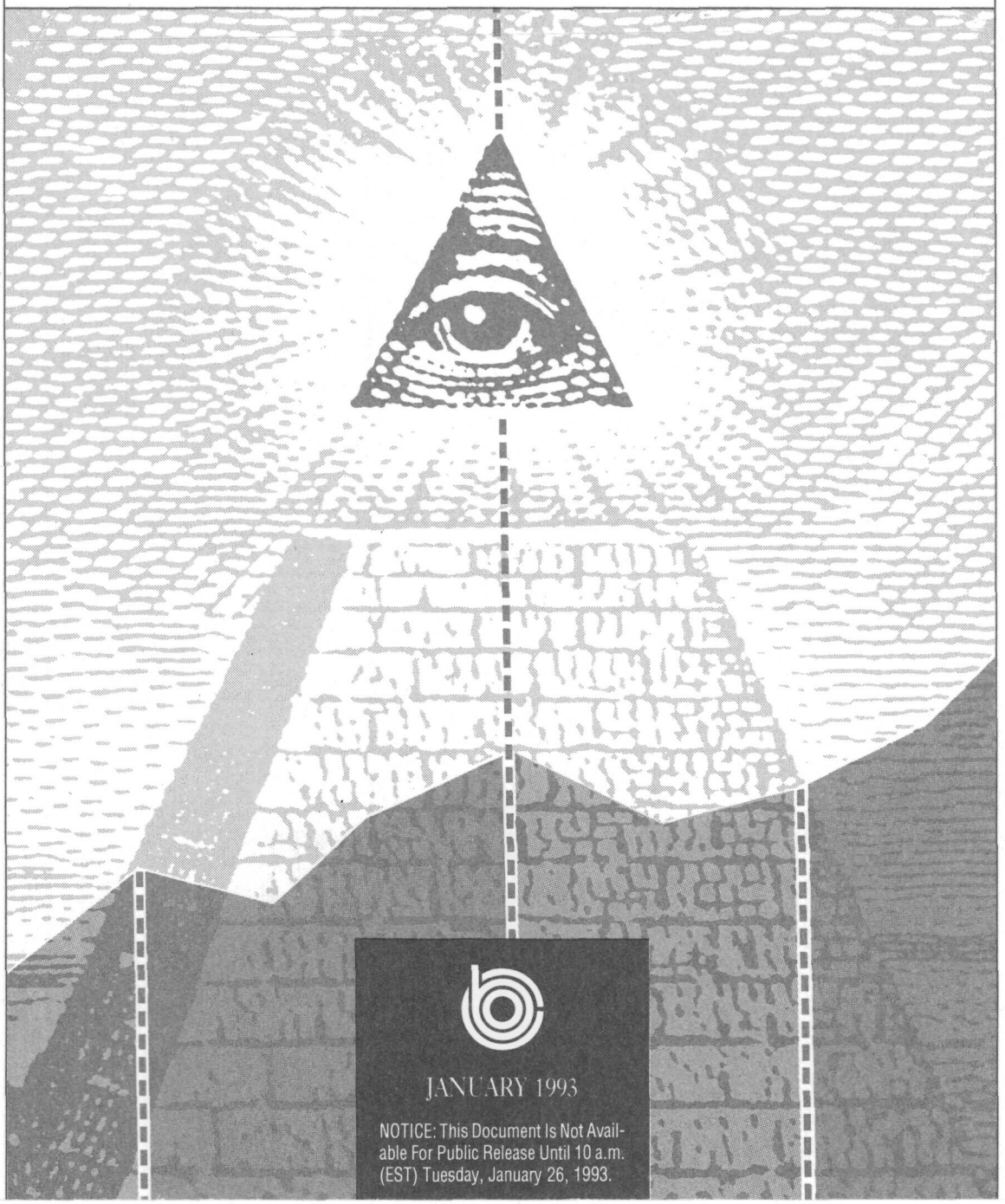
CONGRESS OF THE UNITED STATES
CONGRESSIONAL BUDGET OFFICE

The Economic and Budget Outlook: Fiscal Years 1994-1998

A Report to the Senate and House Committees on the Budget

As Required by Public Law 93-344



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CBO Publication

S U M M A R Y

January 1993

CBO ECONOMIC AND BUDGET OUTLOOK

The federal deficit is expected to reach $310 billion in 1993, setting a new record for the fourth year in a row, according to the Congressional Budget Office's report *The Economic and Budget Outlook: Fiscal Years 1994-1998*. The pace of economic growth will be insufficient to bring down the deficit, which is expected to hover near $300 billion through mid-decade and then grow even bigger (see table on reverse). Under current policies, CBO projects that the deficit would reach $357 billion in 1998 and about $650 billion in 2003.

Because the economy is still operating below its potential, part of the deficit stems from economic weakness. This cyclical deficit makes up one-fourth of the 1993 deficit, but its significance fades as the expansion continues. Spending for deposit insurance will also cause modest, transitory fluctuations in the deficit. The year-to-year swings in this spending, however, have little effect on the economy or on interest rates. When both cyclical and transitory factors are removed, what remains is the standardized-employment deficit, also called the structural deficit. This deficit hardly budges from $230 billion through 1995. It then climbs steadily, fueled by burgeoning outlays for Medicare and Medicaid, growing net interest costs, and the expiration of the 1990 Budget Enforcement Act's strict limits on discretionary appropriations.

The deficit is unlikely to go away of its own accord. But the penalty for not reducing it is widely acknowledged: by draining national saving, the government crimps investment, which is the primary engine that drives growth in productivity and living standards. CBO concludes that erasing the deficit in five or 10 years could cause short-term disruption, but with a significant long-run payoff. Even the short-term pain could be minimized if a credible deficit reduction package permitted the Federal Reserve to ease monetary policy. Reviewing various potential reforms in the budget process, CBO argues that they are no substitute for tough decisions to cut spending or raise taxes. But they can play a useful auxiliary role in cementing budget discipline.

The economy has finally embarked on a self-sustaining expansion, though one that is lackluster by historical standards. Weak growth abroad, belt-tightening by state and local governments and private businesses, and a glut of commercial real estate are among the factors retarding growth. CBO projects that real economic growth will be about 3 percent in 1993 and 1994 and that short-term Treasury bill rates will gradually climb from today's levels.

CBO does not try to project cyclical ups and downs beyond a two-year horizon but instead weighs such fundamental factors as growth in the labor force, productivity, and saving. CBO assumes that real growth will gradually taper down to about 2 percent a year by 1998, unemployment will decline, and short-term interest rates will continue to inch up. As a silver lining to this tepid expansion, inflation is expected to remain low.

Questions concerning the budget projections should be directed to CBO's Budget Analysis Division (202-226-2880) and inquiries about the economic forecast to the Macroeconomic Analysis Division (226-2750). The Office of Intergovernmental Relations is CBO's Congressional liaison office and can be reached at 226-2600. For additional copies of the report, please call the Publications Office at 226-2809.

CONGRESSIONAL BUDGET OFFICE
Second and D Streets, S.W.
Washington, D.C. 20515

Budget Projections and Underlying Assumptions

	1992	1993	1994	1995	1996	1997	1998
Budget Projections (By fiscal year) in Billions of Dollars							
Total Deficit[a]	290	310	291	284	287	319	357
Cyclical Deficit	91	79	59	43	32	24	17
Deposit Insurance Spending[b]	-2	3	10	11	-1	-14	-10
Standardized-Employment Deficit[c]	201	228	222	230	256	309	351
As a Percentage of GDP							
Total Deficit[a]	4.9	5.0	4.5	4.1	4.0	4.2	4.5
Standardized-Employment Deficit[c]	3.3	3.6	3.3	3.3	3.5	4.1	4.4
Economic Assumptions (By calendar year)							
Nominal GDP (Billions of dollars)	5,943	6,255	6,594	6,942	7,288	7,627	7,953
Real GDP (Percentage change)	2.0	2.8	3.0	2.9	2.7	2.4	2.0
CPI-U (Percentage change)[d]	3.1	3.0	2.7	2.7	2.7	2.7	2.7
Unemployment Rate (Percent)	7.4	7.1	6.6	6.2	6.0	5.8	5.7
Three-Month Treasury Bill Rate (Percent)	3.5	3.1	3.7	4.4	4.7	4.8	4.9
Ten-Year Treasury Note Rate (Percent)	7.0	6.7	6.6	6.6	6.5	6.5	6.4

SOURCE: Congressional Budget Office, January 1993.

NOTE: The projections include Social Security and the Postal Service, which are off-budget.

a. The projections assume compliance with the discretionary spending caps in the Budget Enforcement Act, which limit annual appropriations through 1995. Projections for 1996 through 1998 are CBO extrapolations.

b. The projections assume the provision of additional resources to the Resolution Trust Corporation (or a successor) beyond those in current law. The 1992 figure also includes final contributions of $5 billion from allied nations for Operation Desert Storm.

c. Excludes deposit insurance, Desert Storm contributions, and cyclical factors. Shown as a percentage of potential GDP.

d. The CPI-U is the consumer price index for all urban consumers.

February 1993

ERRATA SHEET

The Economic and Budget Outlook: Fiscal Years 1994-1998

The figures in Table E-1 on page 123 of the report should read as indicated on this sheet.

