) implicit price deflator would increase by 5.2 percent in fiscal year 1991. This inflation assumption was developed by the Office of Management and Budget in late September 1990, soon after Iraq invaded Kuwait, and received little or no Congressional review. OMB not only assumed that the invasion would increase oil prices sharply, but the assumed price increase was substantially larger than most private forecasters expected.

In fact, oil prices in fiscal year 1991 were lower than in 1990, and OMB seriously overestimated the inflation rate. The actual rate of increase in the GNP deflator was only 3.9 percent. This miscalculation necessitates a reduction of roughly 1.3 percent in the budget authority limits for 1993 through 1995 and corresponding reductions in the outlay limits. If inflation remains low, similar reductions could occur in the next two years.

## Pay-As-You-Go Sequestration Report

Table A-3 shows CBO's estimates of the budgetary effects of direct spending and receipt legislation enacted since the Budget Enforcement Act took effect. By CBO's reckoning, this legislation increased the deficit by $6 million in 1991 and $752 million in 1992, and a pay-as-you-go sequestration would have been required in 1992 to eliminate the excess. OMB's estimates are the final word, however, for purposes of the Budget Enforcement Act, and OMB's final sequestration report for 1992 showed no increase in the deficit and no need for sequestration.

At present, CBO's estimates show a net reduction of $1,762 million in the deficit for fiscal year 1993. This deficit reduction is more than accounted for by the Intermodal Surface Transportation Act. Several Members of Congress, however, have suggested that this is an unintended result and have indicated that they will attempt to amend the act to make it deficit neutral. Excluding the Intermodal Surface Transportation Act, CBO's estimate shows a small net increase of $36 million in the 1993 deficit.

## Deficit Sequestration Report

The estimated maximum deficit amounts equal the projected on-budget baseline deficits, assuming that discretionary spending is held to the adjusted limits, minus any net deficit increases or decreases resulting from legislation that affects direct spending or receipts. CBO's current estimates of the maximum deficit amounts, using the economic and technical estimating assumptions described elsewhere in this volume, are shown in Table A-4. These figures exclude the special budget authority allowances for 1993, adjustments for actual inflation affecting 1994 and 1995, and other changes in the discretionary spending limits that will not be made until later. As a result, they differ slightly from the on-budget deficits shown in the rest of this report. CBO's estimates of the maximum deficit amount have increased by $39 billion for 1993, $19 billion for 1994, and $33 billion for 1995, as Table A-4 shows. These changes are similar in size to the economic and technical changes in the total deficit discussed in Chapter 2 and stem from the same factors.

**Table A-3.**
**Budgetary Effects of Direct Spending and Receipt Legislation Enacted Since the Budget Enforcement Act (By fiscal year, in millions of dollars)**

| Legislation | 1991 | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|---|
| Extending IRS Deadline for Desert Storm Troops (P.L. 102-2)[a] | 1 | 5 | 0 | 0 | 0 |
| Veterans Education and Employment Programs (P.L. 102-25) | 2 | 2 | 2 | 2 | 1 |
| Persian Gulf Conflict Supplemental Authorization and Personnel Benefit Act (P.L. 102-25) | 0 | 0 | 0 | 145 | 170 |
| Higher Education Technical Amendments (P.L. 102-26) | 3 | -56 | 5 | b | b |
| Veterans Affairs Health-Care Personnel Act (P.L. 102-40) | b | b | 0 | 0 | 0 |
| Veterans Housing Amendments (P.L. 102-54) | 0 | 5 | 3 | 1 | 0 |
| Veterans' Benefits Programs Improvement Act (P.L. 102-86) | b | 3 | 3 | 3 | 3 |
| Intelligence Authorization Act, FY 1991 (P.L. 102-88)[a] | b | b | b | b | b |
| Veterans' Educational Assistance Amendments (P.L. 102-127) | 0 | b | b | b | 10 |
| Extend Most-Favored-Nation Status to Bulgaria (P.L. 102-158)[a] | 0 | 2 | 0 | 0 | 0 |
| Emergency Unemployment Compensation Act (P.L. 102-164)[a] | 0 | 1,225 | -68 | -65 | -65 |
| Civil Rights Act (P.L. 102-166) | 0 | 0 | 1 | 5 | 5 |
| Provide Permanent Most-Favored-Nation Status to Czechoslovakia and Hungary (P.L. 102-182)[a] | 0 | 522 | 17 | 17 | 17 |
| Intelligence Authorization Act, FY 1992 (P.L. 102-183)[a] | 0 | b | b | b | b |
| National Defense Authorization Act (P.L. 102-190) | 0 | -7 | -19 | -19 | -19 |
| Extend Most-Favored-Nation Status to the Soviet Union (P. L. 102-197)[a] | 0 | 22 | 0 | 0 | 0 |
| James Madison Memorial Fellowship Act (P.L. 102-221) | 0 | b | 1 | 1 | 1 |
| Tax Extension Act (P.L. 102-227)[a] | 0 | -405 | 46 | 308 | -170 |
| San Carlos Indian Irrigation Project Divestiture Act (P.L. 102-231) | 0 | -2 | 7 | -1 | -1 |
| Resolution Trust Corporation Refinancing Act (P.L. 102-233) | 0 | 25 | 37 | 42 | 41 |
| Food, Agriculture, Conservation, and Trade Act Amendments (P.L. 102-237) | 0 | -2 | 1 | 0 | -1 |
| Intermodal Surface Transportation Act (P.L. 102-240) | 0 | -590 | -1,798 | -328 | 0 |
| Comprehensive Deposit Insurance Reform Act (P.L. 102-242) | 0 | 3 | 0 | 0 | -1 |
| Total Change in the Deficit | 6 | 752 | -1,762 | 111 | -9 |

SOURCE: Congressional Budget Office.

NOTES: IRS = Internal Revenue Service; P.L. = Public Law.

The following bills affected direct spending or receipts but did not increase or decrease the deficit in any year through 1995: Veterans' Compensation Amendments (P.L. 102-3), Agent Orange Act (P.L. 102-4), Resolution Trust Corporation Funding Act (P.L. 102-18), Rehabilitation Act Amendments (P.L. 102-52), Emergency Unemployment Compensation Act (P.L. 102-107), Armed Forces Immigration Adjustment Act (P.L. 102-110), Veterans' Compensation Rate Amendments (P.L. 102-152), Patent and Trademark Office Authorization Act (P.L. 102-204), Chattahoochee Forest Protection Act (P.L. 102-217), Health Education Assistance Loans Ceiling (P.L. 102-222), Miscellaneous Immigration Amendments (P.L. 102-232), Medicaid Amendments (P.L. 102-234), Permit Secretary of HHS to Waive Certain Recovery Requirements (P.L. 102-239), and Coast Guard Authorization Act (P.L. 102-241).

a. This law affected receipts. Reductions in receipts are shown as positive because they increase the deficit.

b. Less than $500,000.

**Table A-4.**
**CBO Estimates of Maximum Deficit Amounts (By fiscal year, in billions of dollars)**

| | 1992 | 1993 | 1994 | 1995 |
|---|---|---|---|---|
| CBO Estimate as of August 15, 1991 | 411 | 347 | 317 | 252 |
| Changes | | | | |
| Emergency appropriations | 7 | 3 | 1 | a |
| Other adjustments | 2 | 1 | a | a |
| Debt service | a | 1 | 1 | 1 |
| Total | 9 | 5 | 3 | 2 |
| CBO Estimate as of January 3, 1992 | 420 | 351 | 320 | 254 |
| Changes | | | | |
| Economic and technical reestimates | -16 | 39 | 19 | 33 |
| CBO Estimate as of January 22, 1992 | 404 | 391 | 339 | 286 |

SOURCE: Congressional Budget Office.

a. Less than $500 million.

Appendix B

# An Analysis of Congressional Budget Estimates

The federal deficit in 1991 totaled $269 billion, only about $15 billion more than the Congress expected when it wrapped up the budget summit agreement in the fall of 1990. Unfortunately, the small overrun masks some bad news. In 1991, revenues deteriorated while spending on many benefit programs climbed sharply. These developments worsened the deficit. Some temporary good news--a slowdown in deposit insurance spending and the receipt of billions of dollars from foreign nations to help cover the costs of Operations Desert Shield and Desert Storm--merely obscured this fundamental deterioration in the budgetary picture.

## The Budget Resolution for Fiscal Year 1991

As the budget cycle for fiscal year 1991 began, the Balanced Budget and Emergency Deficit Control Reaffirmation Act (better known as Gramm-Rudman-Hollings II) governed the budget process. It set a maximum deficit in fiscal year 1991 of $64 billion. The President's budget, submitted in January 1990, met the limit on paper by using highly optimistic economic and technical assumptions to underpin its estimates. By late spring, however, it was clear to all that these assumptions were patently unrealistic. The Administration and top Congressional leaders began budget summit negotiations that lasted for almost five months. On September 30--the eve of the new fiscal year--they announced a deficit reduction package, agreeing on the contours of a five-year plan to cut the deficit by almost $500 billion.

When the summit agreement was first presented to the House of Representatives, in the form of a concurrent resolution on the budget, it was rejected. With some modifications, however, a budget resolution was ratified by the House on October 8 and by the Senate the next day. Because Gramm-Rudman-Hollings II was still law, the resolution claimed to reach the official $64 billion deficit target simply by copying assumptions from the Administration's January budget. But it was widely recognized that this method of meeting the target was out of the question and that the 1991 deficit would likely reach about $250 billion. Congressional committees labored over the next three weeks to complete appropriation action and a mammoth reconciliation package to carry out the summit's instructions. Soon after they were finished, CBO tallied up the legislators' actions and said that the expected deficit in 1991 was $253 billion.[1]

1. Congressional Budget Office, "The 1990 Budget Agreement: An Interim Assessment," CBO Paper (December 1990).

**Why Analyze the Summit Agreement?** Rather than analyze the official October 1990 budget resolution, and its unrealistic deficit of $64 billion, CBO has opted to analyze why the deficit differed from the more realistic figure of $253 billion. This, after all, was what policymakers believed they were accomplishing. Table B-1 shows why the actual deficit exceeded $253 billion.

**Changes in Policies.** Subsequent policy changes not explicitly incorporated in the summit agreement reduced the deficit by about $19 billion in 1991. Nearly all were associated with Operations Desert Shield and Desert Storm, which the budget summit agreement recognized as an emergency. Revenues declined by about $700 million, because an executive order made the wages of some service members stationed in the Persian Gulf area partially exempt from income tax. Spending for Operation Desert Storm totaled an estimated $23 billion in 1991 (and will cost more in 1992 and beyond, as the Defense Department replaces and repairs weapons and materiel used in the conflict). Such spending is not segregated in outlay data but is simply part of ordinary defense accounts--for personnel, operation and maintenance, and so forth. CBO thus estimates Desert Storm-related spending by looking at a variety of clues. And in 1991, contributions from foreign nations to help finance the operation brought in $43 billion. Other policy changes principally reflect emergency aid to Israel and Iraq's Kurds, plus debt service savings.

**Economic Factors.** Although forecasters expected a recession in the aftermath of the invasion of Kuwait, they anticipated that it would be short and shallow. Instead, it

**Table B-1.**
**Sources of Differences Between Actual Budget Totals and Budget Resolution Totals for Fiscal Year 1991 (In billions of dollars)**

| | Reasons for Differences | | | |
|---|---|---|---|---|
| | Policy | Economic | Technical | Total |
| Revenues | -0.7 | -31.4 | -23.6 | -55.7 |
| Outlays | | | | |
| Defense | | | | |
| Desert Storm spending | 22.7 | 0 | 0 | 22.7 |
| Desert Storm contributions | -43.2 | 0 | 0 | -43.2 |
| Other | 0 | 0 | -6.8 | -6.8 |
| International discretionary | 1.2 | 0 | -0.2 | 1.0 |
| Domestic discretionary | 0.7 | 0 | -4.2 | -3.5 |
| Entitlements and other mandatory spending | 0.3 | 3.0 | 15.1 | 18.4 |
| Deposit insurance[a] | 0 | 0 | -28.5 | -28.5 |
| Net interest[a] | -1.2 | -2.2 | 3.8 | 0.5 |
| Offsetting receipts | 0 | 0 | -1.0 | -1.0 |
| Total | -19.5 | 0.8 | -21.7 | -40.4 |
| Deficit | -18.7 | 32.3 | 1.8 | 15.3 |

SOURCE: Congressional Budget Office.

NOTE: Differences are actual outcomes less budget resolution assumptions.

a. The estimates for deposit insurance and net interest are adjusted for about $3.4 billion in interest paid by two deposit insurance agencies, the Resolution Trust Corporation and the Bank Insurance Fund, to the Federal Financing Bank (an arm of the Treasury Department). These payments are intrabudgetary and do not affect total spending or the deficit.

proved to be deeper and more stubborn. The economy's weaker-than-expected performance dampened revenues by an estimated $31 billion, principally in lower individual income tax, social insurance, and corporation income tax collections. The feeble economy also boosted spending on benefit programs; but a decline in interest rates saved several billion dollars in debt service costs. In sum, the economy's failure to live up to expectations swelled the 1991 deficit by $32 billion.

**Technical Factors.** Technical factors accounted for just $2 billion of the deficit error, but this figure is deceptive. Revenues deteriorated and benefit spending surged even more than the economy's weak performance could readily explain. Revenues suffered by an estimated $24 billion as collections came in well below expectations, particularly around the critical April tax deadlines. Most of the shortfall came in revenue from capital gains realized in 1990. Information on realizations from capital gains is not available until the end of the next year, and CBO had to depend on 1988 data for its projections. And entitlements topped expectations by $15 billion, with two-thirds of the overrun in Medicaid and Medicare. Offsetting these items, deposit insurance spending fell about $28 billion short of expectations, partly because of delays in enacting necessary funding. More modest slowdowns occurred in defense and nondefense discretionary programs.