Table E-1.
Standardized-Employment Deficit and Related Series, Fiscal Years 1956-1992 (In billions of dollars)

	Standardized-Employment			Gross Domestic Product		NAIRU[a]
	Revenues	Outlays[b]	Deficit(-)[b]	Potential	Actual	(Percent)
1956	73.1	71.2	1.9	407	416	5.1
1957	79.5	77.3	2.2	432	438	5.1
1958	84.3	82.0	2.3	459	448	5.0
1959	82.4	91.2	-8.8	485	480	5.1
1960	95.2	92.1	3.1	510	505	5.2
1961	100.5	96.8	3.7	534	517	5.2
1962	103.4	106.5	-3.0	563	555	5.2
1963	109.8	111.4	-1.7	591	585	5.4
1964	112.6	118.9	-6.3	620	625	5.4
1965	114.7	119.3	-4.5	657	671	5.6
1966	124.1	136.7	-12.7	704	735	5.6
1967	142.6	160.1	-17.5	759	793	5.6
1968	146.5	181.1	-34.7	816	847	5.6
1969	178.6	187.6	-9.1	888	926	5.6
1970	190.8	199.0	-8.1	970	985	5.6
1971	191.2	210.9	-19.6	1,058	1,051	5.7
1972	210.6	231.2	-20.6	1,150	1,148	5.8
1973	224.6	247.8	-23.2	1,244	1,274	5.8
1974	260.6	272.3	-11.7	1,386	1,404	5.8
1975	296.7	327.7	-30.9	1,579	1,510	6.0
1976	317.5	363.7	-46.3	1,751	1,684	5.9
1977	367.4	405.7	-38.4	1,955	1,917	6.0
1978	402.4	457.7	-55.3	2,158	2,155	5.9
1979	462.7	505.3	-42.7	2,425	2,430	5.9
1980	538.9	586.7	-47.7	2,729	2,644	5.9
1981	633.0	670.4	-37.4	3,080	2,965	6.0
1982	683.5	730.3	-46.7	3,374	3,122	5.9
1983	677.8	783.1	-105.2	3,599	3,316	5.9
1984	704.9	837.9	-133.1	3,828	3,695	5.8
1985	760.5	938.0	-177.4	4,064	3,968	5.8
1986	794.2	978.9	-184.7	4,308	4,219	5.7
1987	875.6	994.5	-118.9	4,526	4,452	5.7
1988	902.7	1,053.9	-151.2	4,784	4,808	5.7
1989	979.5	1,125.2	-145.7	5,137	5,173	5.6
1990	1,035.1	1,196.0	-161.0	5,485	5,467	5.6
1991	1,111.8	1,291.6	-179.8	5,852	5,633	5.6
1992	1,163.9	1,365.4	-201.5	6,140	5,869	5.5

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.

THE ECONOMIC AND BUDGET OUTLOOK: FISCAL YEARS 1994-1998

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Congressional Budget Office

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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 6 are fiscal years.

Some figures in this report indicate periods of recession using shaded vertical bars. The bars extend from the peak to the trough of the recession.

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 is referred to in this volume more briefly as Gramm-Rudman-Hollings. This act was amended by the Budget Enforcement Act of 1990, which is Title XIII of the Omnibus Budget Reconciliation Act of 1990.

Preface

This volume is one of a series of reports on the state of the economy and the budget that the Congressional Budget Office (CBO) issues periodically. It satisfies the requirement 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. In accordance with CBO's mandate to provide objective and impartial analysis, the report contains no recommendations.

The analysis of the economic outlook presented in Chapter 1 was prepared by the Macroeconomic Analysis Division under the direction of Robert Dennis and John F. Peterson. John Sturrock wrote Chapter 1. Chapter 5 was written by Robert Dennis, with contributions from Matthew Salomon.

The baseline outlay projections were prepared by the staff of the Budget Analysis Division under the supervision of C.G. Nuckols, Paul N. Van de Water, James Horney, Michael Miller, Charles Seagrave, and Robert Sunshine. The revenue estimates were prepared by the staff of the Tax Analysis Division under the supervision of Rosemary D. Marcuss and Richard A. Kasten. Kathy A. Ruffing wrote Chapter 2. Ellen Hays wrote Chapter 3. Richard A. Kasten wrote Chapter 4. Chapter 6 was written by James Horney and Philip Joyce. The appendixes were written by James Horney (Appendix A); Kathy A. Ruffing (Appendixes B and C); Jeffrey Holland (Appendix D); and Karin Carr (Appendix E). Paul N. Van de Water wrote the summary of the report.

An early version of the economic forecast underlying this report was discussed at a meeting of CBO's Panel of Economic Advisers. Members of this panel are Barry Bosworth, Andrew F. Brimmer, Robert Dederick, Martin Feldstein, Benjamin M. Friedman, Lyle E. Gramley, Edward M. Gramlich, Lawrence R. Klein, John Makin, Rudolph Oswald, Rudolph G. Penner, George L. Perry, William Poole, Alice M. Rivlin, Jeffrey Sachs, Paul Samuelson, Charles L. Schultze, James Tobin, and Murray Weidenbaum. Robert J. Gordon, Burton Malkiel, Allan Meltzer, and Laurence H. Meyer attended as guests. In addition, William Poole gave valuable comments on Chapters 1 and 5. Despite the considerable assistance afforded by these outside advisers, this document does not necessarily reflect their views.

Paul L. Houts supervised the editing and production of the report, assisted by Sherry Snyder. Major portions were edited by Paul L. Houts, Sherry Snyder, Sherwood D. Kohn, and Leah Mazade. Christian Spoor provided editorial assistance and coordinated the graphics. The authors owe thanks to Jeanne Burke, Marion Curry, Dorothy Kornegay, Linda Lewis, and L. Rae Roy, who assisted in the preparation of the report. With the assistance of Martina Wojak-Piotrow, Kathryn Quattrone prepared the report for final publication.

Robert D. Reischauer
Director

January 1993

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Summary

At long last, the U.S. economy seems to be entering a period of self-sustaining growth. But this expansion will differ from previous ones in two key respects. First, in 1993 and 1994, the economy will grow at only three-fourths of the pace that is typical for this stage of the business cycle. Second, the rate of growth will be insufficient to bring down the federal budget deficit, which will hover near $300 billion for several years and will then grow even larger. Under current budgetary policies, the deficit will climb from $310 billion in 1993 to $357 billion in 1998 and about $650 billion in 2003.

Such lackluster expansion and large budget deficits are not merely coincidental. Living standards are projected to grow so slowly, in part, because of the decline in the national saving rate over the past decade. And the federal budget deficit has been a major contributor to that drop in saving.

By the same token, reducing the deficit is the most direct and reliable way to increase national saving and long-run economic growth. Increasing the share of government spending devoted to investment could also spur growth, but the specific projects would have to be chosen carefully so that their benefits exceeded their costs. At first, efforts to eliminate the deficit would tend to weaken income and employment, but a more stimulative monetary policy could largely offset this disruption. Over the long run, a higher rate of saving would encourage new investment, boost workers' productivity, reduce net borrowing from abroad, and raise real incomes and living standards.

The Economic Outlook

Although the economy reached the bottom of the recession in the first quarter of 1991, the first year of the recovery was extremely weak, and the unemployment rate continued to rise through mid-1992. In the summer of 1992, however, the economy appears to have turned a corner. Though still slow by historical standards, the rate of growth is likely to be enough to ensure that the unemployment rate will gradually decline without requiring further fiscal or monetary stimulus.

The Forecast for 1993 and 1994

The Congressional Budget Office (CBO) forecasts that real gross domestic product (GDP) will grow at an annual rate of 3 percent in 1993 and 1994. Although this growth is well below average for the start of an expansion, it will bring the unemployment rate down from 7 percent at the end of 1992 to below 6½ percent by the end of 1994.

One benefit of such a tepid expansion is that inflation will remain low. Given the substantial excess capacity in the economy, the consumer price index should grow at only about 2¾ percent for the next few years. Inter-

est rates are expected to remain nearly constant through 1993, though short-term rates will rise during 1994, once the expansion is firmly established.

CBO's forecasts of economic growth and unemployment are close to those of the *Blue Chip* consensus of private forecasters (see Summary Table 1). CBO is slightly more optimistic, however, about the prospects that low inflation and low short-term interest rates will continue. But even if CBO has underestimated inflation, the deficit projections would be little affected; although higher inflation would add slightly more to outlays than to revenues, the deficit would be no higher as a share of GDP.

Projections for 1995 Through 1998

CBO does not attempt to forecast cyclical fluctuations in the economy more than two years into the future. Thus, beyond 1994, the projec-

Summary Table 1.
Comparison of Forecasts for 1993 and 1994

	Actual 1991	Estimated 1992	Forecast 1993	Forecast 1994
	Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP				
CBO	3.5	5.1	5.4	5.4
Blue Chip	3.5	5.3	6.0	6.4
Real GDP[a]				
CBO	0.1	2.7	2.8	3.0
Blue Chip	0.1	2.7	3.0	3.2
Implicit GDP Deflator				
CBO	3.4	2.4	2.5	2.4
Blue Chip	3.4	2.6	2.9	3.1
Consumer Price Index[b]				
CBO	3.0	3.1	2.8	2.7
Blue Chip	3.0	3.0	3.2	3.6
	Calendar-Year Averages (Percent)			
Civilian Unemployment Rate				
CBO	6.8	7.4	7.1	6.6
Blue Chip	6.8	7.4	7.0	6.5
Three-Month Treasury Bill Rate				
CBO	5.4	3.5	3.1	3.7
Blue Chip	5.4	3.5	3.5	4.2
Ten-Year Treasury Note Rate				
CBO	7.9	7.0	6.7	6.6
Blue Chip[c]	7.9	7.0	6.9	7.2

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 1994 are based on a survey of 50 private forecasters, published on January 10, 1993.

a. In constant 1987 dollars.

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

c. *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.

tions are based on trends in the labor force, productivity, and national saving.

Over the 1995-1998 period, CBO projects that real GDP will grow at an average annual rate of about 2½ percent (see Summary Table 2). By comparison, potential output grows only 2 percent a year. The gap between actual and potential real GDP will therefore gradually shrink to its historical average of about 0.6 percent of potential GDP by 1998.

Because GDP remains below its potential throughout the period of the projections, inflation is not likely to rise. Long-term interest rates are also assumed to remain steady at about 6.5 percent, although short-term rates are projected to rise from 3.7 percent in 1994 to 4.9 percent by 1998.

The Budget Outlook

The onset of economic expansion will bring no relief from recordbreaking budget deficits. As CBO projected last summer, the federal budget deficit is stuck near $300 billion for the next few years and will move even higher in the second half of the 1990s. If the current fiscal course is not changed, 10 years from now the deficit could reach twice today's level. Federal debt would then represent almost 80

Summary Table 2.
Medium-Term Economic Projections (By calendar year)

	Estimated	Forecast		Projected			
	1992	1993	1994	1995	1996	1997	1998
Nominal GDP (Billions of dollars)	5,943	6,255	6,594	6,942	7,288	7,627	7,953
Real GDP (Billions of 1987 dollars)	4,918	5,054	5,204	5,354	5,497	5,628	5,740
Real GDP (Percentage change)	2.0	2.8	3.0	2.9	2.7	2.4	2.0
Implicit GDP Deflator (Percentage change)	2.6	2.4	2.4	2.3	2.3	2.2	2.2
CPI-U (Percentage change)	3.1	3.0	2.7	2.7	2.7	2.7	2.7
Unemployment Rate (Percent)	7.4	7.1	6.6	6.2	6.0	5.8	5.7
Three-Month Treasury Bill Rate (Percent)	3.5	3.1	3.7	4.4	4.7	4.8	4.9
Ten-Year Treasury Note Rate (Percent)	7.0	6.7	6.6	6.6	6.5	6.5	6.4

SOURCE: Congressional Budget Office.

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

percent of GDP, higher than at any time since the aftermath of World War II.

The Outlook for the Deficit

The federal budget deficit set a record of $290 billion in 1992. CBO estimates that the 1993 deficit will be even higher--$310 billion, or 5 percent of GDP (see Summary Table 3). An expanding economy is likely to keep the deficit in check for a few years, but by 1996 or 1997 upward pressures on the deficit will again come to the fore.

These baseline budget projections assume that current laws and policies affecting tax revenues and mandatory spending remain unchanged. Discretionary spending (that is, spending controlled by annual appropriations) in 1994 and 1995 is assumed to be held to the tight limits established in the Budget Enforcement Act of 1990 (BEA). These caps require that discretionary outlays be cut by roughly 7 percent in real terms between 1993 and 1995. CBO assumes that discretionary outlays will grow at the same pace as inflation after 1995.

One can see the rising trend in the deficit most clearly in the standardized-employment deficit, which removes the effects of the business cycle from government revenues and spending. CBO projects that the standardized-employment deficit will rise, with only one slight interruption, from $180 billion (3.1 percent of potential GDP) in 1991 to $351 billion (4.4 percent of GDP) in 1998.

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

	1991	1992	1993	1994	1995	1996	1997	1998
				In Billions of Dollars				
Total Deficit	270	290	310	291	284	287	319	357
Standardized-Employment Deficit[a]	180	201	228	222	230	256	309	351
Deficit Excluding Social Security and Postal Service	322	340	361	347	351	364	402	445
				As a Percentage of GDP				
Total Deficit	4.8	4.9	5.0	4.5	4.1	4.0	4.2	4.5
Standardized-Employment Deficit[a, b]	3.1	3.3	3.6	3.3	3.3	3.5	4.1	4.4
Deficit Excluding Social Security and Postal Service	5.7	5.8	5.9	5.3	5.1	5.1	5.3	5.7
Memorandum:								
Gross Domestic Product (Billions of dollars)	5,633	5,869	6,173	6,508	6,855	7,202	7,543	7,873

SOURCE: Congressional Budget Office.

a. Excludes cyclical deficit as well as deposit insurance and Desert Storm contributions.

b. Shown as a percentage of potential GDP.

Why this grim budget outlook? After all, revenues are projected to keep pace with GDP, and most major spending programs are projected to grow no faster than the economy. However, the costs of the two major health care entitlements--Medicare and Medicaid--are expected to continue to explode. Together, Medicare and Medicaid benefits represented 3.4 percent of GDP in 1992, but they are projected to swell to 5.1 percent of GDP by 1998. The runaway growth in these programs parallels the projected growth of 10 percent a year in national health expenditures and stems largely from continued increases in the cost and use of medical care. Health care reform is currently high on the public policy agenda. But reform will almost certainly entail using public resources to extend health insurance coverage to the 37 million Americans who are now uninsured, as well as controlling health care costs. It will prove difficult, therefore, to reduce federal health costs significantly.

More rapid economic growth is also not going to slay the deficit dragon. Even if the economy were to expand 1 percent a year more rapidly than CBO assumes--an unlikely outcome--the deficit would still total $230 billion in 1998.

Changes in the Projections

The outlook for the 1993 deficit has brightened a bit since CBO's previous budget projections last summer, but the longer-term fiscal picture has dimmed. The revisions to the projections have nothing to do with recent legisla-

Summary Table 4.
Changes in CBO Deficit Projections (By fiscal year, in billions of dollars)

	1993	1994	1995	1996	1997
Summer Baseline Deficit	331	268	244	254	290
Changes					
Policy changes	1	1	a	a	a
Economic assumptions					
Revenues[b]	15	23	27	28	36
Net interest	-5	-12	-15	-17	-20
Other outlays	a	-1	-7	-17	-29
Subtotal	9	10	6	-6	-13
Technical reestimates					
Revenues[b]	6	4	5	6	5
Deposit insurance[c]	-45	-5	8	8	4
Medicaid	2	5	8	10	12
Medicare	a	5	8	11	14
Other major benefits	3	2	2	2	3
Net interest[c]	-2	-4	-1	1	3
Other outlays	6	4	4	a	a
Subtotal	-30	11	34	37	42
Total Changes	-21	23	40	32	29
Winter Baseline Deficit	310	291	284	287	319

SOURCE: Congressional Budget Office.

a. Less than $500 million.

b. Revenue losses are shown with a positive sign because they increase the deficit.

c. Excludes changes in interest paid by deposit insurance agencies to the Treasury. These interest payments are intrabudgetary and do not affect the deficit.

tion, which on balance has had a negligible effect on the deficit. Nor do the revisions stem from CBO's updated economic assumptions, which worsen the deficit through 1995 but improve it thereafter. The culprit is changes in other, so-called technical factors that determine revenues and spending (see Summary Table 4).

In 1993, the largest technical reestimate is a reduction of $45 billion in projected spending for deposit insurance. That shortfall is largely the result of a delay in providing necessary funds to the Resolution Trust Corporation (RTC), the agency charged with closing or merging hundreds of insolvent savings and loan institutions. But it also reflects a modest reduction in CBO's estimate of the long-run cost of resolving troubled thrift institutions and banks, as well as a decrease in RTC's estimated need for working capital. Therefore, only part of the lower spending in 1993 is projected to be made up in the next few years.

In 1994 and beyond, higher Medicare and Medicaid spending dominates the technical reestimates. Although CBO has upped its projections for these two programs several times in the past few years, actual spending continues to outpace the estimates. In Medicare, the most rapid increases have been for care at home and in skilled nursing facilities. The growth in Medicaid is fueled by unexpected increases in the number of aged and disabled beneficiaries.

The Challenge of Reducing the Deficit

Large and growing budget deficits have been a problem for a decade, and there have been many stabs at a solution. Most recently, in the 1990 budget summit agreement, the Congress and President Bush adopted a package of tax increases and spending reductions totaling almost $500 billion over five years, as well as a set of budgetary procedures designed to assure that subsequent legislation would not erode those savings. Because the 1990 package has proved insufficient, and now that the economy has resumed growing, reducing the deficit is rightly receiving renewed attention.

The size of the problem today, however, is bigger than it was in 1990. Another five-year, $500 billion effort would not quite halve the deficit by 1998. Eliminating the deficit over the next five years would require tax hikes and spending cuts about twice as large as those adopted in 1990.

The Congressional Budget Office does not endorse particular changes in taxing or spending policies. But in the second volume of its annual report, *Reducing the Deficit: Spending and Revenue Options*, CBO provides a menu of some 250 ways to trim the deficit. The final two chapters of the present volume consider the economic consequences of reducing the deficit and the role of the budget process in enforcing a deficit reduction plan.

The Economic Consequences of Reducing the Deficit

CBO has analyzed the probable effects of reducing the deficit using several different macroeconomic models. Even though the models differ considerably in design, they reach broadly similar conclusions.

First, closing the deficit or increasing the share of government spending that goes to productive investment would increase the standard of living that will be sustainable in the 21st century. A reasonable estimate is that eliminating the deficit would eventually increase consumption per person by more than 5 percent.

Second, efforts to reduce the deficit would tend to dampen economic activity and increase unemployment in the next few years, but a more expansionary monetary policy could largely offset these fiscal effects. Even if the monetary stimulus were not fully offsetting, a

planned steady reduction in the deficit should not throw the economy back into recession, as long as the economy is growing at the moderate rate that is projected.

Third, whether the deficit is closed in five years or 10 years makes little difference to the economy in either the short or long run, provided that the effort is credible and is carried through. Because much of the expected rise in the deficit occurs after 1998, a program to balance the budget in 10 years would come close to its goal after five years as well. In either case, the more credible the effort, the more likely that the Federal Reserve will provide the necessary monetary boost, and the more likely that private investment will rapidly fill the gap left by lower public and private consumption.

The Budget Process and Deficit Reduction

How might changes in the budget process make deficit reduction more credible? Before 1985, the laws governing the President's budgetary submission and the rules concerning Congressional consideration of the budget prescribed formats and procedures, not outcomes. In recent years, however, there have been three efforts to construct a budget process that would achieve a specific result--namely, a lower deficit.

The first two attempts--the Gramm-Rudman-Hollings legislation of 1985 and 1987--established fixed numerical targets for the deficit and aimed to balance the budget in five years. But each time, a deteriorating economic outlook and changes in other factors led the deficit to grow more rapidly than expected and made the political price of meeting the targets impossible to bear. The new budgetary procedure therefore proved incapable of forcing the President and the Congress to agree on the substantial tax increases or spending cuts that were needed to meet the deficit targets. Instead, policymakers turned to budgetary gimmickry and unrealistic assumptions to avoid the strictures of the law.

The Budget Enforcement Act of 1990 scrapped much of Gramm-Rudman-Hollings. It replaced the previous focus on fixed deficit targets with a concentration on enforcing the $500 billion of deficit reduction that had been adopted at the budget summit. The BEA set up two major enforcement mechanisms--annual limits on discretionary appropriations and a pay-as-you-go requirement for revenues and mandatory spending. These procedures have succeeded in preventing new legislation from making the deficit worse, even though economic and technical factors have again caused a substantial increase in the projected deficits.

The experience of the past seven years suggests that the chances of reducing the deficit will be enhanced if attention is focused on policy first, process second. Once the Congress and the President have agreed on specific spending cuts and tax increases, then they should put in place a process to ensure that those measures are carried out. At a minimum, this process should include giving the discretionary spending limits and pay-as-you-go procedures in the BEA a new lease on life.

Conclusion

As was widely expected in 1990, when the Budget Enforcement Act was adopted, deficit reduction seems likely to return to the top of the political agenda in 1993. At least three factors increase the likelihood of action this year. First, the public debt will reach its statutory limit in March, and the need to increase the limit may again force a revision of the budget process, as it did in 1985, 1987, and 1990. Second, the President and the Congress may desire some flexibility in meeting the discretionary spending limits, which are

pinching more tightly. Third, the pay-as-you-go rule could use strengthening; because this requirement is scheduled to expire in only two years, it is becoming relatively easy to shift costly programs beyond the reach of the BEA's enforcement arm.