# Budget Resolutions in 1980 Through 1991: A Retrospective

Fiscal year 1991 marked the 12th straight year in which the deficit topped the budget resolution figure. Differences between the budget resolution totals and actual outcomes are shown in Table B-2, where they are split into their underlying sources: policy, economic, or technical. The figures for 1991 are not strictly comparable with those for earlier years, however. The budget resolutions for 1980 through 1990 were typically passed well before the start of the fiscal year--in contrast with 1991's budget summit agreement.

Fiscal year 1991 was only the third time in this 12-year period that policy actions reduced the deficit by more than the budget resolution contemplated. In 1991, Operation Desert Storm was the reason. The only other occasions were 1982 (the first Reagan Administration budget), when revenues were cut by less than the budget resolution permitted, and 1987, when the Tax Reform Act of 1986 brought in a surge of extra money from capital gains realizations. In all other years, policy actions fell short of the budget resolution's goals.

Economic and technical errors tended overwhelmingly to drive the deficit higher than the budget resolution provided for. Economic errors were greatest in 1982 and 1983, as the nation experienced its deepest recession since the 1930s, and soared again in 1990 and 1991. Technical errors have boosted the deficit in all years since 1986, and in four of the six years before that. The huge technical error in 1990 mainly reflected deposit insurance spending, as the budget resolution adopted one year earlier continued to assume that savings and loan resolutions would not be very costly and the outlays could conveniently be shunted off-budget.

In 1986 through 1990, the budget process was driven by fixed deficit targets that created enormous incentives to understate projected deficits. During this period, all budget resolutions used assumptions that were thought even at the time to be too optimistic. The new Budget Enforcement Act banished much of the incentive to understate projected deficits. By analyzing the summit agreement for fiscal year 1991, CBO paints a realistic picture of what policymakers thought they had accomplished and what went otherwise.

**Table B-2.**
**Sources of Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1991 (In billions of dollars)**

| | Policy | Economic | Technical | Total |
|---|---|---|---|---|
| | | **Revenues** | | |
| 1980 | 6.2 | 8.4 | -3.5 | 11.1 |
| 1981 | -3.7 | 5.0 | -12.6 | -11.2 |
| 1982 | 13.0 | -51.9 | -1.1 | -40.0 |
| 1983 | -4.6 | -58.0 | -2.7 | -65.3 |
| 1984 | -13.7 | 4.5 | -3.9 | -13.1 |
| 1985 | -0.2 | -20.0 | 3.3 | -16.8 |
| 1986 | -1.5 | -23.0 | -2.1 | -26.6 |
| 1987 | 22.1 | -27.0 | 6.7 | 1.7 |
| 1988 | -10.9 | 3.6 | -16.5 | -23.8 |
| 1989 | 0.7 | 33.5 | -7.8 | 26.4 |
| 1990 | -7.0 | -36.5 | 9.4 | -34.0 |
| 1991[a] | -0.7 | -31.4 | -23.6 | -55.7 |
| Average Difference | b | -16.1 | -4.5 | -20.6 |
| Average Absolute Difference | 7.0 | 25.2 | 7.8 | 27.2 |
| | | **Outlays** | | |
| 1980 | 19.6 | 12.4 | 15.6 | 47.6 |
| 1981 | 24.5 | 6.4 | 16.0 | 46.9 |
| 1982 | 1.2 | 24.1 | 7.7 | 32.9 |
| 1983 | 17.6 | 0.5 | 8.1 | 26.2 |
| 1984 | 1.5 | 7.1 | -18.0 | -9.4 |
| 1985 | 22.8 | -5.2 | -12.9 | 4.8 |
| 1986 | 14.2 | -12.1 | 20.1 | 22.2 |
| 1987 | 6.8 | -11.9 | 13.0 | 7.9 |
| 1988 | -2.0 | 11.7 | 12.0 | 21.7 |
| 1989 | 17.5 | 13.9 | 11.8 | 43.2 |
| 1990 | 13.0 | 13.0 | 59.0 | 85.0 |
| 1991[a] | -19.5 | 0.8 | -21.7 | -40.4 |
| Average Difference | 9.8 | 5.1 | 9.2 | 24.1 |
| Average Absolute Difference | 13.4 | 9.9 | 18.0 | 32.4 |
| | | **Deficit** | | |
| 1980 | 13.4 | 4.0 | 19.1 | 36.6 |
| 1981 | 28.2 | 1.4 | 28.6 | 58.1 |
| 1982 | -11.8 | 76.0 | 8.8 | 72.9 |
| 1983 | 22.2 | 58.5 | 10.8 | 91.5 |
| 1984 | 15.2 | 2.7 | -14.1 | 3.7 |
| 1985 | 23.0 | 14.8 | -16.2 | 21.6 |
| 1986 | 15.7 | 10.9 | 22.2 | 48.8 |
| 1987 | -15.3 | 15.1 | 6.3 | 6.2 |
| 1988 | 8.9 | 8.1 | 28.5 | 45.5 |
| 1989 | 16.8 | -19.7 | 19.6 | 16.8 |
| 1990 | 20.0 | 49.5 | 49.6 | 119.1 |
| 1991 | -18.7 | 32.3 | 1.8 | 15.3 |
| Average Difference | 9.8 | 21.1 | 13.8 | 44.7 |
| Average Absolute Difference | 17.4 | 24.4 | 18.8 | 44.7 |

SOURCE: Congressional Budget Office.

NOTE: Differences are actual outcomes less budget resolution assumptions.

a. Based on the fiscal year 1991 budget summit agreement, as assessed by CBO in December 1990.

b. Less than $50 million.

# The Federal Sector of the National Income and Product Accounts

In addition to the usual budget presentation, the economic influence of the federal government can be measured through the national income and product accounts (NIPAs). The NIPAs provide a picture of government activity in terms of its production, distribution, and use of output. This approach recasts the government's transactions into categories that affect gross domestic product, income, and other macroeconomic aggregates, thereby helping to trace the relationship between the federal sector and other areas of the economy.

## Relationship Between the Budget and the NIPAs

A handful of major differences distinguish the NIPA versions of federal receipts and expenditures from their budget counterparts. Netting and grossing adjustments move selected offsets against outlays from the spending to the receipts side of the NIPAs (see Table C-1). The budget records these receipts as negative outlays because they are not deemed to result from the government's power to tax. The NIPAs, to portray a more comprehensive measure of receipts from all sources, shift them from the expenditures to the receipts side. This shift does not affect the deficit.

Foremost among netting and grossing adjustments are intrabudgetary receipts for retirement contributions on behalf of federal workers and voluntary premiums for Medicare coverage. A growing item reflects the recent rise in deposit insurance outlays. Deposit insurance has been financed in part by an increase in premiums paid by banks and thrift institutions, which has correspondingly increased the netting and grossing adjustment.

By contrast with the budget, the NIPAs exclude lending and financial transactions, which causes the NIPA deficit to diverge from its budget counterpart. The NIPA totals disregard transactions that involve the transfer of existing assets and liabilities and that therefore do not contribute to current income and production. In recent years, huge outlays for deposit insurance have dominated this category. Other, relatively small factors driving a wedge between budget and NIPA accounting include timing adjustments and geographical differences (the exclusion of Puerto Rico, the Virgin Islands, and a few other areas from the national economic statistics).

## NIPA Receipts and Expenditures

The NIPA federal sector generally portrays receipts according to their source and expenditures according to their purpose and destination. Table C-2 divides receipts and expenditures into their NIPA categories. The largest source of federal government receipts is taxes and fees received from individuals. Following this category closely are contributions for social insurance such as Social Se-

**Table C-1.**
**Relationship of the Budget to the Federal Sector of the National Income and Product Accounts (By fiscal year, in billions of dollars)**

| | Estimate 1991[a] | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| | | | **Receipts** | | | | |
| Revenues (Budget Basis)[b] | 1,054 | 1,102 | 1,179 | 1,263 | 1,342 | 1,415 | 1,492 |
| Differences | | | | | | | |
| Netting and grossing | | | | | | | |
| Government contributions for employee retirement | 48 | 51 | 53 | 57 | 60 | 63 | 66 |
| Medicare premiums | 12 | 13 | 15 | 17 | 19 | 21 | 22 |
| Deposit insurance premiums | 7 | 6 | 8 | 9 | 9 | 10 | 11 |
| Other | 1 | 2 | 1 | 2 | 2 | 1 | c |
| Geographic exclusions | -2 | -2 | -2 | -3 | -3 | -3 | -3 |
| Other | -4 | c | 5 | 1 | -1 | 1 | 4 |
| Total | 62 | 70 | 80 | 83 | 87 | 93 | 99 |
| Receipts (NIPA Basis) | 1,116 | 1,172 | 1,259 | 1,345 | 1,428 | 1,508 | 1,591 |
| | | | **Expenditures** | | | | |
| Outlays (Budget Basis)[b] | 1,323 | 1,454 | 1,505 | 1,523 | 1,536 | 1,593 | 1,718 |
| Differences | | | | | | | |
| Netting and grossing | | | | | | | |
| Government contributions for employee retirement | 48 | 51 | 53 | 57 | 60 | 63 | 66 |
| Medicare premiums | 12 | 13 | 15 | 17 | 19 | 21 | 22 |
| Deposit insurance premiums | 7 | 6 | 8 | 9 | 9 | 10 | 11 |
| Other | 1 | 2 | 1 | 2 | 2 | 1 | c |
| Lending and financial transactions | | | | | | | |
| Deposit insurance | -67 | -66 | -67 | -32 | 17 | 41 | 22 |
| Other | -13 | -13 | -12 | -8 | -6 | c | -4 |
| Defense timing adjustment | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Geographic exclusions | -7 | -8 | -8 | -9 | -9 | -9 | -10 |
| Other | 1 | -1 | -1 | -5 | -1 | 2 | -2 |
| Total | -17 | -15 | -10 | 32 | 91 | 128 | 105 |
| Expenditures (NIPA Basis) | 1,305 | 1,439 | 1,495 | 1,555 | 1,626 | 1,721 | 1,823 |
| | | | **Deficits** | | | | |
| Deficit (Budget Basis)[b] | 269 | 352 | 327 | 260 | 194 | 178 | 226 |
| Differences | | | | | | | |
| Lending and financial | -80 | -79 | -79 | -40 | 11 | 40 | 18 |
| Defense timing adjustment | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Geographic exclusions | -5 | -6 | -6 | -6 | -6 | -7 | -7 |
| Other | 5 | -1 | -6 | -5 | -1 | 1 | -6 |
| Total | -79 | -85 | -90 | -51 | 4 | 35 | 6 |
| Deficit (NIPA Basis) | 189 | 266 | 236 | 209 | 198 | 213 | 232 |

SOURCE: Congressional Budget Office.

a. Differences estimated by CBO.

b. Includes Social Security and the Postal Service.

c. Less than $500 million.

**Table C-2.**
**Projections of Baseline Receipts and Expenditures Measured by the National Income and Product Accounts (By fiscal year, in billions of dollars)**

| | Estimate 1991 | 1992 | 1993 | 1994 | 1995 | 1996 | 1997 |
|---|---|---|---|---|---|---|---|
| | | | **Receipts** | | | | |
| Personal Tax and Nontax Receipts | 474 | 499 | 527 | 565 | 605 | 644 | 684 |
| Corporate Profits Tax Accruals | 103 | 108 | 125 | 134 | 139 | 145 | 151 |
| Indirect Business Tax and Nontax Accruals | 76 | 78 | 84 | 88 | 91 | 91 | 93 |
| Contributions for Social Insurance | 463 | 487 | 523 | 558 | 592 | 628 | 662 |
| Total | 1,116 | 1,172 | 1,259 | 1,345 | 1,428 | 1,508 | 1,591 |
| | | | **Expenditures** | | | | |
| Purchases of Goods and Services | | | | | | | |
| Defense | 326 | 318 | 301 | 307 | 315 | 326 | 338 |
| Nondefense | 120 | 132 | 137 | 144 | 149 | 155 | 162 |
| Subtotal | 446 | 451 | 439 | 451 | 464 | 481 | 500 |
| Transfer Payments | | | | | | | |
| Domestic | 534 | 583 | 613 | 651 | 697 | 746 | 796 |
| Foreign | -29 | 8 | 13 | 13 | 14 | 14 | 15 |
| Subtotal | 505 | 591 | 626 | 665 | 711 | 760 | 811 |
| Grants-in-Aid to State and Local Governments | 146 | 172 | 188 | 203 | 218 | 234 | 252 |
| Net Interest | 185 | 198 | 211 | 231 | 244 | 255 | 269 |
| Subsidies Less Current Surplus of Government Enterprises | 23 | 27 | 31 | 32 | 31 | 33 | 35 |
| Required Reductions in Discretionary Spending | n.a. | n.a. | n.a. | -26 | -42 | -43 | -45 |
| Total | 1,305 | 1,439 | 1,495 | 1,555 | 1,626 | 1,721 | 1,823 |
| | | | **Deficit** | | | | |
| Deficit | 189 | 266 | 236 | 209 | 198 | 213 | 232 |

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

curity and Medicare. Both personal tax and nontax receipts, as well as contributions for social insurance, are expected to reach almost $500 billion in 1992.

Classifying government expenditures as to their purpose and destination is somewhat more problematic. Defense and nondefense purchases of goods and services clearly enter directly into gross domestic product (GDP). The effect of the remaining expenditure categories is less straightforward, however, because their effect on GDP depends on the recipients' use of the funds. For example, Social Security payments may be used for a variety of purchases--from durable goods to services--and will not be counted as part of GDP until the funds are spent.

Determining how the NIPA expenditure categories relate to the unified budget can be difficult, particularly with regard to the treatment of net interest and the definition of "subsidies less current surplus of government enterprises." The major factors causing NIPA net interest to diverge from its budget counterpart are Federal Financing Bank (FFB) receipts from deposit insurance agencies and interest on late tax payments. The budget records interest paid by deposit insurance agencies to the FFB (an arm of the Treasury Department) as a deposit insurance outlay and a net interest receipt, which dampens net interest in the budget totals and swells deposit insurance. The NIPAs, by contrast, reflect the interest costs of deposit insurance agencies in net interest. In 1992, interest paid to the FFB for deposit insurance should increase NIPA net interest by slightly more than $5 billion.