Although these factors can set the stage for deficit reduction, they cannot make it happen, nor will they ease the political choices. The deficit will come down only when both elected officials and the public conclude that the borrowing binge must stop. They must be willing to pay higher taxes and receive fewer government benefits in the 1990s for the sake of higher living standards in the next century.

Chapter One

The Economic Outlook

The economy finally appears to have reached a long-awaited stage of self-sustained growth. As it has reported for the last year, however, the Congressional Budget Office (CBO) expects growth to be less robust than typically occurs during a similar stage of expansion. The recession and the subsequent recovery have been atypical in many respects, and the sluggish rate of expansion that is anticipated may make the normal fits and starts of the growth process seem more daunting than usual.

CBO's Economic Forecast: 1993 Through 1994

CBO forecasts that real gross domestic product (GDP) will grow at an annual rate of nearly 3 percent during the four quarters of this year and will maintain that rate through 1994 (see Table 1-1 and Figure 1-1). Such growth represents only about three-quarters of the pace normally recorded over the same period following a recession trough. (Box 1-1 discusses the atypical nature of this recession and recovery.) As a result, the pickup in employment and the fall in the unemployment rate will proceed much more gradually than they usually do during the initial years of an expansion.

Nevertheless, the economy appears to have crossed an important threshold. Through the second quarter of 1992, the recovery from the recession of 1990 and 1991 moved at an annual rate of less than 2 percent, too slowly to keep the unemployment rate from rising. The 3 percent rate of growth currently forecast, however, will ensure continued, though slow, improvement in the rate of unemployment without requiring further fiscal or monetary stimulus.

The mild pace of the expansion will keep rates of inflation and interest low by recent standards. CBO expects that inflation will remain at about 2.7 percent through the next few years. Interest rates, both long-term and short-term, are also expected to remain fairly constant through 1993, although short-term rates will rise during 1994, once the expansion has firmly established itself.

The main contributors to expansion in 1993 and 1994 will be investment in producers' durable equipment and residential structures. Purchases of durable goods by consumers will also add to demand later this year. Although investment in nonresidential structures will decline in 1993, mainly because of the continued high vacancy rates for office and retail space, it will not dampen overall expansion as much as it did in 1992, when it fell by an estimated 7.4 percent. In 1994, investment in nonresidential structures and inventories should pick up as the expansion continues. Government purchases and net exports will not be strong sources of growth because the federal government must control the deficit under current policy, state and local govern-

ments continue to face tight budgets, and the current and prospective status of foreign economies has weakened markedly.

CBO's forecast rests on an analysis of three groups of factors. The first group consists of exogenous factors--that is, factors outside the control of private individuals and firms in the domestic economy. This group includes fiscal policy, monetary policy, and economic developments in foreign countries. On balance, these three major exogenous factors are expected to provide little, if any, stimulus to the economy during the forecast period.

The second group of factors reflects long-term adjustments that various sectors of the economy are undergoing as they respond to fundamental imbalances that developed during the 1980s, along with demographic and institutional changes. Such factors include overhanging debt burdens of consumers; declining numbers of households in their prime first-time homebuying years; overbuilding in commercial real estate; and restructuring in such sectors as automobiles, retail trade, computers, manufacturing, and defense-related industries. The adjustments within these sectors have retarded growth during the recovery. The adjustment process appears to be close to completion in some of these sectors, however, so that they will no longer act as such a drag on the economy.

The third group of factors consists of recently released data about the economy that bear on the near-term outlook. Recent developments appear to augur steady, if unspectacular, growth in the future.

Exogenous Factors Will Provide Little Stimulus

The exogenous factors in the first group--fiscal policy, monetary policy, and foreign developments--help to explain why the economy was

Table 1-1.
The CBO Forecast for 1993 and 1994

	Actual 1991	Estimated 1992	Forecast 1993	Forecast 1994
	Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP	3.5	5.1	5.4	5.4
Real GDP[a]	0.1	2.7	2.8	3.0
Implicit GDP Deflator	3.4	2.4	2.5	2.4
Fixed-Weighted GDP Price Index	3.5	3.1	2.8	2.6
CPI-U[b]	3.0	3.1	2.8	2.7
	Calendar-Year Averages (Percent)			
Civilian Unemployment Rate	6.8	7.4	7.1	6.6
Three-Month Treasury Bill Rate	5.4	3.5	3.1	3.7
Ten-Year Treasury Note Rate	7.9	7.0	6.7	6.6

SOURCES: 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. Consumer price index for all urban consumers.

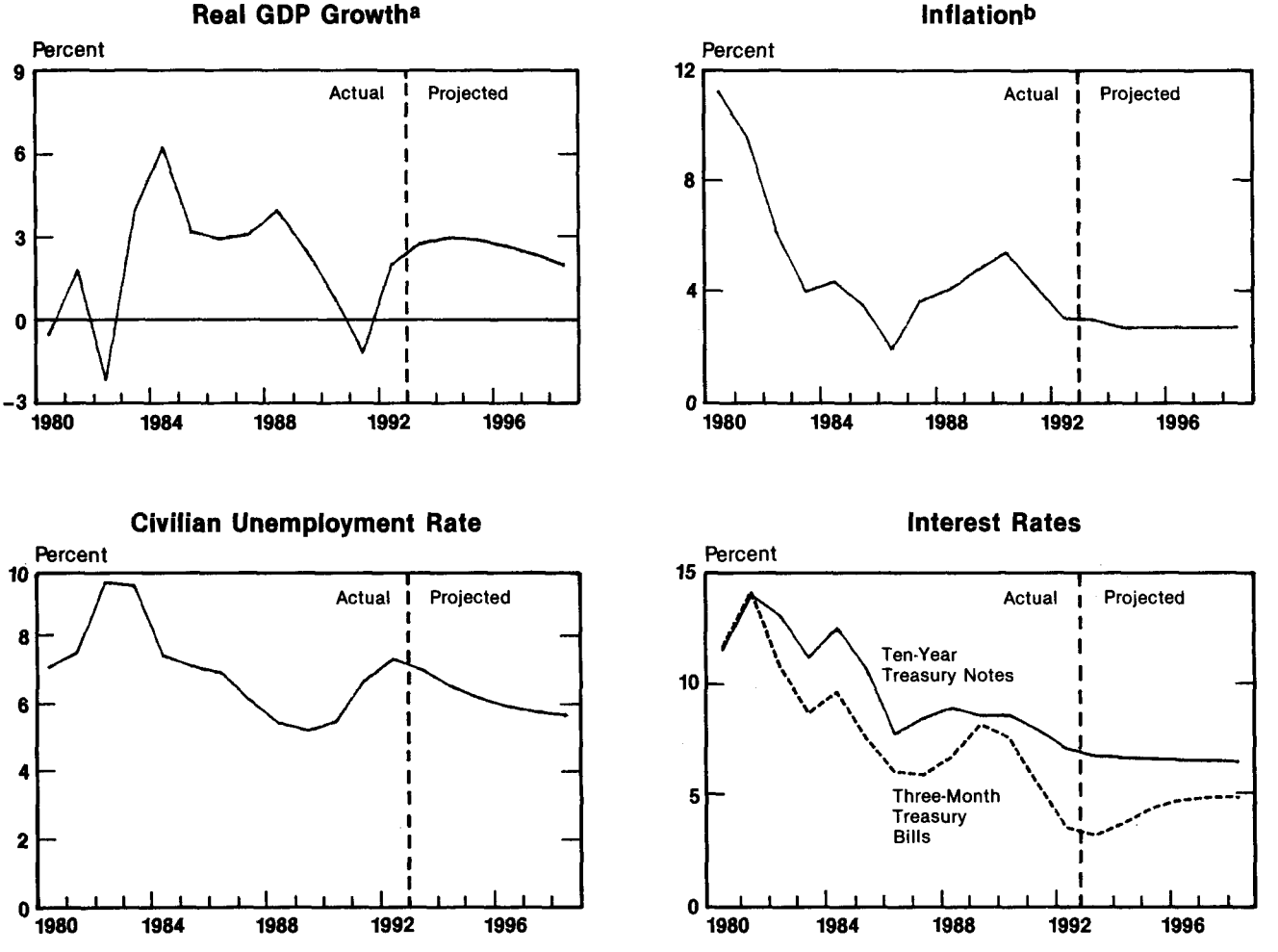
so weak in its recovery. Moreover, they are generally not likely to help economic expansion much in the next year or so.

Fiscal Policy Is Nearly Neutral

Federal fiscal policy will provide only mild stimulus in 1993, which will be reversed in 1994. (This projection does not reflect the possible impact of policies that may be proposed by the Clinton Administration or by the Congress.) State and local governments also face budget problems and are likely to follow slightly restrictive policies.

Federal Fiscal Policy Provides Little or No Stimulus. Although the Congress consid-

Figure 1-1.
The Economic Forecast and Projection



SOURCES: 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 1992 is estimated by CBO.

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

ered several important budgetary initiatives in 1992, it did not undertake any major departures from the policy adopted two years ago under the budget agreement of 1990. Since August, the Congress increased spending by $7 billion in 1993 and $2 billion in 1994, using the emergency provisions of the Budget Enforcement Act of 1990 (BEA) for disaster relief in the aftermath of Hurricanes Andrew and Iniki and for U.S. spending related to Operation Desert Storm. At the same time, however, the Congress also reduced spending for defense in 1993 to $5 billion below the level allowed by the BEA. The net effect on the budget and the economy of these and other changes since CBO's August report is essentially zero.

According to the basic measure of fiscal stimulus--the year-to-year change in the standardized-employment deficit relative to potential GDP (the highest rate of output that available resources of capital and labor could sustain without increasing the rate of inflation)--current federal policy provides no overall boost in the next two years (see Table 1-2; also Box 1-2 briefly explains the standardized-employment deficit). As in 1992, a small increase in the standardized-employment deficit relative to potential GDP will impart a mild stimulus in 1993. But the fiscal policy limitations of the BEA will impose an equal amount of restraint in 1994.

The role of fiscal policy could change if the new Administration and the Congress decide that some short-term stimulus is needed to boost growth in 1993. They could do this either by invoking the emergency provisions of the BEA or by modifying the current budget process. Most forms of fiscal stimulus work by increasing the federal deficit, however, so most proposals discussed have concentrated on temporary measures rather than on permanent ones. But how effective would such stimulus be?

Broadly speaking, a temporary fiscal stimulus that increases the federal deficit by about $50 billion could add around 1 percentage point to the growth of GDP over a four-quarter period, provided that the Federal Reserve does not slow money growth to offset the stimulus. The exact increase in growth, however, would depend critically on how the deficit was raised. For example, all other things being equal, an increase in federal purchases would provide

Box 1-1. Why Is This Business Cycle Different from All Others?

During the last few years, the economy has behaved differently from the way it usually does during similar phases of the business cycle. The decline during the recession was about average, but growth following the recession was so feeble that it was not clear that recovery had actually begun. Indeed, only in December 1992 did the official arbiter of the business cycle, the National Bureau of Economic Research, determine that the trough occurred in the first quarter of 1991. Moreover, employment and hours worked have moved little from their levels at the trough; increased productivity has accounted for nearly all of the expansion in output to date.

Furthermore, the economy has grown only sluggishly since the trough. Growth in the early stages of expansion is usually rapid--six quarters after a recession ends, on average, real GDP exceeds its trough value by nearly 7 percent. But in the third quarter of 1992, output exceeded the trough value by less than half of that. Partly as a result of such slow growth, the unemployment rate continued to climb during the recovery. Even after a decline from its high in June 1992, the unemployment rate for the fourth quarter of 1992 stood more than 1 percentage point higher than it did in the quarter of the trough. If the expansion had been average, the unemployment rate would have fallen by nearly 1 percentage point.

Although the expansion has been slow and faltering until now, in one sense it has actually proceeded more smoothly than is usual. During the first six quarters following the latest trough, growth averaged 2 percent at an annual rate, with an average quarterly fluctuation of plus or minus 1 percentage point. In previous expansions, both the average rate of growth and its average quarterly fluctuation have typically been more than twice those values, respectively.

more boost than a broad-based tax cut because all of the purchases would go directly into aggregate demand, whereas part of a tax cut would be saved. In any case, when the temporary stimulus has run its course and taxes rise or spending falls, growth would be correspondingly weakened for a period of four to six quarters. After about two or three years, output would be approximately what it would have been otherwise.

One commonly discussed approach to short-run fiscal stimulus would accelerate spending on infrastructure projects. The difficulty with this approach is that such projects usually take a long time to get into full swing. The stimulus they impart, therefore, may not be timely. And too rapid an acceleration risks committing funds to projects that really should not be undertaken.

Another frequently mentioned approach, which appears to promise the biggest gain in output for a given rise in the deficit, involves an investment tax credit (ITC) for equipment. The ITC could stimulate investment by reducing its after-tax cost. Some economists advocate an incremental ITC, which would apply only to investment above some base. For example, the base might be defined as a specified fraction of investment that a firm made in an earlier period. The purpose of limiting the credit in such a way is to try to avoid giving credits for investment that would have been made anyway--thereby reducing the revenue loss to the Treasury--while still encouraging firms to make additional investment.

Yet an ITC for equipment also has drawbacks, which, in general, are magnified if it is incremental. Although an ITC would encourage more total investment, it would also encourage misallocation of some investment because it would favor investment in equipment over structures, in short-lived equipment over long-lived equipment, and by firms with current tax liabilities rather than those without. If the ITC is temporary, it would also favor

Table 1-2.
The Fiscal Policy Outlook (By fiscal year, on a budget basis)

	1991	1992	1993	1994	1995	1996	1997	1998
				In Billions of Dollars				
Total Budget Deficit[a]	246	293	307	282	273	288	333	367
Standardized-employment deficit	180	201	228	222	230	256	309	351
Cyclical deficit	66	91	79	59	43	32	24	17
Memorandum:								
Deposit Insurance	66	3	3	10	11	-1	-14	-10
Desert Storm Contributions	-43	-5	0	0	0	0	0	0
				As a Percentage of Potential GDP				
Total Budget Deficit[a]	4.2	4.8	4.8	4.2	3.9	3.9	4.4	4.6
Standardized-employment deficit	3.1	3.3	3.6	3.3	3.3	3.5	4.1	4.4
Cyclical deficit	1.1	1.5	1.2	0.9	0.6	0.4	0.3	0.2

SOURCE: Congressional Budget Office.

NOTE: Negative values denote surpluses.

a. These measures of fiscal policy exclude outlays for deposit insurance and allied contributions for Operation Desert Storm.

Box 1-2. What Is the Standardized-Employment Deficit?

The standardized-employment deficit represents an estimate of the size of the federal deficit if the economy were operating at potential gross domestic product. By looking at the standardized-employment deficit rather than the actual deficit, analysts separate the effects of policy on the deficit from the effects of the business cycle. For example, a cyclical fall in output would increase the deficit by reducing revenues from taxes and by raising payments for Unemployment Insurance and other transfers. But this increase reflects the influence of the economy on the deficit rather than the other way around. By estimating what the deficit would be at potential GDP, the standardized-employment deficit removes such cyclical influences to isolate the effects of policy on the deficit.

For structural reasons, the standardized-employment deficit can change in the absence of a change in policy. For example, Medicare spending could rise faster than potential GDP simply because the number of recipients or the price of their medical services rose, not because of any change in Medicare policy.

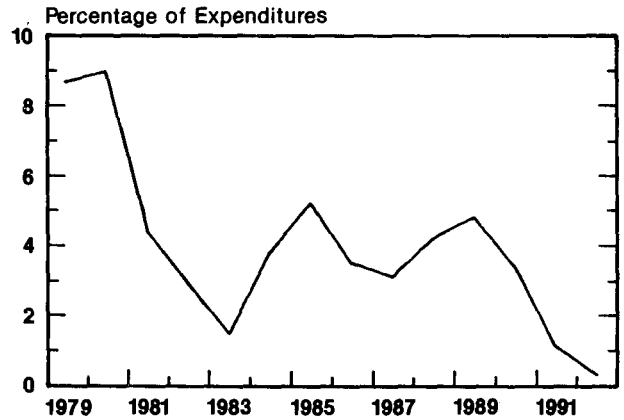
Calculating the standardized-employment deficit excludes outlays for deposit insurance and allied contributions for Operation Desert Storm, which would otherwise appear in the historical series in 1991 and 1992 as offsets to outlays. The outlays for deposit insurance are excluded because they mainly represent an exchange of assets and, therefore, do not directly increase the current income or wealth of the private sector or add to aggregate demand. Contributions for Operation Desert Storm are excluded because they do not reduce domestic aggregate demand, even though they are an offset to budget outlays.

equipment that can easily be installed earlier than originally planned. An incremental ITC could also arbitrarily put some firms at a disadvantage because their planned investment is low relative to their investment in the base period--for example, firms that made unusually large investments in the base period or that operate in declining industries. Finally, an incremental ITC would introduce administrative complexity to deal with such issues as how to define the level of base investment for partnerships, new firms, and firms that have merged or split since the base period, or how to prevent firms with high bases from using credits by selling capital to low-base firms, then leasing it from them.

State and Local Governments Face Fiscal Restrictions. The current financial conditions of state and local governments preclude much stimulus from this sector. The recession has strained the resources of states and localities by reducing tax collections and requiring recession-related services. At the same time, the demand for other services, especially in education and health, continues to grow. In addition, there is a backlog of demand for the repair or building of infrastructure, such as highways, bridges, prisons, and schools.

Those demands will continue, but financial resources available to meet them are limited. For example, the reserves that states main-

Figure 1-2. Year-End Balances of States



SOURCES: Congressional Budget Office; National Association of State Budget Officers.

NOTES: Data are for July-to-June fiscal years. Value for 1992 is estimated by the National Association of State Budget Officers.

tain for unforeseen circumstances now stand at historic lows, and restoring more normal levels will probably require some combination of spending restraint and higher taxes (see Figure 1-2). Most analysts expect that, given current conditions, less essential services will be curtailed, so spending by the state and local sector will grow less rapidly than the economy as a whole.

Monetary Policy Will Remain Cautious

Relying on widely shared expectations of a milder recession and stronger recovery than transpired, and anxious to preserve low inflation, the Federal Reserve acted cautiously during the recession and early part of the expansion. Unusual behavior in the relationships among money, interest rates, and output also encouraged caution. In retrospect, the Federal Reserve was probably too cautious, but it probably feels that it has no compelling reason to adopt a more aggressive policy now that the expansion appears to be self-sustaining. Therefore, CBO expects that monetary policy will continue to focus on containing inflation while providing for moderate expansion.

The difficulty that the Federal Reserve has faced in interpreting the monetary environment over the last three years can be summarized by the unusual behavior of monetary indicators:

- Long-term rates (particularly for maturities of over 10 years) have not matched the fall in short-term rates, creating a historically large yield spread--that is, the difference between long- and short-term rates.

- Short-term interest rates fell substantially, but this did not prevent the expansion from faltering in its earliest stages.

- Broad measures of money, M2 and M3, have grown quite slowly for the past three years, but narrow measures of money, including both M1 and banking system reserves, have grown substantially faster than M2.[1]

These indicators appear to send conflicting signals. The rapid growth in bank reserves and narrowly defined money suggest that the financial system is quite liquid and that monetary policy has been stimulative. If so, excess liquidity could eventually overstimulate the economy, imperiling the hard-won reductions in inflation of the last two years. But the growth of M2--whose movements have been more closely related to movements in GDP than narrower measures of money--fell below its target range, and the velocity of M2 (the ratio of GDP to M2) rose. This pattern would seem to suggest that monetary policy has been restrictive.

These conflicting signals present a dilemma to the Federal Reserve. Should it soak up excess liquidity indicated by the narrower monetary measures? Or should it maintain, or even lower, short-term rates of interest to boost the growth of M2? The Federal Reserve appears to have decided that velocity will remain high--that a given amount of M2 will sustain a higher amount of GDP than previously--so that further easing may be unnecessary.