An opposing difference pushes estimates of NIPA net interest below those in the unified budget. The NIPAs consider interest paid on personal and business taxes to be offsets to federal interest payments, thereby lowering net interest payments by $9 billion to $12 billion each year through 1997.

Determining what the category of "subsidies less current surplus of government enterprises" comprises can also be perplexing. The first portion of the title--subsidies--is defined as monetary grants paid by government to businesses, including state and local government enterprises such as local public housing authorities. Subsidies are dominated by housing assistance, which accounts for approximately $18 billion of the $28 billion total in 1992 subsidy outlays.

The second portion of the category is the current surplus of government enterprises. "Government enterprise" is a term that designates certain business-type operations of the government--for example, the Postal Service. The operating costs of government enterprises are mostly covered by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit. In 1992, the current surplus of government enterprises will be approximately $1 billion.

A word of caution: government enterprises should not be confused with government-sponsored enterprises (GSEs), which are private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. Examples of GSEs include the Federal National Mortgage Association (Fannie Mae) and the Student Loan Marketing Association (Sallie Mae). As privately owned organizations, GSEs are not included in the budget or the NIPAs.

## Recent Changes in the National Income and Product Accounts

In December 1991, the Bureau of Economic Analysis (BEA) released its comprehensive revision of the NIPAs. In addition to shifting the base period for constant dollar estimates to 1987 and focusing on gross domestic product rather than gross national product, the BEA made some definitional and classifica-

tory changes to the government receipts and expenditures accounts. The four expenditure categories that were most affected are net interest, subsidies less current surplus of government enterprises, nondefense purchases, and foreign transfers.

Interest owed by the government on tax refunds paid after 45 days is now classified as an interest payment rather than as an offset to tax receipts. Also, interest paid by individuals and businesses on late tax payments is now classified as a negative interest outlay instead of a tax receipt. Together, these shifts reduce NIPA net interest by about $6.5 billion in 1992 and reduce NIPA receipts by a similar amount.

Two major conceptual revisions affected subsidies less current surplus. Both involved the reclassification of government enterprises as general government agencies. First, several deposit insurance agencies (the Federal Deposit Insurance Corporation, the Federal Savings and Loan Insurance Corporation, and their successors) are now considered general government agencies. Hence, deposit insurance premiums are now classified as business nontaxes instead of as a reduction in net subsidies. Second, reclassifying the Commodity Credit Corporation (CCC) as a general government agency eliminates the CCC deficit as an element of government subsidies and, by itself, would lead to a corresponding change in government purchases.

Beyond simply reclassifying CCC, though, the BEA also modified the treatment of CCC loans. Before the revisions, the CCC counted as government purchases all crops taken as loan collateral. When a loan was repaid, a negative purchase was recorded. However, only a small percentage of CCC loans over the past four years have actually ended in default and resulted in the government's keeping the farmer's crops. The previous treatment, therefore, led to large swings in government purchases. In the revised NIPAs, the BEA now counts as purchases only those loans that default.

Finally, nonresident taxes have been reclassified as negative foreign transfers. Taxes paid by foreigners to the U.S. government will reduce foreign transfers by approximately $1.5 billion per year through 1997.

Appendix D

# Historical Budget Data

This appendix provides historical data for revenues, outlays, and the deficit. Estimates of the standardized-employment deficit and its revenue and outlay components for fiscal years 1956 through 1991 are reported in Table D-1, along with estimates of the nonaccelerating inflation rate of unemployment (NAIRU). Data consistent with the budget projections in the report are available for fiscal years 1962 through 1991 and are reported in Tables D-2 through D-9. The data are shown both in nominal dollars and as a percentage of gross domestic product.

The change in the standardized-employment deficit, as shown in Table D-1, is a commonly used measure of the short-term impact of discretionary fiscal policy on aggregate demand. The standardized-employment deficit excludes the revenue and outlay effects of cyclical fluctuations in output and unemployment. More specifically, standardized-employment revenues are the federal revenues that would be collected if the economy were operating at its potential level of gross domestic product (GDP). These revenues are greater than actual revenues when actual GDP is below its potential level because the actual tax bases are then cyclically depressed. Standardized-employment outlays are the federal outlays that would be recorded if the economy were at an unemployment rate consistent with stable inflation--the NAIRU, which is also the benchmark used to compute potential GDP. These outlays are less than actual outlays when the actual rate of unemployment is higher than the NAIRU because actual transfer payments for Unemployment Insurance and other programs are then cyclically inflated.

Federal revenues, outlays, deficit or surplus, and debt held by the public are shown in Tables D-2 and D-3. Revenues, outlays, and the deficit have both on-budget and off-budget components. Social Security receipts and outlays were placed off-budget by the Balanced Budget and Emergency Deficit Control Act of 1985; the Postal Service was moved off-budget beginning in 1989 by the Omnibus Budget Reconciliation Act of 1989. Both Social Security and the Postal Service are excluded from the calculation of the maximum deficit amount under the Budget Enforcement Act of 1990.

The major sources of federal revenues (including off-budget revenues) are presented in Tables D-4 and D-5. Social insurance taxes and contributions include employer and employee payments for Social Security, Medicare, Railroad Retirement, Unemployment Insurance, and pension contributions by federal workers. Excise taxes are levied on certain products and services, such as gasoline, alcoholic beverages, and air travel. The windfall profits tax on domestic oil producers, enacted in 1980 and classified as an excise tax, was repealed in 1988. Miscellaneous receipts consist of deposits of earnings by the Federal Reserve System and numerous fees and charges.

Total on- and off-budget outlays for major spending categories are shown in Tables D-6

and D-7. In order to compare historical outlays with the projections discussed in Chapter 2, the historical data have been divided into the same categories of spending as the projections. Spending controlled by the appropriation process is classified as discretionary. Tables D-8 and D-9 divide discretionary spending into its defense, international, and domestic components. Entitlements and other mandatory spending include programs for which spending is governed by laws making those who meet certain requirements eligible to receive payments. Additional detail on entitlement programs is shown in Tables D-10 and D-11. Net interest is identical to the budget function with the same title (function 900). Offsetting receipts include the federal government's contribution toward employee retirement, fees and charges such as Medicare premiums, and receipts from the use of federally controlled land and offshore territory.

In the interest of uniformity, CBO and the Office of Management and Budget (OMB) have changed the classification of several budget accounts since last year's report. For CBO, the largest change in classification entailed moving the loan programs of the Farmers Home Administration and the Rural Electrification Administration from the discretionary to the mandatory category. CBO reclassified these programs as mandatory to conform with OMB's treatment of credit activity in the historical data.

**Table D-1.**
**Standardized-Employment Deficit and Related Series, Fiscal Years 1956-1991 (In billions of dollars)**

| | Standardized-Employment | | | |
|---|---|---|---|---|
| | Revenues | Outlays | Deficit(-) | NAIRU[a] |
| 1956 | 73.1 | 71.2 | 1.9 | 5.1 |
| 1957 | 79.5 | 77.3 | 2.2 | 5.1 |
| 1958 | 84.3 | 82.0 | 2.3 | 5.0 |
| 1959 | 82.3 | 91.2 | -8.9 | 5.1 |
| 1960 | 94.8 | 92.1 | 2.7 | 5.2 |
| 1961 | 100.5 | 96.8 | 3.7 | 5.2 |
| 1962 | 103.3 | 106.5 | -3.2 | 5.2 |
| 1963 | 109.8 | 111.4 | -1.7 | 5.4 |
| 1964 | 112.5 | 118.9 | -6.5 | 5.4 |
| 1965 | 114.8 | 119.3 | -4.5 | 5.6 |
| 1966 | 125.0 | 136.7 | -11.7 | 5.6 |
| 1967 | 143.8 | 160.1 | -16.3 | 5.6 |
| 1968 | 146.9 | 181.1 | -34.3 | 5.6 |
| 1969 | 178.8 | 187.6 | -8.8 | 5.6 |
| 1970 | 191.4 | 198.9 | -7.6 | 5.6 |
| 1971 | 191.6 | 210.9 | -19.3 | 5.7 |
| 1972 | 211.0 | 231.2 | -20.1 | 5.8 |
| 1973 | 224.8 | 247.8 | -23.0 | 5.8 |
| 1974 | 260.9 | 272.4 | -11.4 | 5.8 |
| 1975 | 296.4 | 327.6 | -31.3 | 6.0 |
| 1976 | 316.2 | 363.8 | -47.6 | 5.9 |
| 1977 | 364.2 | 405.8 | -41.5 | 6.0 |
| 1978 | 399.4 | 457.7 | -58.3 | 5.9 |
| 1979 | 464.1 | 505.4 | -41.2 | 5.9 |
| 1980 | 539.2 | 586.7 | -47.5 | 5.9 |
| 1981 | 627.9 | 670.4 | -42.5 | 6.0 |
| 1982 | 681.3 | 730.2 | -48.9 | 5.9 |
| 1983 | 675.1 | 783.0 | -108.0 | 5.9 |
| 1984 | 703.8 | 838.0 | -134.2 | 5.8 |
| 1985 | 761.4 | 937.9 | -176.5 | 5.8 |
| 1986 | 794.1 | 978.9 | -184.8 | 5.7 |
| 1987 | 874.0 | 994.4 | -120.4 | 5.7 |
| 1988 | 895.7 | 1,053.8 | -158.0 | 5.7 |
| 1989[b] | 977.4 | 1,125.1 | -147.7 | 5.6 |
| 1990[b] | 1,045.6 | 1,196.0 | -150.4 | 5.6 |
| 1991[b] | 1,120.0 | 1,291.6 | -171.6 | 5.6 |

SOURCE: Congressional Budget Office.

a. The NAIRU is the nonaccelerating inflation rate of unemployment. It is the benchmark for computing potential GDP.

b. Excludes deposit insurance.

**Table D-2.**
**Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1991 (In billions of dollars)**

| | | | Deficit (-) or Surplus | | | | Debt Held by the Public[a] |
|---|---|---|---|---|---|---|---|
| | Revenues | Outlays | On-Budget | Social Security | Postal Service | Total | |
| 1962 | 99.7 | 106.8 | -5.9 | -1.3 | 0 | -7.1 | 248.0 |
| 1963 | 106.6 | 111.3 | -4.0 | -0.8 | 0 | -4.8 | 254.0 |
| 1964 | 112.6 | 118.5 | -6.5 | 0.6 | 0 | -5.9 | 256.8 |
| 1965 | 116.8 | 118.2 | -1.6 | 0.2 | 0 | -1.4 | 260.8 |
| 1966 | 130.8 | 134.5 | -3.1 | -0.6 | 0 | -3.7 | 236.7 |
| 1967 | 148.8 | 157.5 | -12.6 | 4.0 | 0 | -8.6 | 266.6 |
| 1968 | 153.0 | 178.1 | -27.7 | 2.6 | 0 | -25.2 | 289.5 |
| 1969 | 186.9 | 183.6 | -0.5 | 3.7 | 0 | 3.2 | 278.1 |
| 1970 | 192.8 | 195.6 | -8.7 | 5.9 | 0 | -2.8 | 283.2 |
| 1971 | 187.1 | 210.2 | -26.1 | 3.0 | 0 | -23.0 | 303.0 |
| 1972 | 207.3 | 230.7 | -26.4 | 3.1 | 0 | -23.4 | 322.4 |
| 1973 | 230.8 | 245.7 | -15.4 | 0.5 | 0 | -14.9 | 340.9 |
| 1974 | 263.2 | 269.4 | -8.0 | 1.8 | 0 | -6.1 | 343.7 |
| 1975 | 279.1 | 332.3 | -55.3 | 2.0 | 0 | -53.2 | 394.7 |
| 1976 | 298.1 | 371.8 | -70.5 | -3.2 | 0 | -73.7 | 477.4 |
| 1977 | 355.6 | 409.2 | -49.8 | -3.9 | 0 | -53.7 | 549.1 |
| 1978 | 399.6 | 458.7 | -54.9 | -4.3 | 0 | -59.2 | 607.1 |
| 1979 | 463.3 | 503.5 | -38.2 | -2.0 | 0 | -40.2 | 639.8 |
| 1980 | 517.1 | 590.9 | -72.7 | -1.1 | 0 | -73.8 | 709.3 |
| 1981 | 599.3 | 678.2 | -74.0 | -5.0 | 0 | -79.0 | 784.8 |
| 1982 | 617.8 | 745.8 | -120.1 | -7.9 | 0 | -128.0 | 919.2 |
| 1983 | 600.6 | 808.4 | -208.0 | 0.2 | 0 | -207.8 | 1,131.0 |
| 1984 | 666.5 | 851.8 | -185.7 | 0.3 | 0 | -185.4 | 1,300.0 |
| 1985 | 734.1 | 946.4 | -221.7 | 9.4 | 0 | -212.3 | 1,499.4 |
| 1986 | 769.1 | 990.3 | -238.0 | 16.7 | 0 | -221.2 | 1,736.2 |
| 1987 | 854.1 | 1,003.9 | -169.3 | 19.6 | 0 | -149.8 | 1,888.1 |
| 1988 | 909.0 | 1,064.1 | -194.0 | 38.8 | 0 | -155.2 | 2,050.3 |
| 1989 | 990.7 | 1,144.2 | -206.2 | 52.4 | 0.3 | -153.5 | 2,190.3 |
| 1990 | 1,031.3 | 1,251.8 | -277.1 | 58.2 | -1.6 | -220.5 | 2,410.4 |
| 1991 | 1,054.3 | 1,323.0 | -320.9 | 53.5 | -1.3 | -268.7 | 2,687.2 |

SOURCE: Congressional Budget Office.

a. End of year.