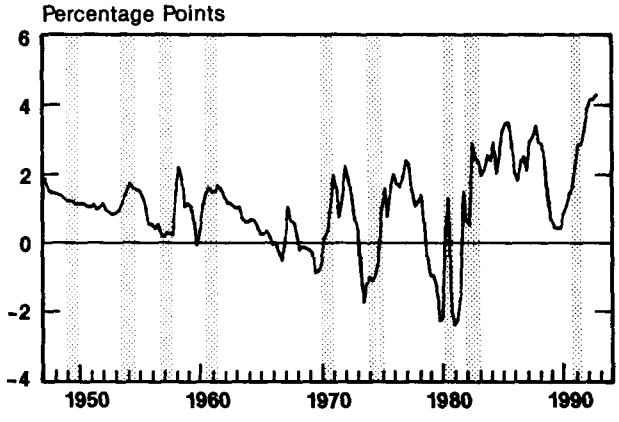
Why Did Interest Rates Behave as They Have? Although short-term rates have fallen substantially, long-term rates have not matched those declines, so that, by most measures, the spread between long-term rates and short-term rates now stands at its highest

1. The aggregate M1 consists primarily of currency and deposits on which checks can be drawn. The aggregate M2 consists of M1 plus primarily savings and small time deposits plus general-purpose and broker-dealer money market funds. The aggregate M3 consists of M2 plus primarily large time deposits, term repurchase agreements and Eurodollars, and institution-only money market funds.

post-war level (see Figure 1-3). Between the third quarter of 1990 (the cyclical peak) and September 1992, the Federal Reserve acted to reduce interest rates only gradually and in many small steps, whereas it usually reduces rates in a few large steps during recessions. The cumulative effect of this policy was to cut short-term interest rates substantially. The rate on three-month Treasury bills fell from about 8 percent in 1988 and 1989, when the Federal Reserve was trying to slow the economy, to about 3 percent in late 1992.

The declines in short-term rates, however, were not enough to promote a stronger rebound. Many observers believe that the Federal Reserve did not act aggressively enough to combat the recession. The many small steps it took to cut rates suggest that it was following, rather than leading, the market--that a weak economy, rather than strong monetary policy, substantially accounts for the fall in interest rates. Support for this view is given by the fact that, in a weak and faltering recovery, short-term rates continued to fall until December 1992.

Figure 1-3.
Spread Between Long- and Short-Term Interest Rates



SOURCES: Congressional Budget Office; Federal Reserve Board.

NOTES: Composite Treasury bonds minus three-month Treasury bills.

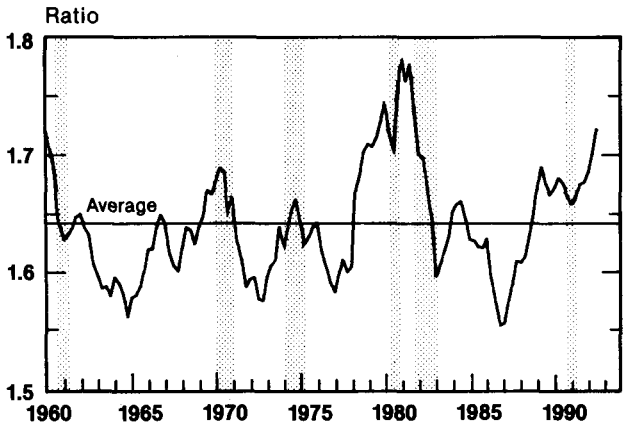
Shaded areas indicate recessions.

Three possible reasons could explain why long-term rates have not matched the fall in short-term rates. First, financial markets may expect real interest rates to rise in the future. For example, during this decade European integration and growth of the newly industrializing countries of Asia and Latin America will probably raise the demand for capital relative to its supply, leading to higher real rates of interest. Furthermore, unless policies change over the next 10 years, the ratio of U.S. federal debt to GDP will rise from 51 percent to 78 percent, draining capital from world markets and pushing up interest rates. Second, markets may expect more inflation in the future. Usually inflation falls in the first two years of an expansion, but markets may expect eventual pressure to monetize the deficit if it is never adequately dealt with. Finally, markets may find holding long-term securities to be riskier than before if the future is now harder to predict. In general, the value of long-term securities fluctuates more than the value of short-term securities when interest rates change. To compensate for this risk, investors holding long-term securities require a higher rate of interest. If investors feel the future has become more unpredictable, they will require even higher rates to hold long-term securities.

Why Has M2 Growth Been So Low? The velocity of M2 has probably climbed to the unusually high level shown in Figure 1-4 because both the demand for and supply of assets that are included in M2 have fallen.

High yield spreads have reduced the *demand* for M2 by inducing investors to shift out of assets that are included in M2--especially small time deposits--and into assets that are not included in M2. With the fall in short-term rates, high long-term rates make long-term investments more attractive, and such instruments as bond and equity funds make shifting assets easy to do at little cost. As a result, small time deposits fell by $89 billion dollars in 1991 and at an annual rate of $201

Figure 1-4.
The Velocity of M2



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

NOTES: M2 velocity is the ratio of nominal GDP to the M2 measure of the money supply. M2 consists primarily of currency, deposits on which checks can be drawn, savings and small time deposits, and general-purpose and broker-dealer money market funds.

Shaded areas indicate recessions.

billion through the first three quarters of 1992. At the same time, investments in mutual funds grew by $129 billion in 1991 and at an annual rate of $208 billion through the first three quarters of 1992.

Weak demand for loans also reduced the need to create M2 assets. In addition to a weak economic environment, the need for firms and households to reduce high debt burdens that they had undertaken in the 1980s reduced the demand for loans.

The *supply* of M2 deposits may have fallen for two reasons. First, the ongoing resolution of the savings and loan debacle has reduced unhealthy competition for deposits. Many insolvent institutions had offered unusually high rates to attract deposits in a gamble to stave off bankruptcy. As short-term rates fell and these deposits came due, they were not renewed at such unrealistic rates, thereby reducing the attractiveness of such deposits. Second, the need to restore profits and meet tightened capital requirements may have made banks and thrift institutions more cautious in lending and creating deposits. Very high profits of banks and savings and loan associations during the first three quarters of 1992 have probably eased the need for stringency in lending.

What Is the Outlook for Monetary Policy and Interest Rates? The most recently published minutes of Federal Reserve deliberations indicate that it will continue to focus on reducing inflation in 1993. Even with slow growth in money, CBO expects that the weaker-than-normal rate of expansion will not put much upward pressure on short-term interest rates until 1994. Short-term interest rates in the CBO forecast reach 3.3 percent by the end of 1993 and 4.0 percent by the end of 1994. In addition to smoothly rising short-term rates, CBO expects that the yield spread will revert to a more normal level. Therefore, CBO's forecast contains essentially no change in long-term rates.

Foreign Economic Developments Turn Less Optimistic

Recent economic developments abroad have caused analysts to lower their expectations of foreign demand for U.S. exports. Growth in the industrial countries of Europe and in Japan has slowed or halted, and projections of their future growth have been revised down significantly. Only the newly industrializing countries in Asia and Latin America are still expected to post strong gains in 1993. But the net effect of the downward revisions lowers only slightly the anticipated impetus to U.S. growth from the foreign sector. The reason for this result is that the improvement in foreign economies from 1992 to 1993 is only slightly below what was previously forecast, because both estimates of growth in 1992 and forecasts of growth in 1993 have been scaled back.

Current international conditions stem, in part, from inconsistent policy goals among the nations of the European Community (EC) following the unification of Germany in 1990. German unification should enhance the long-run growth prospects of western Europe, and it initially spurred growth. But the efforts to dampen the ensuing inflation also dampened growth in 1992. The capital needs of eastern Germany are expected to place massive demands on credit markets and have rapidly driven up the German fiscal deficit, which reached 4.1 percent of gross national product (GNP) in 1991. In addition, the one-to-one conversion of eastern German ostmarks into deutsche marks (DM) and the stimulus arising from the process of unification together caused a huge increase in the German money supply. As a result, the German current-account balance tumbled from a DM76 billion surplus in 1990 to deficits of DM33 billion in 1991 and an estimated DM37 billion in 1992. These declines led to an increase in inflation that in turn raised long-term interest rates.

To redress these imbalances, Germany instituted tight monetary and fiscal policies. The German central bank raised the discount rate to its highest level since 1931, and the federal government imposed tax increases and budget cuts in a planned attempt to reduce the federal deficit to 2.5 percent of GNP by 1995. Although these restrictive policies have lowered long-term interest rates, they have also weakened the German economy, which experienced declines of real GNP in the second and third quarters of 1992. Moreover, further fiscal restrictions are in store. A one-percentage-point increase in the German value-added tax took effect in January of this year, and Chancellor Kohl has warned that more tax increases will be necessary to cover the costs of unification.

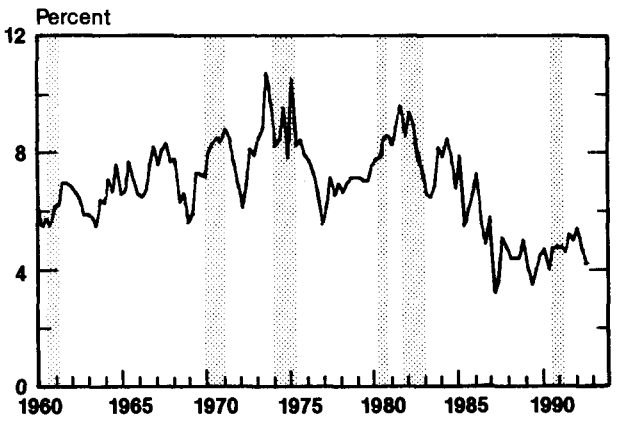
The economies of the other EC countries have also suffered as a result of recent events in Germany. When German growth fell last year, German demand for imports from its European trading partners also fell. More important, high German interest rates forced other EC central banks to raise their interest rates to defend the values of their currencies under the requirements of the European exchange rate mechanism (ERM). The ERM specifies a tight band of exchange rate parities that each EC country must maintain relative to the currencies of the others. Because high interest rates in Germany strengthened the mark as foreigners bid it up in order to buy high-yielding German securities, central banks in other EC countries were forced to follow suit and raise their interest rates to maintain the values of their currencies.

In mid-September, Italy and the United Kingdom found the squeeze intolerable and temporarily withdrew from the ERM, allowing their currencies to find lower levels against the mark. But they are expected to reenforce relatively tight monetary policies in order to contain the inflationary impact of having their currencies fall even farther. Fiscal policies in Europe are also likely to be tight, with nine European countries having announced plans to reduce their deficits by an amount that equals more than 1 percent of their combined GNP.

Restriction Caused by Long-Term Adjustments Will Ease

One reason for the unexpectedly weak recovery in the United States is that a number of sectors have been adjusting to imbalances that developed in the 1980s. These adjustments have restrained economic activity and are likely to continue to do so. But signs now indicate that this process is nearly complete in some sectors, so they should respond more normally to any stimulus to growth. This development makes it more likely that growth of the economy, although moderate, will be able to sustain itself.

Figure 1-5.
Personal Saving Rate



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

NOTES: The last data point, the fourth quarter of 1992, is estimated by CBO.

Shaded areas indicate recessions.

Consumer Debt May No Longer Restrain Consumer Demand

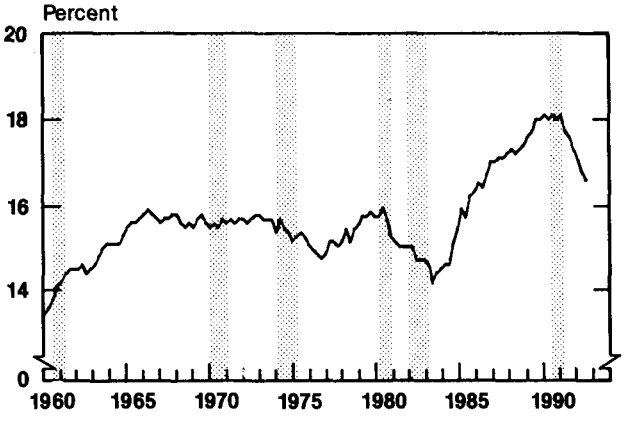
Heavy debt burdens of households appear to have curbed borrowing to finance consumption. During the 1980s, the personal saving rate plummeted as households took on unprecedented amounts of debt (see Figure 1-5). As a result, households needed to restructure their balance sheets, which made it more difficult for consumption to contribute to the recovery.

Increased demand for consumer loans played an important role in financing consumption during previous recoveries. The increased threat of job loss during a recession usually induces households to increase their saving and reduce their debt burdens. But when the initial stages of recovery have eased the threat, consumers become more willing to take on debt to finance consumption, especially for purchases of durable goods they have put off.

Consumers behaved differently, however, during this episode of recession and recovery. The sluggish growth in income before the peak made it more difficult for consumers to reduce their consumption during the recession. As a consequence, the personal saving rate remained flat throughout the recession. Furthermore, households remained reluctant to increase their borrowing during the recovery, so that consumption did not rebound as strongly as it usually does. The high burden of debt, fear of permanent job loss, and worries about asset values all probably contributed to the atypical behavior of consumers.

Households, however, may not remain so tightly constrained by financial considerations. The ratio of debt service to income has fallen since 1990, and disposable personal income has risen faster than household debt through the first three quarters of 1992 (see Figure 1-6). Although consumer installment debt has fallen throughout the first three

Figure 1-6.
Household Burden of Debt Repayment



SOURCES: Congressional Budget Office; Federal Reserve Board.

NOTES: The repayment burden of household debt is composed of scheduled principal and interest payments on home mortgage and consumer debt (as estimated by the Federal Reserve Board) as a percentage of disposable personal income. The last data point is the third quarter of 1992.

Shaded areas indicate recessions.

quarters of 1992, some of this reduction may reflect increased reliance on other forms of debt, especially home equity loans, which are favored because they offer lower interest rates, longer repayment periods, and tax-deductible status.

Demographic Factors Will Dampen Demand for Residential Construction

Changing demographics, along with other factors, undercut housing activity in the last half of the 1980s and are currently dampening the recent rebound in residential construction. Each year since 1986, housing starts fell by at least 100,000 units--from about 1.8 million units to about 1 million units in 1991. Contributing to the decline were slow growth in real income, high real after-tax interest rates, high vacancy rates in rental housing, and changes in the tax code in 1986 that withdrew special treatment of depreciation from owners of rental units and reduced the tax advantage of home ownership.

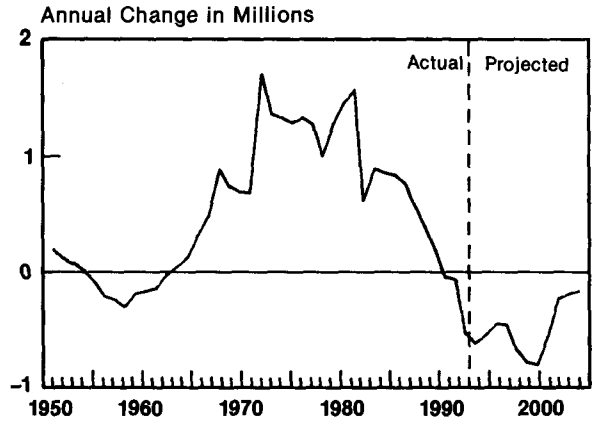
More fundamentally, however, an era ended in residential construction when most of the baby-boom generation passed through their prime years of first-time homebuying. After having risen for 25 years, the number of people in the 25- to 34-year-old cohort, the principal pool of potential first-time homebuyers, started to decline in the 1990s. This decline will persist throughout the decade, restraining the housing recovery (see Figure 1-7). Residential construction will also be restrained by the increased proportion of one-adult households, who are less likely to own their own home.

Demand for Nonresidential Business Structures Will Not Be as Weak as Before

Construction of business structures has been one of the weakest sectors in both the recession and the recovery to date, but it is likely to be less of a drag on the economy this year than last. Office buildings, retail space, and hotels--the commercial construction category that accounted for about half of business construction in the mid-1980s--weakened before the recession and then tumbled (see Figure 1-8). The recovery has been severely undermined by this sector. In the five quarters from the second quarter of 1991 to the third quarter of 1992, the weakness of commercial construction reduced the rate of growth of aggregate demand by 0.3 percentage points. If other categories of demand had grown as they did in the period, and if commercial construction had simply held to its early 1991 level, aggregate demand would have grown at an annual rate of 2.2 percent instead of the actual 1.9 percent registered over those quarters.

Tentative signs, however, indicate a smaller rate of decline in business construction this year. The monthly declines in commercial construction slowed in the closing months of 1992, and other business construction (primarily industrial, utilities, and mining) ap-

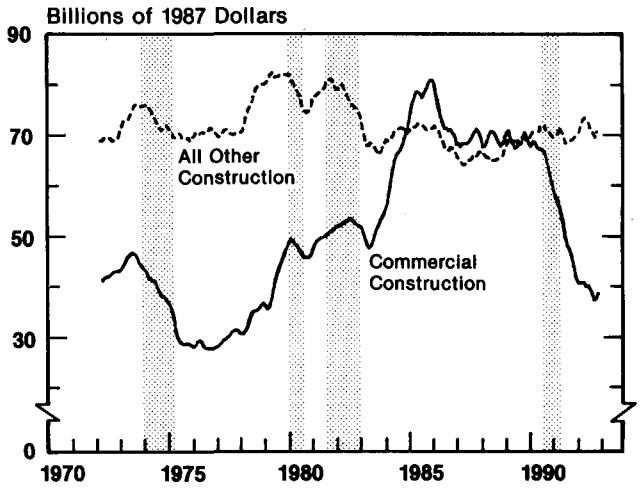
Figure 1-7.
Population of First-Time Homebuyers



SOURCES: Congressional Budget Office; Census Bureau.

NOTE: Population of first-time homebuyers is defined as the population between the ages of 25 and 34.

Figure 1-8.
Nonresidential Business Construction



SOURCES: Congressional Budget Office; Census Bureau.

NOTES: Three-month moving average of data through November 1992. Commercial construction includes offices, retail space, hotels, and motels.

Shaded areas indicate recessions.

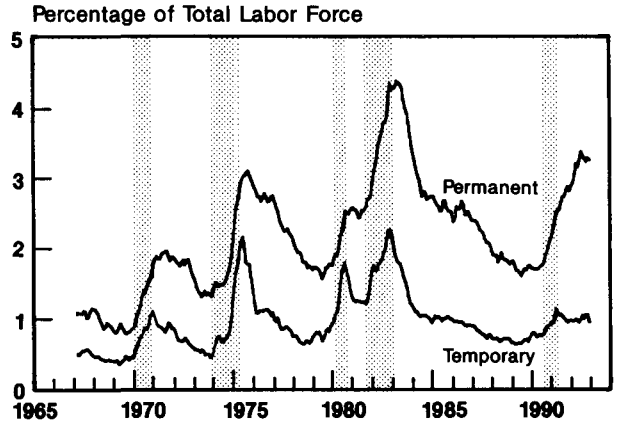
pears to have stabilized as well. In addition, data on construction contracts compiled by F.W. Dodge suggest that commercial construction will hold near its current level.

Although total business construction will probably firm up, office construction may not recover for years to come. Vacancy rates for office buildings now stand at all-time highs. Furthermore, demand for space will grow slowly both because of moderate growth in the labor force and in the overall economy and because of restructuring by firms to reduce the proportion of middle managers. These factors imply that vacancy rates will continue to be high throughout the forecast period and perhaps, in many metropolitan areas, throughout the decade.

Corporate Restructuring Will Moderate the Fall of Unemployment

Some sectors of the economy and some major firms have been forced by competition or loss of markets to cut payrolls and costs, which has retarded growth over the past few years. Unlike previous experience, permanent separations have been responsible for almost all of the job losses since the recession began (see Figure 1-9). People who lose their jobs permanently do not have their old jobs to return to when business picks up, so employment improves more slowly when losses have been permanent. The process of restructuring in some industries--particularly retail trade--appears to be largely complete, however, so this factor should weigh less heavily in the future.

Figure 1-9.
Permanent and Temporary Job Losses



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

NOTES: Temporary job losses are those currently unemployed classified as layoffs; permanent are all other job losses.

Shaded areas indicate recessions.