**Table D-3.**
**Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1991 (As a percentage of GDP)**

| | | | Deficit (-) or Surplus | | | | Debt |
|---|---|---|---|---|---|---|---|
| | Revenues | Outlays | On-Budget | Social Security | Postal Service | Total | Held by the Public[a] |
| 1962 | 18.0 | 19.3 | -1.1 | -0.2 | 0 | -1.3 | 44.7 |
| 1963 | 18.2 | 19.0 | -0.7 | -0.1 | 0 | -0.8 | 43.4 |
| 1964 | 18.0 | 18.9 | -1.0 | 0.1 | 0 | -0.9 | 41.0 |
| 1965 | 17.4 | 17.6 | -0.2 | b | 0 | -0.2 | 38.8 |
| 1966 | 17.7 | 18.2 | -0.4 | -0.1 | 0 | -0.5 | 35.7 |
| 1967 | 18.8 | 19.9 | -1.6 | 0.5 | 0 | -1.1 | 33.7 |
| 1968 | 18.0 | 21.0 | -3.3 | 0.3 | 0 | -3.0 | 34.1 |
| 1969 | 20.2 | 19.8 | -0.1 | 0.4 | 0 | 0.4 | 30.0 |
| 1970 | 19.6 | 19.9 | -0.9 | 0.6 | 0 | -0.3 | 28.7 |
| 1971 | 17.8 | 20.0 | -2.5 | 0.3 | 0 | -2.2 | 28.8 |
| 1972 | 18.1 | 20.1 | -2.3 | 0.3 | 0 | -2.0 | 28.1 |
| 1973 | 18.1 | 19.2 | -1.2 | b | 0 | -1.2 | 26.7 |
| 1974 | 18.8 | 19.2 | -0.6 | 0.1 | 0 | -0.4 | 24.5 |
| 1975 | 18.5 | 22.0 | -3.7 | 0.1 | 0 | -3.5 | 26.1 |
| 1976 | 17.7 | 22.1 | -4.2 | -0.2 | 0 | -4.4 | 28.3 |
| 1977 | 18.5 | 21.3 | -2.6 | -0.2 | 0 | -2.8 | 28.6 |
| 1978 | 18.5 | 21.3 | -2.5 | -0.2 | 0 | -2.7 | 28.2 |
| 1979 | 19.1 | 20.7 | -1.6 | -0.1 | 0 | -1.7 | 26.3 |
| 1980 | 19.6 | 22.3 | -2.7 | b | 0 | -2.8 | 26.8 |
| 1981 | 20.2 | 22.9 | -2.5 | -0.2 | 0 | -2.7 | 26.5 |
| 1982 | 19.8 | 23.9 | -3.8 | -0.3 | 0 | -4.1 | 29.4 |
| 1983 | 18.1 | 24.4 | -6.3 | b | 0 | -6.3 | 34.1 |
| 1984 | 18.0 | 23.0 | -5.0 | b | 0 | -5.0 | 35.2 |
| 1985 | 18.5 | 23.8 | -5.6 | 0.2 | 0 | -5.3 | 37.8 |
| 1986 | 18.2 | 23.5 | -5.6 | 0.4 | 0 | -5.2 | 41.1 |
| 1987 | 19.2 | 22.5 | -3.8 | 0.4 | 0 | -3.4 | 42.4 |
| 1988 | 18.9 | 22.1 | -4.0 | 0.8 | 0 | -3.2 | 42.6 |
| 1989 | 19.2 | 22.1 | -4.0 | 1.0 | b | -3.0 | 42.4 |
| 1990 | 18.9 | 22.9 | -5.1 | 1.1 | b | -4.0 | 44.2 |
| 1991 | 18.7 | 23.5 | -5.7 | 1.0 | b | -4.8 | 47.8 |

SOURCE: Congressional Budget Office.

a. End of year.

b. Less than 0.05 percent.

**Table D-4.**
**Revenues by Major Source, Fiscal Years 1962-1991 (In billions of dollars)**

| | Individual Income Taxes | Corporate Income Taxes | Social Insurance Taxes | Excise Taxes | Estate and Gift Taxes | Customs Duties | Miscel-laneous Receipts | Total Revenues |
|---|---|---|---|---|---|---|---|---|
| 1962 | 45.6 | 20.5 | 17.0 | 12.5 | 2.0 | 1.1 | 0.8 | 99.7 |
| 1963 | 47.6 | 21.6 | 19.8 | 13.2 | 2.2 | 1.2 | 1.0 | 106.6 |
| 1964 | 48.7 | 23.5 | 22.0 | 13.7 | 2.4 | 1.3 | 1.1 | 112.6 |
| 1965 | 48.8 | 25.5 | 22.2 | 14.6 | 2.7 | 1.4 | 1.6 | 116.8 |
| 1966 | 55.4 | 30.1 | 22.5 | 13.1 | 3.1 | 1.8 | 1.9 | 130.8 |
| 1967 | 61.5 | 34.0 | 32.6 | 13.7 | 3.0 | 1.9 | 2.1 | 148.8 |
| 1968 | 68.7 | 28.7 | 33.9 | 14.1 | 3.1 | 2.0 | 2.5 | 153.0 |
| 1969 | 87.2 | 36.7 | 39.0 | 15.2 | 3.5 | 2.3 | 2.9 | 186.9 |
| 1970 | 90.4 | 32.8 | 44.4 | 15.7 | 3.6 | 2.4 | 3.4 | 192.8 |
| 1971 | 86.2 | 26.8 | 47.3 | 16.6 | 3.7 | 2.6 | 3.9 | 187.1 |
| 1972 | 94.7 | 32.2 | 52.6 | 15.5 | 5.4 | 3.3 | 3.6 | 207.3 |
| 1973 | 103.2 | 36.2 | 63.1 | 16.3 | 4.9 | 3.2 | 3.9 | 230.8 |
| 1974 | 119.0 | 38.6 | 75.1 | 16.8 | 5.0 | 3.3 | 5.4 | 263.2 |
| 1975 | 122.4 | 40.6 | 84.5 | 16.6 | 4.6 | 3.7 | 6.7 | 279.1 |
| 1976 | 131.6 | 41.4 | 90.8 | 17.0 | 5.2 | 4.1 | 8.0 | 298.1 |
| 1977 | 157.6 | 54.9 | 106.5 | 17.5 | 7.3 | 5.2 | 6.5 | 355.6 |
| 1978 | 181.0 | 60.0 | 121.0 | 18.4 | 5.3 | 6.6 | 7.4 | 399.6 |
| 1979 | 217.8 | 65.7 | 138.9 | 18.7 | 5.4 | 7.4 | 9.3 | 463.3 |
| 1980 | 244.1 | 64.6 | 157.8 | 24.3 | 6.4 | 7.2 | 12.7 | 517.1 |
| 1981 | 285.9 | 61.1 | 182.7 | 40.8 | 6.8 | 8.1 | 13.8 | 599.3 |
| 1982 | 297.7 | 49.2 | 201.5 | 36.3 | 8.0 | 8.9 | 16.2 | 617.8 |
| 1983 | 288.9 | 37.0 | 209.0 | 35.3 | 6.1 | 8.7 | 15.6 | 600.6 |
| 1984 | 298.4 | 56.9 | 239.4 | 37.4 | 6.0 | 11.4 | 17.0 | 666.5 |
| 1985 | 334.5 | 61.3 | 265.2 | 36.0 | 6.4 | 12.1 | 18.5 | 734.1 |
| 1986 | 349.0 | 63.1 | 283.9 | 32.9 | 7.0 | 13.3 | 19.9 | 769.1 |
| 1987 | 392.6 | 83.9 | 303.3 | 32.5 | 7.5 | 15.1 | 19.3 | 854.1 |
| 1988 | 401.2 | 94.3 | 334.3 | 35.2 | 7.6 | 16.2 | 19.9 | 909.0 |
| 1989 | 445.7 | 103.3 | 359.4 | 34.4 | 8.7 | 16.3 | 22.8 | 990.7 |
| 1990 | 466.9 | 93.5 | 380.0 | 35.3 | 11.5 | 16.7 | 27.3 | 1,031.3 |
| 1991 | 467.8 | 98.1 | 396.0 | 42.4 | 11.1 | 15.9 | 22.8 | 1,054.3 |

SOURCE: Congressional Budget Office.

**Table D-5.**
**Revenues by Major Source, Fiscal Years 1962-1991 (As a percentage of GDP)**

| | Individual Income Taxes | Corporate Income Taxes | Social Insurance Taxes | Excise Taxes | Estate and Gift Taxes | Customs Duties | Miscel-laneous Receipts | Total Revenues |
|---|---|---|---|---|---|---|---|---|
| 1962 | 8.2 | 3.7 | 3.1 | 2.3 | 0.4 | 0.2 | 0.2 | 18.0 |
| 1963 | 8.1 | 3.7 | 3.4 | 2.3 | 0.4 | 0.2 | 0.2 | 18.2 |
| 1964 | 7.8 | 3.7 | 3.5 | 2.2 | 0.4 | 0.2 | 0.2 | 18.0 |
| 1965 | 7.3 | 3.8 | 3.3 | 2.2 | 0.4 | 0.2 | 0.2 | 17.4 |
| 1966 | 7.5 | 4.1 | 3.5 | 1.8 | 0.4 | 0.2 | 0.3 | 17.7 |
| 1967 | 7.8 | 4.3 | 4.1 | 1.7 | 0.4 | 0.2 | 0.3 | 18.8 |
| 1968 | 8.1 | 3.4 | 4.0 | 1.7 | 0.4 | 0.2 | 0.3 | 18.0 |
| 1969 | 9.4 | 4.0 | 4.2 | 1.6 | 0.4 | 0.3 | 0.3 | 20.2 |
| 1970 | 9.2 | 3.3 | 4.5 | 1.6 | 0.4 | 0.2 | 0.3 | 19.6 |
| 1971 | 8.2 | 2.5 | 4.5 | 1.6 | 0.4 | 0.2 | 0.4 | 17.8 |
| 1972 | 8.3 | 2.8 | 4.6 | 1.4 | 0.5 | 0.3 | 0.3 | 18.1 |
| 1973 | 8.1 | 2.8 | 4.9 | 1.3 | 0.4 | 0.2 | 0.3 | 18.1 |
| 1974 | 8.5 | 2.8 | 5.3 | 1.2 | 0.4 | 0.2 | 0.4 | 18.8 |
| 1975 | 8.1 | 2.7 | 5.6 | 1.1 | 0.3 | 0.2 | 0.4 | 18.5 |
| 1976 | 7.8 | 2.5 | 5.4 | 1.0 | 0.3 | 0.2 | 0.5 | 17.7 |
| 1977 | 8.2 | 2.9 | 5.5 | 0.9 | 0.4 | 0.3 | 0.3 | 18.5 |
| 1978 | 8.4 | 2.8 | 5.6 | 0.9 | 0.2 | 0.3 | 0.3 | 18.5 |
| 1979 | 9.0 | 2.7 | 5.7 | 0.8 | 0.2 | 0.3 | 0.4 | 19.1 |
| 1980 | 9.2 | 2.4 | 6.0 | 0.9 | 0.2 | 0.3 | 0.5 | 19.6 |
| 1981 | 9.6 | 2.1 | 6.2 | 1.4 | 0.2 | 0.3 | 0.5 | 20.2 |
| 1982 | 9.5 | 1.6 | 6.4 | 1.2 | 0.3 | 0.3 | 0.5 | 19.8 |
| 1983 | 8.7 | 1.1 | 6.3 | 1.1 | 0.2 | 0.3 | 0.5 | 18.1 |
| 1984 | 8.1 | 1.5 | 6.5 | 1.0 | 0.2 | 0.3 | 0.5 | 18.0 |
| 1985 | 8.4 | 1.5 | 6.7 | 0.9 | 0.2 | 0.3 | 0.5 | 18.5 |
| 1986 | 8.3 | 1.5 | 6.7 | 0.8 | 0.2 | 0.3 | 0.5 | 18.2 |
| 1987 | 8.8 | 1.9 | 6.8 | 0.7 | 0.2 | 0.3 | 0.4 | 19.2 |
| 1988 | 8.3 | 2.0 | 7.0 | 0.7 | 0.2 | 0.3 | 0.4 | 18.9 |
| 1989 | 8.6 | 2.0 | 7.0 | 0.7 | 0.2 | 0.3 | 0.4 | 19.2 |
| 1990 | 8.6 | 1.7 | 7.0 | 0.6 | 0.2 | 0.3 | 0.5 | 18.9 |
| 1991 | 8.3 | 1.7 | 7.0 | 0.8 | 0.2 | 0.3 | 0.4 | 18.7 |

SOURCE: Congressional Budget Office.

**Table D-6.**
**Outlays for Major Spending Categories, Fiscal Years 1962-1991 (In billions of dollars)**

| | Discretionary Spending | Entitlements and Other Mandatory Spending | Deposit Insurance | Net Interest | Offsetting Receipts | Total Outlays |
|---|---|---|---|---|---|---|
| 1962 | 74.9 | 32.3 | -0.4 | 6.9 | -6.8 | 106.8 |
| 1963 | 78.3 | 33.6 | -0.4 | 7.7 | -7.9 | 111.3 |
| 1964 | 82.8 | 35.7 | -0.4 | 8.2 | -7.7 | 118.5 |
| 1965 | 81.8 | 36.1 | -0.4 | 8.6 | -7.9 | 118.2 |
| 1966 | 94.1 | 39.9 | -0.5 | 9.4 | -8.4 | 134.5 |
| 1967 | 110.4 | 47.4 | -0.4 | 10.3 | -10.2 | 157.5 |
| 1968 | 122.1 | 56.1 | -0.5 | 11.1 | -10.6 | 178.1 |
| 1969 | 121.4 | 61.2 | -0.7 | 12.7 | -11.0 | 183.6 |
| 1970 | 124.6 | 68.7 | -0.5 | 14.4 | -11.5 | 195.6 |
| 1971 | 127.1 | 82.7 | -0.4 | 14.8 | -14.1 | 210.2 |
| 1972 | 133.1 | 96.8 | -0.6 | 15.5 | -14.1 | 230.7 |
| 1973 | 135.0 | 112.2 | -0.8 | 17.3 | -18.0 | 245.7 |
| 1974 | 142.5 | 127.1 | -0.6 | 21.4 | -21.2 | 269.4 |
| 1975 | 162.5 | 164.4 | 0.5 | 23.2 | -18.3 | 332.3 |
| 1976 | 175.5 | 189.7 | -0.6 | 26.7 | -19.6 | 371.8 |
| 1977 | 197.0 | 206.6 | -2.8 | 29.9 | -21.5 | 409.2 |
| 1978 | 218.7 | 228.4 | -1.0 | 35.5 | -22.8 | 458.7 |
| 1979 | 240.0 | 248.2 | -1.7 | 42.6 | -25.6 | 503.5 |
| 1980 | 276.5 | 291.5 | -0.4 | 52.5 | -29.2 | 590.9 |
| 1981 | 308.1 | 340.6 | -1.4 | 68.8 | -37.9 | 678.2 |
| 1982 | 326.2 | 372.7 | -2.2 | 85.0 | -36.0 | 745.8 |
| 1983 | 353.5 | 411.6 | -1.2 | 89.8 | -45.3 | 808.4 |
| 1984 | 379.6 | 406.3 | -0.9 | 111.1 | -44.2 | 851.8 |
| 1985 | 416.2 | 450.0 | -2.2 | 129.5 | -47.1 | 946.4 |
| 1986 | 439.0 | 459.7 | 1.5 | 136.0 | -45.9 | 990.3 |
| 1987 | 444.9 | 470.2 | 3.1 | 138.7 | -53.0 | 1,003.9 |
| 1988 | 465.0 | 494.2 | 10.0 | 151.8 | -57.0 | 1,064.1 |
| 1989 | 489.6 | 527.2 | 22.0 | 169.2 | -63.9 | 1,144.2 |
| 1990 | 501.7 | 566.5 | 58.1 | 183.8 | -58.4 | 1,251.8 |
| 1991 | 532.2 | 635.9 | 66.3 | 196.3 | -107.8 | 1,323.0 |

SOURCE: Congressional Budget Office.

**Table D-7.**
**Outlays for Major Spending Categories, Fiscal Years 1962-1991 (As a percentage of GDP)**

| | Discretionary Spending | Entitlements and Other Mandatory Spending | Deposit Insurance | Net Interest | Offsetting Receipts | Total Outlays |
|---|---|---|---|---|---|---|
| 1962 | 13.5 | 5.8 | -0.1 | 1.2 | -1.2 | 19.3 |
| 1963 | 13.4 | 5.7 | -0.1 | 1.3 | -1.3 | 19.0 |
| 1964 | 13.2 | 5.7 | -0.1 | 1.3 | -1.2 | 18.9 |
| 1965 | 12.2 | 5.4 | -0.1 | 1.3 | -1.2 | 17.6 |
| 1966 | 12.7 | 5.4 | -0.1 | 1.3 | -1.1 | 18.2 |
| 1967 | 14.0 | 6.0 | -0.1 | 1.3 | -1.3 | 19.9 |
| 1968 | 14.4 | 6.6 | -0.1 | 1.3 | -1.2 | 21.0 |
| 1969 | 13.1 | 6.6 | -0.1 | 1.4 | -1.2 | 19.8 |
| 1970 | 12.6 | 7.0 | -0.1 | 1.5 | -1.2 | 19.9 |
| 1971 | 12.1 | 7.9 | a | 1.4 | -1.3 | 20.0 |
| 1972 | 11.6 | 8.4 | -0.1 | 1.4 | -1.2 | 20.1 |
| 1973 | 10.6 | 8.8 | -0.1 | 1.4 | -1.4 | 19.2 |
| 1974 | 10.2 | 9.1 | a | 1.5 | -1.5 | 19.2 |
| 1975 | 10.8 | 10.9 | a | 1.5 | -1.2 | 22.0 |
| 1976 | 10.4 | 11.3 | a | 1.6 | -1.2 | 22.1 |
| 1977 | 10.3 | 10.8 | -0.1 | 1.6 | -1.1 | 21.3 |
| 1978 | 10.1 | 10.6 | a | 1.6 | -1.1 | 21.3 |
| 1979 | 9.9 | 10.2 | -0.1 | 1.8 | -1.1 | 20.7 |
| 1980 | 10.5 | 11.0 | a | 2.0 | -1.1 | 22.3 |
| 1981 | 10.4 | 11.5 | a | 2.3 | -1.3 | 22.9 |
| 1982 | 10.4 | 11.9 | -0.1 | 2.7 | -1.2 | 23.9 |
| 1983 | 10.7 | 12.4 | a | 2.7 | -1.4 | 24.4 |
| 1984 | 10.3 | 11.0 | a | 3.0 | -1.2 | 23.0 |
| 1985 | 10.5 | 11.3 | -0.1 | 3.3 | -1.2 | 23.8 |
| 1986 | 10.4 | 10.9 | a | 3.2 | -1.1 | 23.5 |
| 1987 | 10.0 | 10.6 | 0.1 | 3.1 | -1.2 | 22.5 |
| 1988 | 9.7 | 10.3 | 0.2 | 3.2 | -1.2 | 22.1 |
| 1989 | 9.5 | 10.2 | 0.4 | 3.3 | -1.2 | 22.1 |
| 1990 | 9.2 | 10.4 | 1.1 | 3.4 | -1.1 | 22.9 |
| 1991 | 9.5 | 11.3 | 1.2 | 3.5 | -1.9 | 23.5 |

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

**Table D-8.**
**Discretionary Outlays, Fiscal Years 1962-1991 (In billions of dollars)**

| | Defense | International | Domestic | Total |
|---|---|---|---|---|
| 1962 | 52.6 | 5.5 | 16.8 | 74.9 |
| 1963 | 53.7 | 5.2 | 19.3 | 78.3 |
| 1964 | 55.0 | 4.6 | 23.1 | 82.8 |
| 1965 | 51.0 | 4.7 | 26.1 | 81.8 |
| 1966 | 59.0 | 5.1 | 30.0 | 94.1 |
| 1967 | 72.0 | 5.3 | 33.1 | 110.4 |
| 1968 | 82.2 | 4.9 | 35.1 | 122.1 |
| 1969 | 82.7 | 4.1 | 34.6 | 121.4 |
| 1970 | 81.9 | 4.0 | 38.7 | 124.6 |
| 1971 | 79.0 | 3.8 | 44.3 | 127.1 |
| 1972 | 79.3 | 4.6 | 49.2 | 133.1 |
| 1973 | 77.1 | 4.8 | 53.0 | 135.0 |
| 1974 | 80.7 | 6.2 | 55.6 | 142.5 |
| 1975 | 87.6 | 8.2 | 66.7 | 162.5 |
| 1976 | 89.9 | 7.5 | 78.2 | 175.5 |
| 1977 | 97.5 | 8.0 | 91.5 | 197.0 |
| 1978 | 104.6 | 8.5 | 105.5 | 218.7 |
| 1979 | 116.8 | 9.1 | 114.1 | 240.0 |
| 1980 | 134.6 | 12.8 | 129.1 | 276.5 |
| 1981 | 158.0 | 13.6 | 136.5 | 308.1 |
| 1982 | 185.9 | 12.9 | 127.4 | 326.2 |
| 1983 | 209.9 | 13.6 | 130.0 | 353.5 |
| 1984 | 228.0 | 16.3 | 135.3 | 379.6 |
| 1985 | 253.1 | 17.4 | 145.7 | 416.2 |
| 1986 | 273.8 | 17.7 | 147.5 | 439.0 |
| 1987 | 282.5 | 15.2 | 147.2 | 444.9 |
| 1988 | 290.9 | 15.7 | 158.4 | 465.0 |
| 1989 | 304.0 | 16.6 | 169.0 | 489.6 |
| 1990 | 300.1 | 19.1 | 182.5 | 501.7 |
| 1991 | 317.0 | 19.5 | 195.7 | 532.2 |

SOURCE: Congressional Budget Office.

**Table D-9.**
**Discretionary Outlays, Fiscal Years 1962-1991 (As a percentage of GDP)**

| | Defense | International | Domestic | Total |
|---|---|---|---|---|
| 1962 | 9.5 | 1.0 | 3.0 | 13.5 |
| 1963 | 9.2 | 0.9 | 3.3 | 13.4 |
| 1964 | 8.8 | 0.7 | 3.7 | 13.2 |
| 1965 | 7.6 | 0.7 | 3.9 | 12.2 |
| 1966 | 8.0 | 0.7 | 4.1 | 12.7 |
| 1967 | 9.1 | 0.7 | 4.2 | 14.0 |
| 1968 | 9.7 | 0.6 | 4.1 | 14.4 |
| 1969 | 8.9 | 0.4 | 3.7 | 13.1 |
| 1970 | 8.3 | 0.4 | 3.9 | 12.6 |
| 1971 | 7.5 | 0.4 | 4.2 | 12.1 |
| 1972 | 6.9 | 0.4 | 4.3 | 11.6 |
| 1973 | 6.0 | 0.4 | 4.2 | 10.6 |
| 1974 | 5.8 | 0.4 | 4.0 | 10.2 |
| 1975 | 5.8 | 0.5 | 4.4 | 10.8 |
| 1976 | 5.3 | 0.4 | 4.6 | 10.4 |
| 1977 | 5.1 | 0.4 | 4.8 | 10.3 |
| 1978 | 4.9 | 0.4 | 4.9 | 10.1 |
| 1979 | 4.8 | 0.4 | 4.7 | 9.9 |
| 1980 | 5.1 | 0.5 | 4.9 | 10.5 |
| 1981 | 5.3 | 0.5 | 4.6 | 10.4 |
| 1982 | 6.0 | 0.4 | 4.1 | 10.4 |
| 1983 | 6.3 | 0.4 | 3.9 | 10.7 |
| 1984 | 3.2 | 0.4 | 3.7 | 10.3 |
| 1985 | 6.4 | 0.4 | 3.7 | 10.5 |
| 1986 | 6.5 | 0.4 | 3.5 | 10.4 |
| 1987 | 6.3 | 0.3 | 3.3 | 10.0 |
| 1988 | 6.0 | 0.3 | 3.3 | 9.7 |
| 1989 | 5.9 | 0.3 | 3.3 | 9.5 |
| 1990 | 5.5 | 0.3 | 3.3 | 9.2 |
| 1991 | 5.6 | 0.3 | 3.5 | 9.5 |

SOURCE: Congressional Budget Office.

## Table D-10.
## Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1991 (In billions of dollars)

| | Means-Tested Programs | | | Non-Means-Tested Programs | | | | | | | Total Entitlements and Other Mandatory Spending |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Medicaid | Other | Total Means-Tested | Social Security | Medicare | Other Retirement and Disability | Unemployment Compensation | Farm Price Supports | Other | Total Non-Means-Tested Programs | |
| 1962 | 0.1 | 4.2 | 4.3 | 14.0 | 0 | 2.7 | 3.5 | 2.4 | 5.3 | 28.0 | 32.3 |
| 1963 | 0.2 | 4.6 | 4.7 | 15.5 | 0 | 2.9 | 3.6 | 3.4 | 3.5 | 28.8 | 33.6 |
| 1964 | 0.2 | 4.8 | 5.0 | 16.2 | 0 | 3.3 | 3.4 | 3.4 | 4.4 | 30.7 | 35.7 |
| 1965 | 0.3 | 5.0 | 5.2 | 17.1 | 0 | 3.6 | 2.7 | 2.8 | 4.7 | 30.9 | 36.1 |
| 1966 | 0.8 | 5.0 | 5.8 | 20.3 | a | 4.1 | 2.2 | 1.4 | 6.1 | 34.1 | 39.3 |
| 1967 | 1.2 | 5.0 | 6.2 | 21.5 | 3.2 | 4.8 | 2.3 | 2.0 | 7.4 | 41.2 | 47.4 |
| 1968 | 1.8 | 5.7 | 7.5 | 23.1 | 5.1 | 5.7 | 2.2 | 3.3 | 9.2 | 48.6 | 56.1 |
| 1969 | 2.3 | 6.4 | 8.6 | 26.7 | 6.3 | 5.2 | 2.3 | 4.2 | 7.8 | 52.6 | 61.2 |
| 1970 | 2.7 | 7.4 | 10.1 | 29.6 | 6.8 | 6.6 | 3.1 | 3.8 | 8.6 | 58.6 | 68.7 |
| 1971 | 3.4 | 10.1 | 13.4 | 35.1 | 7.5 | 8.3 | 5.8 | 2.9 | 9.8 | 69.3 | 82.7 |
| 1972 | 4.6 | 11.7 | 16.3 | 39.4 | 8.4 | 9.6 | 6.7 | 4.1 | 12.4 | 80.5 | 96.8 |
| 1973 | 4.6 | 11.4 | 16.0 | 48.2 | 9.0 | 11.7 | 4.9 | 3.6 | 18.8 | 96.2 | 112.2 |
| 1974 | 5.8 | 13.7 | 19.5 | 55.0 | 10.7 | 13.8 | 5.6 | 1.0 | 21.6 | 107.7 | 127.1 |
| 1975 | 6.8 | 18.5 | 25.4 | 63.6 | 14.1 | 18.3 | 12.8 | 0.6 | 29.7 | 139.0 | 164.4 |
| 1976 | 8.6 | 21.7 | 30.3 | 72.7 | 16.9 | 18.9 | 18.6 | 1.1 | 31.2 | 159.4 | 189.7 |
| 1977 | 9.9 | 23.5 | 33.3 | 83.7 | 20.8 | 21.6 | 14.3 | 3.8 | 29.0 | 173.2 | 206.6 |
| 1978 | 10.7 | 24.8 | 35.5 | 92.4 | 24.3 | 23.7 | 10.8 | 5.7 | 36.0 | 192.9 | 228.4 |
| 1979 | 12.4 | 26.5 | 38.9 | 102.6 | 28.2 | 27.9 | 9.8 | 3.6 | 37.3 | 209.3 | 248.2 |
| 1980 | 14.0 | 32.0 | 45.9 | 117.1 | 34.0 | 32.1 | 16.9 | 2.8 | 42.8 | 245.6 | 291.5 |
| 1981 | 16.8 | 37.1 | 53.9 | 137.9 | 41.3 | 37.4 | 18.3 | 4.0 | 47.8 | 286.7 | 340.6 |
| 1982 | 17.4 | 37.4 | 54.8 | 153.9 | 49.2 | 40.7 | 22.2 | 11.7 | 40.3 | 318.0 | 372.7 |
| 1983 | 19.0 | 40.3 | 59.3 | 168.5 | 55.5 | 43.2 | 29.7 | 18.9 | 36.6 | 352.4 | 411.6 |
| 1984 | 20.1 | 41.2 | 61.3 | 176.1 | 61.0 | 44.7 | 17.0 | 7.3 | 38.9 | 345.0 | 406.3 |
| 1985 | 22.7 | 43.3 | 66.0 | 186.4 | 69.7 | 45.5 | 15.8 | 17.7 | 48.8 | 384.0 | 450.0 |
| 1986 | 25.0 | 44.9 | 69.9 | 196.5 | 74.2 | 47.5 | 16.1 | 25.8 | 29.5 | 389.8 | 459.7 |
| 1987 | 27.4 | 45.5 | 72.9 | 205.1 | 79.9 | 50.8 | 15.5 | 22.4 | 23.6 | 397.3 | 470.2 |
| 1988 | 30.5 | 50.0 | 80.5 | 216.8 | 85.7 | 54.2 | 13.6 | 12.2 | 31.3 | 413.8 | 494.2 |
| 1989 | 34.6 | 54.2 | 88.8 | 230.4 | 94.3 | 57.2 | 13.9 | 10.6 | 32.0 | 438.4 | 527.2 |
| 1990 | 41.1 | 58.8 | 99.9 | 246.5 | 107.4 | 59.9 | 17.5 | 6.5 | 28.9 | 466.7 | 566.5 |
| 1991 | 52.5 | 69.8 | 122.3 | 266.7 | 114.2 | 64.4 | 25.1 | 10.1 | 33.1 | 513.6 | 635.9 |

SOURCE: Congressional Budget Office.

a. Less than $50 million.

**Table D-11.**
**Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1991 (As a percentage of GDP)**

| | Means-Tested Programs | | | Non-Means-Tested Programs | | | | | | | Total Entitlements and Other Mandatory Spending |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Medicaid | Other | Total Means-Tested | Social Security | Medicare | Other Retirement and Disability | Unemployment Compensation | Farm Price Supports | Other | Total Non-Means-Tested Programs | |
| 1962 | a | 0.8 | 0.8 | 2.5 | 0 | 0.5 | 0.6 | 0.4 | 1.0 | 5.0 | 5.8 |
| 1963 | a | 0.8 | 0.8 | 2.6 | 0 | 0.5 | 0.6 | 0.6 | 0.6 | 4.9 | 5.7 |
| 1964 | a | 0.8 | 0.8 | 2.6 | 0 | 0.5 | 0.5 | 0.5 | 0.7 | 4.9 | 5.7 |
| 1965 | a | 0.7 | 0.8 | 2.5 | 0 | 0.5 | 0.4 | 0.4 | 0.7 | 4.6 | 5.4 |
| 1966 | 0.1 | 0.7 | 0.8 | 2.7 | a | 0.6 | 0.3 | 0.2 | 0.8 | 4.6 | 5.4 |
| 1967 | 0.1 | 0.6 | 0.8 | 2.7 | 0.4 | 0.6 | 0.3 | 0.2 | 0.9 | 5.2 | 6.0 |
| 1968 | 0.2 | 0.7 | 0.9 | 2.7 | 0.6 | 0.7 | 0.3 | 0.4 | 1.1 | 5.7 | 6.6 |
| 1969 | 0.2 | 0.7 | 0.9 | 2.9 | 0.7 | 0.6 | 0.2 | 0.5 | 0.8 | 5.7 | 6.6 |
| 1970 | 0.3 | 0.7 | 1.0 | 3.0 | 0.7 | 0.7 | 0.3 | 0.4 | 0.9 | 5.9 | 7.0 |
| 1971 | 0.3 | 1.0 | 1.3 | 3.3 | 0.7 | 0.8 | 0.5 | 0.3 | 0.9 | 6.6 | 7.9 |
| 1972 | 0.4 | 1.0 | 1.4 | 3.4 | 0.7 | 0.8 | 0.6 | 0.4 | 1.1 | 7.0 | 8.4 |
| 1973 | 0.4 | 0.9 | 1.3 | 3.8 | 0.7 | 0.9 | 0.4 | 0.3 | 1.5 | 7.5 | 8.8 |
| 1974 | 0.4 | 1.0 | 1.4 | 3.9 | 0.8 | 1.0 | 0.4 | 0.1 | 1.5 | 7.7 | 9.1 |
| 1975 | 0.5 | 1.2 | 1.7 | 4.2 | 0.9 | 1.2 | 0.8 | a | 2.0 | 9.2 | 10.9 |
| 1976 | 0.5 | 1.3 | 1.8 | 4.3 | 1.0 | 1.1 | 1.1 | 0.1 | 1.9 | 9.5 | 11.3 |
| 1977 | 0.5 | 1.2 | 1.7 | 4.4 | 1.1 | 1.1 | 0.7 | 0.2 | 1.5 | 9.0 | 10.8 |
| 1978 | 0.5 | 1.1 | 1.6 | 4.3 | 1.1 | 1.1 | 0.5 | 0.3 | 1.7 | 8.9 | 10.6 |
| 1979 | 0.5 | 1.1 | 1.6 | 4.2 | 1.2 | 1.1 | 0.4 | 0.1 | 1.5 | 8.6 | 10.2 |
| 1980 | 0.5 | 1.2 | 1.7 | 4.4 | 1.3 | 1.2 | 0.6 | 0.1 | 1.6 | 9.3 | 11.0 |
| 1981 | 0.6 | 1.3 | 1.8 | 4.7 | 1.4 | 1.3 | 0.6 | 0.1 | 1.6 | 9.7 | 11.5 |
| 1982 | 0.6 | 1.2 | 1.8 | 4.9 | 1.6 | 1.3 | 0.7 | 0.4 | 1.3 | 10.2 | 11.9 |
| 1983 | 0.6 | 1.2 | 1.8 | 5.1 | 1.7 | 1.3 | 0.9 | 0.6 | 1.1 | 10.6 | 12.4 |
| 1984 | 0.5 | 1.1 | 1.7 | 4.8 | 1.6 | 1.2 | 0.5 | 0.2 | 1.1 | 9.3 | 11.0 |
| 1985 | 0.6 | 1.1 | 1.7 | 4.7 | 1.8 | 1.1 | 0.4 | 0.4 | 1.2 | 9.7 | 11.3 |
| 1986 | 0.6 | 1.1 | 1.7 | 4.7 | 1.8 | 1.1 | 0.4 | 0.6 | 0.7 | 9.2 | 10.9 |
| 1987 | 0.6 | 1.0 | 1.6 | 4.6 | 1.8 | 1.1 | 0.3 | 0.5 | 0.5 | 8.9 | 10.6 |
| 1988 | 0.6 | 1.0 | 1.7 | 4.5 | 1.8 | 1.1 | 0.3 | 0.3 | 0.7 | 8.6 | 10.3 |
| 1989 | 0.7 | 1.0 | 1.7 | 4.5 | 1.8 | 1.1 | 0.3 | 0.2 | 0.6 | 8.5 | 10.2 |
| 1990 | 0.8 | 1.1 | 1.8 | 4.5 | 2.0 | 1.1 | 0.3 | 0.1 | 0.5 | 8.5 | 10.4 |
| 1991 | 0.9 | 1.2 | 2.2 | 4.7 | 2.0 | 1.1 | 0.4 | 0.2 | 0.6 | 9.1 | 11.3 |

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Appendix E

# Major Contributors to the Revenue and Spending Projections

The following analysts prepared the revenue and spending projections in this report:

Revenue Projections

| | |
|---|---|
| Mark Booth | Corporate income taxes, Federal Reserve System earnings |
| Maureen Griffin | Social insurance contributions, excise taxes, estate and gift taxes |
| Katherine Johnson | Excise taxes, NIPA receipts |
| Linda Radey | Excise taxes |
| John Stell | Customs duties, miscellaneous receipts |
| David Weiner | Individual income taxes |

Spending Projections

*Defense and International Affairs*

| | |
|---|---|
| Eugene Bryton | Defense |
| Kent Christensen | International affairs |
| Raymond Hall | Defense |
| Barbara Hollinshead | Defense |
| William Myers | Defense |
| Mary Helen Petrus | Defense |
| Amy Plapp | Defense |
| Lisa Siegel | Defense |
| Joseph Whitehill | International affairs |

*Human Resources*

| | |
|---|---|
| Sandra Clark | Child nutrition, veterans' compensation and pensions |
| Paul Cullinan | Social Security |
| Cathy Ellman | Civil Service Retirement, Railroad Retirement |
| Alan Fairbank | Hospital Insurance |
| Scott Harrison | Medicare |
| Jean Hearne | Medicaid |
| Lori Housman | Medicare |
| Julia Isaacs | Food stamps, foster care, child care |
| Deborah Kalcevic | Education |

| | |
|---|---|
| Josh Leichter | Social service programs, Head Start |
| Cory Oltman | Unemployment insurance, training programs, veterans' education |
| Pat Purcell | Supplemental Security Income, Medicaid |
| Kathleen Shepherd | Veterans' benefits |
| Connie Takata | Public Health Service |
| John Tapogna | Aid to Families with Dependent Children, child support enforcement |

*Natural and Physical Resources*

| | |
|---|---|
| Philip Bartholomew | Deposit insurance |
| Kim Cawley | Energy, pollution control and abatement |
| Patricia Conroy | Community and regional development, general government |
| Peter Fontaine | Energy |
| Mark Grabowicz | Science and space, justice |
| Theresa Gullo | Water resources, conservation, and land management |
| James Hearn | General government, Agricultural Credit Insurance Fund, Outer Continental Shelf receipts |
| David Hull | Agriculture |
| Thomas Lutton | Deposit insurance |
| Mary Maginniss | Deposit insurance |
| Eileen Manfredi | Agriculture |
| Marjorie Miller | Transportation, Federal Housing Administration |
| Andrew Morton | Agriculture |
| Deborah Reis | Recreation, water transportation |
| Mitchell Rosenfeld | Air transportation, justice, Postal Service |
| Brent Shipp | Housing and mortgage credit |
| John Webb | Commerce, disaster relief |

*Other*

| | |
|---|---|
| Janet Airis | Appropriation bills |
| Edward Blau | Appropriation bills |
| Betty Embrey | Appropriation bills |
| Kenneth Farris | Computer support |
| Glen Goodnow | Authorization bills |
| Alice Grant | Appropriation bills |
| Leslie Griffin | Net interest on public debt |
| Vernon Hammett | Computer support |
| Ellen Hays | Budget projections |
| Sandra Hoffman | Computer support |
| Jeffrey Holland | National income and product accounts, other interest |
| Richard Krop | Civilian agency pay, historical data |
| Terri Linger | Computer support |
| Fritz Maier | Computer support |
| Kathy Ruffing | Treasury borrowing, interest, and debt |
| Robert Sempsey | Appropriation bills |
| Jeff Swersey | Computer support |

# Glossary

The definitions of terms in this glossary reflect their usage in this report. Although such usage is standard, the definitions may not apply in other contexts. Some entries sacrifice precision for brevity and clarity to the lay reader. The Budget Enforcement Act of 1990 redefined a number of budget terms, and the Bureau of Economic Analysis, in the fall of 1991, redefined or reclassified some components of the national income and product accounts. The definitions of terms below conform to those redefinitions. Where appropriate, sources for entries are indicated as follows:

BEA denotes Bureau of Economic Analysis, Department of Commerce;

BLS denotes Bureau of Labor Statistics, Department of Labor;

CBO denotes Congressional Budget Office;

FRB denotes Federal Reserve Board; and

NBER denotes National Bureau of Economic Research.

**Adjustable-rate mortgage:** Mortgage whose interest rate is not fixed for the life of the mortgage, but varies in a predetermined way with movements in a specified market interest rate.

**Aggregate demand:** Total purchases of a country's output of goods and services by consumers, businesses, government, and foreigners during a given period. Because purchases equal sales, aggregate demand equals gross domestic product. (BEA)

**Appropriations:** The legal authority for federal agencies to incur obligations and make payments from the Treasury for specified purposes.

*Discretionary appropriations* are usually made on an annual basis but are sometimes made on a multiyear or open-ended basis. In acting annually on these appropriations, the Congress exercises complete discretion regarding the amounts appropriated.

*Mandatory appropriations* are also provided by the Congress on an annual basis. The amount of the appropriations, however, is determined largely by existing, substantive law. For the purposes of the Budget Enforcement Act of 1990, any reference to entitlement authority includes mandatory appropriations. See **Entitlements.**

*Permanent appropriations* are available as a result of previously enacted legislation and do not require subsequent action by the Congress to authorize their use.

**Authorization:** A substantive law that sets up or continues a federal program or agency. Authorizing legislation is normally a prerequisite for appropriations. For some programs, the authorizing legislation itself provides the authority to incur obligations and make payments.

**Balanced Budget Act:** Common shorthand for the Balanced Budget and Emergency Deficit Control Act of 1985, also known as Gramm-Rudman-Hollings. The act sets forth specific deficit targets and a sequestration procedure to reduce spending if the targets are exceeded. The Budget Enforcement Act of 1990 established a revised set of targets through fiscal year 1995, which excludes the Social Security trust funds. The President is required to adjust the deficit targets for revised economic and technical assumptions when submitting the budget for 1993 and has that option for the budgets of fiscal years 1994 and 1995.

**Baseline:** A benchmark for measuring the budgetary effects of proposed changes in federal revenues or spending with the assumption that current budgetary policies are continued without change. As specified in the Budget Enforcement Act of 1990, the baseline for revenues and entitlement spending generally assumes that laws now on the statute books will continue. For discretionary spending, the projections for fiscal year 1993 are based on the appropriations for fiscal year 1992, adjusted for inflation. In this report, however, the discretionary spending projections for 1993 through 1995 are based on the discretionary spending caps set by the act and are adjusted for inflation thereafter.

***Blue Chip* consensus forecast:** The average of about 50 forecasts surveyed by Eggert Economic Enterprises, Inc.

**Budget:** A detailed statement of actual or anticipated revenues and expenditures during an accounting period.

**Budget authority:** Authority provided by law to incur financial obligations that will result in spending of federal government funds. Offsetting collections, including offsetting receipts, constitute negative budget authority.

**Budget deficit:** Amount by which budget expenditures exceed budget revenues during a given period.

**Budget Enforcement Act of 1990:** Title XIII of the Omnibus Budget Reconciliation Act of 1990. This act amended both the Congressional Budget Act

of 1974 and the Balanced Budget and Emergency Deficit Control Act of 1985. The new law provides for new budget targets, sequestration procedures, pay-as-you-go procedures, credit reform, and various other changes.

**Budget function:** One of 19 areas into which federal spending and credit activity are divided. National needs are grouped into 17 broad budget functions, including national defense, international affairs, energy, agriculture, health, income security, and general government. Two functions--net interest and undistributed offsetting receipts--do not address national needs but are included to complete the budget.

**Budget resolution:** A resolution, passed by both Houses of the Congress but not requiring the President's signature, that sets forth a Congressional budget plan for the next five years. The plan must be carried out through subsequent legislation, including appropriations and changes in tax and entitlement laws. The Congressional Budget Act of 1974 established a number of mechanisms that are designed to hold spending and revenues to the targets established in the budget resolution.

**Budgetary resources:** All sources of budget authority that are subject to sequestration. Budgetary resources include new budget authority, unobligated balances, direct spending authority, and obligation limitations. See **Sequestration.**

**Business cycle:** Fluctuations in overall business activity accompanied by swings in the unemployment rate, interest rates, and profits. Over a business cycle, real activity rises to a peak (its highest level during the cycle), then falls until it reaches its trough (its lowest level following the peak), whereupon it starts to rise again, defining a new cycle. Business cycles are irregular, varying in frequency, amplitude, and duration. (NBER)

**Capital:** *Physical capital* is the output that has been set aside to be used in production rather than consumed. According to the national income and product accounts, private capital goods are composed of residential and nonresidential structures, producers' durable equipment, and business inventories. *Financial capital* is a claim on an individual, business, or government represented by a security, such as a mortgage, stock certificate, or bond. Issuing such securities provides the resources to buy physical capital.

**Central bank:** A government-established agency responsible for conducting monetary policy and overseeing credit conditions. The Federal Reserve System fulfills these functions in the United States.

**Civilian unemployment rate:** Unemployment as a percentage of the civilian labor force--that is, the labor force excluding armed forces personnel. (BLS)

**Commercial paper:** Short-term, unsecured debt obligations that are issued by large corporations with good credit ratings and that are actively traded in financial markets. By selling such obligations, issuers of commercial paper borrow directly from the public, rather than indirectly through financial intermediaries such as commercial banks.

**Compensation:** All income due to employees for their work during a given period. Compensation includes wages and salaries as well as fringe benefits and employers' share of social insurance taxes. (BEA)

**Constant dollar:** Measured in terms of prices of a base period, currently 1987 for most purposes, to remove the influence of inflation. Compare with **Current dollar.**

**Consumer confidence:** A measure of consumer attitudes and buying plans indicated by an index of consumer sentiment. The index is constructed by the University of Michigan Survey Research Center based on surveys of consumers' views of the states of the economy and their personal finances, both current and prospective.

**Consumer durable goods:** Goods bought by households for their personal use that, on average, last more than three years--for example, automobiles, furniture, or appliances.

**Consumption:** Total purchases of goods and services during a given period by households for their own use. (BEA)

**Cost of capital:** Total expected rate of return an investment must generate in order to provide investors with the prevailing market yield consistent with risk after accounting for corporate taxes (if applicable) and depreciation.

**Countercyclical:** Acting to moderate the ups and downs of the business cycle.

**CPI-U:** An index of consumer prices based on the typical market basket of goods and services consumed by all urban consumers during a base period--currently 1982 through 1984. (BLS)

**Credit crunch:** A significant, temporary decline in the normal supply of credit, usually caused by tight monetary policy or a regulatory restriction facing lending institutions.

**Credit reform:** A revised system of budgeting for federal credit activities that focuses on the cost of subsidies conveyed in federal credit assistance. This process was authorized by the Federal Credit Reform Act of 1990.

**Credit subsidies:** The estimated long-term costs to the federal government of direct loans or loan guarantees calculated on the basis of net present value, excluding administrative costs and any incidental effects on governmental receipts or outlays. For direct loans, the subsidy cost is the net present value of loan disbursements, less repayments, and adjusted for interest, estimated defaults, prepayments, fees, penalties, and other recoveries. For loan guarantees, the subsidy cost is the net present value of the estimated payments by the government to cover defaults and delinquencies, interest subsidies, or other payments, offset by any payments to the government, including origination and other fees, penalties, and recoveries.

**Currency value:** See **Exchange rate.**

**Current-account balance:** The net revenues that arise from a country's international sales and purchases of goods and services, net international transfers (public or private gifts or donations), and net factor income (primarily capital income from foreign-located property owned by residents less capital income from domestic property owned by nonresidents). The current-account balance differs from net exports in that the former includes international transfers and net factor income. (BEA)

**Current dollar:** Measured in the dollar value--reflecting then-prevailing prices--of the period under consideration. Compare with **Constant dollar.**

**Cyclical deficit:** The part of the budget deficit that results from cyclical factors rather than from underlying fiscal policy. The cyclical deficit reflects the fact that, when GDP falls, revenues automatically fall and outlays automatically rise. By definition, the cyclical deficit is zero when the economy is operating at potential GDP. Compare with **Standardized-employment budget deficit.** (CBO)

**Debt maintenance:** Payment of scheduled interest obligations on outstanding debt.

**Debt restructuring:** Changing the characteristics of an entity's outstanding debt, such as maturity or interest rate. Such changes can be effected by issuing long-term debt and retiring short-term debt (or vice versa), or by negotiating with creditors.

**Defense spending:** See **Discretionary spending.**

**Deflator:** See **Implicit deflator.**

**Deposit insurance:** The guarantee by a federal agency that an individual depositor at a participating depository institution will receive the full amount of the deposit (up to $100,000) if the institution becomes insolvent.

**Depository institutions:** Financial intermediaries that make loans to borrowers and obtain funds from savers by accepting deposits. Depository institutions are commercial banks, savings and loan institutions, mutual savings banks, and credit unions.

**Depreciation:** Decline in the value of a currency, financial asset, or capital good. When applied to a capital good, the term usually refers to loss of value because of obsolescence or wear.

**Direct spending:** The Budget Enforcement Act of 1990 defines this term as (a) budget authority provided by law other than appropriation acts, (b) entitlement authority (including mandatory appropriations), and (c) the Food Stamp program. Compare with **Discretionary spending.**

**Discount rate:** The interest rate charged by the Federal Reserve System on a loan that it makes to a bank. Such loans, when allowed, enable a bank to meet its reserve requirements without reducing its loans.

**Discouraged workers:** Jobless people who are available for work, but who are not actively seeking jobs because they think they have poor prospects of finding jobs. Because they are not actively seeking jobs, discouraged workers are not counted as part of the labor force or as being unemployed. (BLS)

**Discretionary spending:** Spending for programs provided by the Congress in the 13 annual appropriation bills. Discretionary spending is divided among three categories: defense, international, and domestic.

*Defense discretionary spending* consists primarily of the military activities of the Department of Defense, which are funded in the defense and military construction appropriation bills. It also includes the defense-related functions of other agencies, such as the Department of Energy's nuclear weapons programs.

*International discretionary spending* encompasses spending for foreign economic and military aid, the activities of the Department of State and the U.S. Information Agency, and international financial programs, such as the Export-Import Bank of the United States.

*Domestic discretionary spending* includes most government activities in science and space, transportation, medical research, environmental protection, and law enforcement, among other spending programs. Funding for these programs is provided in 10 of the annual appropriation bills.

**Discretionary spending caps:** Ceilings on budget authority and outlays for discretionary programs as defined by the Budget Enforcement Act of 1990. For fiscal years 1991 through 1993, the caps are divided among the three categories of discretionary spending--defense, international, and domestic. For fiscal years 1994 and 1995, there is one cap for all discretionary spending. Discretionary spending caps are enforced through Congressional rules and sequestration procedures.

**Disposable (personal) income:** Income received by individuals, including transfer payments, less personal taxes and fees paid to government. (BEA)

**Domestic demand:** Total purchases of goods and services, regardless of origin, by U.S. consumers, businesses, and governments during a given period. Domestic demand equals gross domestic product minus net exports. (BEA)

**Domestic discretionary spending:** See **Discretionary spending.**

**Entitlements:** Programs that make payments to any person, business, or unit of government that seeks the payments and meets the criteria set in law. The Congress controls these programs indirectly by defining eligibility and setting the benefit or payment rules, rather than directly through the annual appropriation process. The best-known entitlements are the major benefit pro-

grams, such as Social Security and Medicare; other entitlements include farm price supports and interest on the federal debt. Under the provisions of the Budget Enforcement Act of 1990, mandatory programs funded through the annual appropriation process are treated for budgetary purposes like entitlements.

**Equity price:** The market value of a stock certificate share.

**Excess reserves:** Total monetary reserves in excess of required reserves. See **Monetary reserves** and **Reserve requirements.**

**Exchange rate:** The number of units of a foreign currency that can be bought with one unit of the domestic currency. (FRB)

**Excise tax:** A tax levied on the purchase of a specific type of good or service, such as tobacco products or telephone services.

**Expansion:** A phase of the business cycle that extends from the trough to the next peak. See **Business cycle.** (NBER)

**Federal funds rate:** Overnight interest rate at which financial institutions borrow and lend monetary reserves. A rise in the federal funds rate (compared with other short-term rates) suggests a tightening of monetary policy, whereas a fall suggests an easing. (FRB)

**Federal Reserve System:** The agency responsible for conducting monetary policy and overseeing credit conditions in the United States.

**Final demand:** See **Final sales.**

**Final sales to domestic purchasers:** Gross domestic product minus both net exports and the change in business inventories during a given period. (BEA)

**Financial intermediary:** An institution that indirectly matches borrowers with lenders. For example, depository institutions, such as commercial banks or savings and loan institutions, lend funds that they have accepted from depositors. Nondepository institutions, such as life insurance companies or pension funds, lend or invest funds that they hold in reserve against future claims by policyholders or participating retirees.

**Financing account:** Any account established under credit reform to finance the portion of federal direct loans and loan guarantees not subsidized by federal funds. Since these accounts are used only to finance the nonsubsidized portion of federal credit activities, they are excluded from the federal budget and included as a means of financing the budget.

**Fiscal policy:** The government's choice of tax and spending programs, which influences the amount and maturity of government debt, as well as the level, composition, and distribution of output and income. An "easy" fiscal policy stimulates the growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment budget

deficit constitute one overall indicator of the tightness or ease of federal fiscal policy--an increase relative to potential GDP suggests fiscal ease, whereas a decrease suggests fiscal restriction. The President and the Congress jointly carry out federal fiscal policy.

**Fiscal year:** A yearly accounting period. The federal government's fiscal year begins October 1 and ends September 30. Fiscal years are designated by the calendar years in which they end--for example, fiscal year 1991 began October 1, 1990, and ended September 30, 1991.

**Fixed-weighted price index:** An index that measures overall price (compared with a base period) without being influenced by changes in the composition of output or purchases. Compare with **Implicit deflator.**

**GDP:** See **Gross domestic product.**

**GNP:** See **Gross national product.**

**Government purchases of goods and services:** Purchases from the private sector (including compensation of government employees) made by government during a given period. Government purchases constitute a component of GDP, but they encompass only a portion of all government expenditure because they exclude transfer payments (which include grants to state and local governments and net interest paid). (BEA)

**Government-sponsored enterprises (GSEs):** Enterprises established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency, but in all cases wholly owned by stockholders rather than the government. Major examples are the Federal National Mortgage Association, the Student Loan Marketing Association, and the Federal Home Loan Banks.

**Grants:** Transfer payments from the federal government to state and local governments or other recipients to help fund projects or activities that do not involve substantial federal participation.

**Grants-in-aid:** Grants from the federal government to state and local governments to help provide for programs of assistance or service to the public.

**Gross domestic product (GDP):** The total market value of all goods and services produced domestically during a given period. The components of GDP are consumption, gross domestic investment, government purchases of goods and services, and net exports. (BEA)

**Gross investment:** Includes additions to the capital stock, but does not include depreciation of existing capital as a subtraction from the capital stock.

**Gross national product (GNP):** The total market value of all goods and services produced in a given period by labor and property supplied by residents of a country, regardless of where the labor and property are located. GNP differs from GDP primarily by including the excess of capital income

that residents earn from investments abroad less capital income that nonresidents earn from domestic investment.

**Implicit deflator:** An overall measure of price (compared with a base period) given by the ratio of current dollar purchases to constant dollar purchases. Changes in an implicit deflator, unlike those in a **fixed-weighted price index**, reflect changes in the composition of purchases as well as in the prices of goods and services purchased. (BEA)

**Index:** An indicator or summary measure that defines the overall level (compared with a base) of some aggregate, such as the general price level or total quantity, in terms of the levels of its components.

**Inflation:** Growth in a measure of the general price level, usually expressed as an annual rate of change.

**Inflation-adjusted budget deficit:** A measure of the change in the real value of the publicly held federal debt.

**Infrastructure:** Government-owned capital goods that provide services to the public, usually with benefits to the community at large as well as to the direct user. Examples include schools, roads, bridges, dams, harbors, and public buildings.

**Inventories:** Stocks of goods held by businesses either for further processing or for sale. (BEA)

**Investment:** *Physical investment* is the current product set aside during a given period to be used for future production; in other words, an addition to the stock of capital goods. According to the national income and product accounts, private domestic investment consists of investment in residential and nonresidential structures, producers' durable equipment, and the change in business inventories. *Financial investment* is the purchase of a financial security.

**Junk bond:** A bond considered by credit rating services to be a speculative financial investment because of its relatively high risk of default or delay in meeting scheduled obligations. Junk bonds offer relatively high yields to compensate investors for their exposure to risk.

**Labor force:** The number of people who have jobs or are available for work and are actively seeking jobs. *Labor force participation rate* is the labor force as a percentage of the noninstitutional population aged 16 years or older. (BLS)

**Liquidating account:** Any budgetary account established under credit reform to finance direct loan and loan guarantee activities that were obligated or committed before credit reform.

**Liquidity:** Characteristic of an asset that permits it to be sold at short notice with little or no loss in value. Ordinarily, a shorter term to maturity or a lower risk of default will enhance an asset's liquidity.

**Long-term interest rate:** Interest rate earned by a note or bond that matures in 10 or more years.

**M2:** A measure of the U.S. money supply that consists of the nonbank public's holdings of currency, traveler's checks, and checking accounts (collectively known as M1), plus small (less than $100,000) time and savings accounts; money-market deposit accounts held at depository institutions, most money-market mutual funds, overnight repurchase agreements, and overnight Eurodollar accounts held by U.S. residents. (FRB)

**Marginal tax rate:** Tax rate that applies to an additional dollar of taxable income.

**Means of financing:** Sources of financing federal deficits or uses of federal surpluses. The largest means of financing is normally federal borrowing from the public, but other means of financing include any transaction that causes a difference between the federal (including off-budget) surplus or deficit and changes in debt held by the public. The means of financing include changes in checks outstanding and Treasury cash balances, seigniorage, and the financing accounts enacted under credit reform.

**Means-tested programs:** Programs that provide cash or services to low-income people who meet a test of need. Most means-tested programs are entitlements--for example, Medicaid, the Food Stamp program, Supplemental Security Income, family support, and veterans' pensions--but a few, such as subsidized housing and various social services, are funded through discretionary appropriations.

**Merchandise trade balance:** Net exports of goods. The merchandise trade balance differs from net exports by excluding exports and imports of services. (BEA)

**Monetary policy:** The strategy of influencing movements of the money supply and interest rates to affect output and inflation. An "easy" monetary policy suggests faster money growth and initially lower short-term interest rates in an attempt to increase aggregate demand, but it may lead to a higher rate of inflation. A tight monetary policy suggests slower money growth and higher interest rates in the near term in an attempt to reduce inflationary pressure by reducing aggregate demand. The Federal Reserve System conducts monetary policy in the United States.

**Monetary reserves:** The amount of funds that banks and other depository institutions hold as cash or as deposits with the Federal Reserve System. See also **Reserve requirements.**

**Money supply:** Private assets that can readily be used to make transactions or can easily be converted into those that can. See **M2.**

**NAIRU (Nonaccelerating inflation rate of unemployment):** The unemployment rate consistent with a constant inflation rate. An unemployment rate greater than the NAIRU indicates downward pressure on inflation, whereas a lower unemployment rate indicates upward pressure on inflation. Estimates of the NAIRU are based on the historical relationship between inflation and the aggregate unemployment rate. CBO's estimating procedures are described in Appendix B of *The Economic and Budget Outlook: An Update* (August 1987).

**National income and product accounts (NIPAs):** Official U.S. accounts that detail the composition of GDP and how the costs of production are distributed as income. (BEA)

**National saving:** Total saving by all sectors of the economy: personal saving, business saving (corporate after-tax profits not paid as dividends), and government saving (budget surplus or deficit--indicating dissaving--of all government entities). National saving represents all income not consumed, publicly or privately, during a given period. (BEA)

**Net exports:** Exports of goods and services produced in a country less its imports of goods and services produced elsewhere.

**Net interest:** *In the federal budget*, net interest includes federal interest payments to the public as recorded in budget function 900. Net interest also includes, as an offset, interest income received by the government on loans and cash balances. *In the national income and product accounts*, net interest is the income component of GDP paid as interest; primarily interest that domestic businesses pay, less interest they receive. The NIPAs treat government interest payments as transfers, so they are not part of GDP.

**Net national saving:** National saving less depreciation of physical capital.

**Net present value:** The current value of future payments and collections. The difference between cash at any point in time and future cash transactions adjusted for the time value of money.

**NIPAs:** See **National income and product accounts.**

**Nominal:** Measured in the dollar value (as in nominal output, income, or wage rate) or market terms (as in nominal exchange or interest rate) of the period under consideration. Compare with **Real.**

**Noncredit account:** Any budgetary account except for credit activity, including the subsidy, program, and liquidating accounts established under credit reform.

**Nonresidential structures:** Primarily business buildings (such as industrial, office, and other commercial buildings) and structures (such as mining and well shafts). (BEA)

**Off-budget:** Spending or revenues excluded from the budget totals by law. The Budget Enforcement Act of 1990 requires that the revenues and outlays of the two Social Security trust funds be shown as off-budget. The Omnibus Budget Reconciliation Act of 1989 took the Postal Service fund off-budget and also excluded it from the Balanced Budget Act and the Congressional budget resolution processes.

**Offsetting receipts:** Funds collected by the federal government that are recorded as negative budget authority and outlays and credited to separate receipt accounts. More than half of offsetting receipts are intragovernmental receipts that reflect agencies' payments to retirement and other funds on their employees' behalf; these receipts simply balance payments elsewhere in the budget. The remaining offsetting receipts (proprietary receipts) come from the public and generally represent voluntary, business-type transactions. The largest items are the flat premiums for Supplementary Medical Insurance (Part B of Medicare), timber and oil lease receipts, and proceeds from the sale of electric power.

**Operating deficit of state and local governments:** Budget deficit excluding revenues and expenditures of their social insurance funds (primarily retirement funds for employees). (BEA)

**Organization of Petroleum Exporting Countries (OPEC):** The group of oil-rich countries that tries to determine the price of crude oil (given demand) by agreeing to production quotas among its members.

**Outlays:** The liquidation of a federal obligation, generally by issuing a check or disbursing cash. Sometimes obligations are liquidated (and outlays occur) by issuing agency notes, such as those of the Federal Deposit Insurance Corporation. Unlike outlays for other categories of spending, outlays for interest on the public debt are counted when the interest is earned, not when it is paid. Outlays may be for payment of obligations incurred in previous fiscal years or in the same year. Outlays, therefore, flow in part from unexpended balances of prior-year budget authority and, in part, from budget authority provided for the current year.

**Pay-as-you-go:** A procedure required in the Budget Enforcement Act of 1990 to ensure that, for fiscal years 1991 through 1995, direct spending and receipt legislation do not increase the deficit. Pay-as-you-go is enforced through Congressional rules and sequestration procedures.

**Peak:** See **Business cycle.**

**Personal saving:** Disposable personal income that households do not use for consumption or interest payments during a given period. *Personal saving rate* is personal saving as a percentage of disposable personal income. (BEA)

**Point-year of unemployment:** An unemployment rate that is 1 percentage point above the NAIRU for one year. For example, if the unemployment rate averaged 2 percentage points above the NAIRU for one and one-half years, that would be three point-years of unemployment.

**Potential real GDP:** The highest level of real GDP that could persist for a substantial period without raising the rate of inflation. CBO's calculation relates potential GDP to the NAIRU. See **NAIRU.** (CBO)

**Private saving:** Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits less dividends paid. (BEA)

**Producers' durable equipment:** Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (BEA)

**Productivity:** Average real output per unit of input. Labor productivity is average real output per hour of labor. The growth of labor productivity is defined as growth of real output that is not explained by growth of labor input alone. Total factor productivity is average real output per unit of combined labor and capital inputs. The growth of total factor productivity is defined as the growth of real output that is not explained by growth of labor and capital. Labor productivity and total factor productivity differ in that increases in capital per worker would raise labor productivity, but not total factor productivity. (BLS)

**Program account:** Any budgetary account that finances credit subsidies and the costs of administering credit programs.

**Publicly held federal debt:** Debt issued by the federal government and held by nonfederal investors (including the Federal Reserve System).

**Real:** Adjusted to remove the effect of inflation. *Real (constant dollar) output* represents volume, rather than dollar value, of goods and services. *Real income* represents power to purchase real output. *Real data* are usually constructed by dividing the corresponding nominal data--such as output or a wage rate--by a price index or deflator. *Real interest rate* is a nominal interest rate minus the inflation rate of a given price index. Compare with **Nominal.**

**Receipt account:** Any budget or off-budget account that is established exclusively to record the collection of income, including negative subsidies. In general, receipt accounts used to collect money arising from the exercise of the government's sovereign powers are included as budget or off-budget revenues, whereas the proceeds of intragovernmental transactions or collections from the public arising from business-type transactions (such as interest income, proceeds from the sale of property or products, or profits from federal credit activities) are included as *offsetting receipts*--that is, credited as offsets to outlays rather than included in receipts.

**Recession:** A phase of the business cycle extending from a peak to the next trough--usually lasting six months to a year--and characterized by widespread declines in output, income, employment, and trade in many sectors of the economy. Real GDP usually falls throughout the recession. See **Business cycle.** (NBER)

**Reconciliation:** A process the Congress uses to make its tax and spending legislation conform with the targets established in the budget resolution. The budget resolution may contain reconciliation instructions directing certain Congressional committees to achieve savings in tax or spending programs under their jurisdiction. Legislation to implement the reconciliation instructions is usually combined in one comprehensive bill. The reconciliation process primarily affects taxes, entitlement spending, and offsetting receipts. As a general rule, decisions on defense and nondefense discretionary programs are determined separately through the appropriation process, which is also governed by allocations in the budget resolution.

**Recovery:** A phase of the business cycle that lasts from a trough until overall economic activity returns to the level it had reached at the previous peak. See **Business cycle.** (NBER)

**Reserve requirements:** The amount of funds that banks and other depository institutions must hold as cash or as deposits with the Federal Reserve System. The Federal Reserve System specifies reserve requirements depending on the level of deposits. Such requirements reduce the risk of bank failure and allow the Federal Reserve System to influence the money supply. (FRB)

**Reserves:** See **Monetary reserves.**

**Residential investment:** Investment in housing, primarily for construction of new single-family and multifamily housing and alterations plus additions to existing housing. (BEA)

**Resolution Trust Corporation (RTC):** An agency created by the Financial Institutions Reform, Recovery, and Enforcement Act of 1989 (FIRREA) to close, merge, or otherwise resolve insolvent savings and loan institutions whose deposits are insured by the federal government.

**Retained earnings:** Corporate profits after tax that are used for investment, rather than paid out as dividends to stockholders. (BEA)

**RTC:** See **Resolution Trust Corporation.**

**Sequestration:** The cancellation of budgetary resources to enforce the Budget Enforcement Act of 1990. Sequestration is triggered if the Office of Management and Budget determines that discretionary appropriations breach the discretionary spending caps, that direct spending and receipt legislation increase the deficit, or that the deficit exceeds, by more than a specified margin, the maximum deficit amount set by law. Failure to meet the maximum deficit amount would trigger across-the-board spending reductions. Changes in direct spending and receipt legislation that increase the deficit would result in reductions in funding from entitlements not otherwise exempted by law. Discretionary spending in excess of the caps would cause the cancellation of budgetary resources within the appropriate discretionary spending category.

**Short-term interest rate:** Interest rate earned by a debt instrument that will mature within one year.

**Standardized-employment budget deficit:** The level of the federal government budget deficit that would occur under current law if the economy were operating at potential GDP. It provides a measure of underlying fiscal policy by removing the influence of cyclical factors from the budget deficit. Compare with **Cyclical deficit.** (CBO)

**Structural budget deficit:** Same as **Standardized-employment budget deficit.**

**Ten-year Treasury note:** Interest-bearing note, issued by the U.S. Treasury, that is redeemed in 10 years.

**Three-month Treasury bill:** Security, issued by the U.S. Treasury, that is redeemed in 91 days.

**Thrift institutions:** Savings and loan institutions and mutual savings banks.

**Transfer payments:** Payments in return for which no good or service is currently received--for example, welfare or Social Security payments or money sent to relatives abroad. (BEA)

**Trough:** See **Business cycle.**

**Trust fund:** A fund, designated as a trust fund by statute, that is credited with income from earmarked collections and charged with certain outlays. Collections may come from the public (for example, taxes or user charges) or from intrabudgetary transfers. More than 150 federal government trust funds exist, of which the largest and best known finance several major benefit programs (including Social Security and Medicare) and certain infrastructure spending (the Highway and the Airport and Airway trust funds). The term "federal funds" refers to all programs that are not trust funds.

**Underlying rate of inflation:** Rate of inflation of a modified CPI-U that excludes from the market basket the components most volatile in price--food, energy, and used cars.

**Unemployment:** The number of jobless people who are available for work and are actively seeking jobs. The *unemployment rate* is unemployment as a percentage of the labor force. (BLS)

**Yield:** The average annual rate of return on a security, including interest payments and repayment of principal, if held to maturity.

**Yield curve:** The relationship formed by plotting the yields of otherwise comparable fixed-income securities against their terms of maturity. Typically, yields increase as maturities lengthen. The rate of this increase determines the "steepness" or "flatness" of the yield curve. Ordinarily a steepening (or flattening) of the yield curve is taken to suggest that relatively short-term interest rates are expected to be higher (or lower) in the future than they are currently.

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