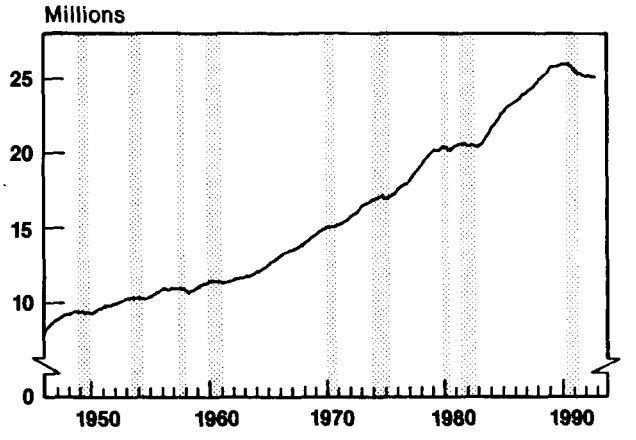
With the end of the Cold War, cutbacks in defense industries will probably contribute more to permanent job losses than any other source. Job losses in this sector--including civilian and military jobs in the Department of Defense and defense-related jobs in the private sector--might approach 1.5 million from 1993 through 1997.[2] Most of the losses will occur in 1993 and 1994. Demand for workers in this sector will continue to fall beyond 1994, but the rate of decline will abate.

Capacity in auto manufacturing in the United States will exceed demand for many years to come. General Motors, for example, plans to close more than 20 plants in North America and cut its work force by 74,000 employees over the next five years. In the short term, however, auto and truck sales respond quickly to improved conditions, as households and businesses undertake purchases they had delayed. The unusually high average age of the current fleet also enhances the possibility that, in the short run, the auto sector can contribute to the transition to self-sustained growth.

In the late 1980s, overbuilding and overborrowing caught up with the retail and wholesale trade sector, which suffered major bankruptcies and takeovers. Growth of employment in trade, which accounts for slightly more than one-quarter of the work force, slackened well before the cyclical peak and entered its greatest decline in postwar history (see Figure 1-10). But declines in employment have abated, and total hours worked in trade have stabilized. In short, the worst of the slump now appears to be over.

Some large firms in other industries are undergoing long-term adjustments, which will continue throughout 1993. For example, sharply declining computer prices and weak demand for mainframes in the wake of the personal computer revolution have led IBM to slash its work force by 100,000 workers over the last eight years, including about 40,000 workers in 1992. The downsizing will continue; IBM announced plans to cut its work force by an additional 25,000 by the end of 1993, necessitating the firm's first dismissals in more than 50 years. The case of IBM represents one of the most dramatic examples of a widespread condition. A recent survey of more than 800 firms found that one in four plans to reduce its work force by the middle of 1993--the highest proportion in the six years since the survey began.[3]

Figure 1-10.
Employment in Wholesale and Retail Trade



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

NOTE: Shaded areas indicate recessions.

2. R. William Thomas, "The Effects of Reduced Defense Spending on States and Industries" (paper presented at a meeting of the Allied Social Science Associations, Anaheim, Calif., January 5, 1993).

3. Survey by the American Management Association, reported in the *New York Times*, December 17, 1992.

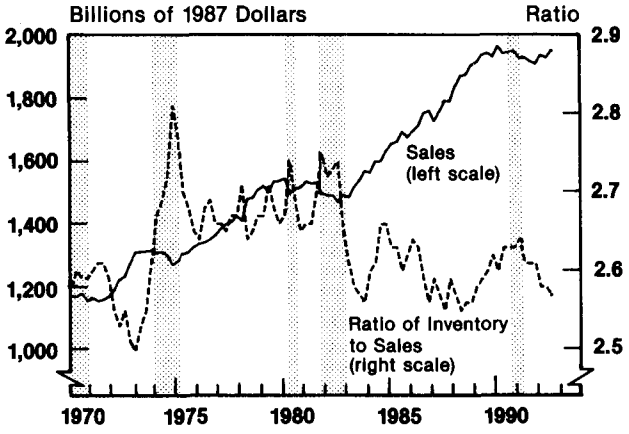
Recent Economic Developments Turn Optimistic

Most of the economic data released since mid-November, as well as revisions of previously reported data, point toward stronger fundamentals for growth than was generally thought--so much so that it appears the long-awaited shift from 2 percent growth to 3 percent is under way.

Because the economy probably could not maintain a 3 percent rate of growth without a sustained increase in the growth of personal consumption, recent data reflecting prospects for personal income and consumption represent an important harbinger of sustained growth. Data since last August on the growth in real wage income and real consumption indicate a willingness and ability of households to maintain a higher growth rate of consumption this year than last. Earlier in the expansion, gains in consumption were not sufficiently supported by gains in income, and the increases in the growth of consumption subsequently faded. The recent gains, in fact, are only partially supported by gains in income to date--the household sector had to reduce its saving rate in order to increase growth of consumption in the fourth quarter--but the growth of hours and wages suggest that enough income will be available to sustain this most recent pickup in consumption.

The residential market also strengthened in the last half of 1992, though it has yet to regain the levels temporarily attained early in 1992. New home sales, sparked by low mortgage rates, recovered from their midyear doldrums and now appear to have settled at rates similar to previous expansions. Housing starts also increased, and, if home sales remain high, starts are likely to strengthen further. At current sales rates, there is only about a five-month inventory of new homes, and such a low level of inventory usually implies a pickup in housing starts.

Figure 1-11.
Goods Sales and the Ratio of Inventory to Sales



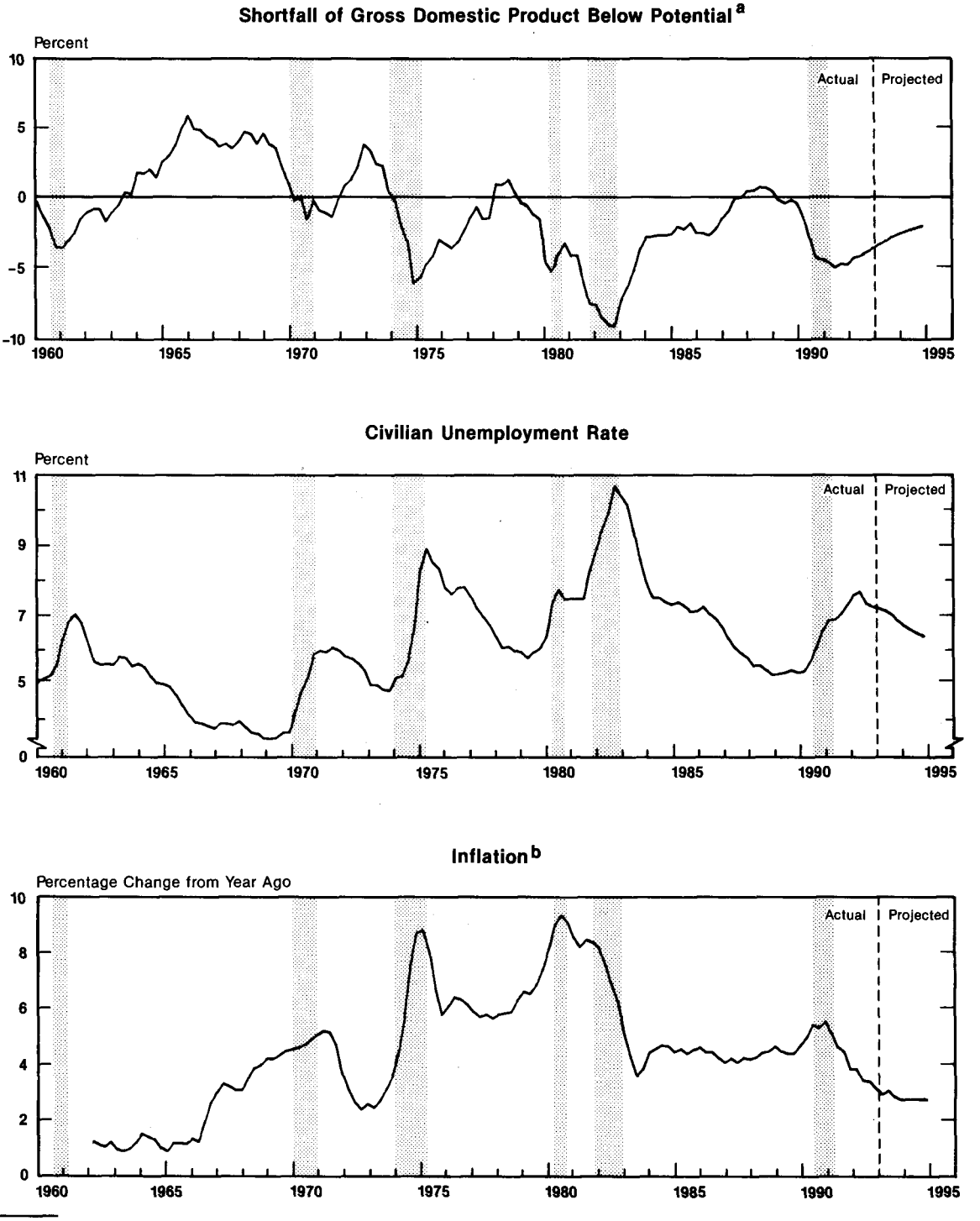
SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: Shaded areas indicate recessions.

The outlook for investment in equipment, which supported growth during 1992, remains good. Orders for nondefense, producers' durable goods continue to be high, and this pattern implies continued strength in this sector. The Commerce Department's fourth-quarter survey of the plans of firms for spending on plant and equipment for 1993 indicates that real spending will increase by 7.6 percent in 1993, after a hike of 5.4 percent in 1992. A huge turnaround in plans for spending by manufacturing industries, which declined last year, accounts for the increase this year. By contrast, nonmanufacturing industries, especially the transportation and commercial sectors, plan to slow their spending for plant and equipment this year.

Final sales of goods recovered during the last half of 1992, but production did not keep pace, so the ratio of inventories to sales fell (see Figure 1-11). That ratio is now slightly below its average during the expansion from 1983 to 1991. The drop in the ratio bodes well for the first half of this year, since it suggests

Figure 1-12.
Inflation and Excess Productive Capacity



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

NOTE: Shaded areas indicate recessions.

a. The shortfall is the difference between actual and potential real gross domestic product.

b. Consumer price index for all urban consumers (CPI-U), excluding food, energy, and used cars. The treatment of home ownership in the official CPI-U changes in 1983. The inflation series in the figure uses a consistent definition throughout.

that manufacturers will increase production rates and employment.

Not all of the news is positive. Employment has not recovered as well as hours worked. Although hours worked is often a leading indicator of the direction of employment, the lack of growth in employment is a reminder that self-sustaining growth is still a forecast, not a fact. In addition, both the number of layoffs and the number of people working part time for economic reasons remain high. Finally, the slump in sales of passenger cars remains a concern. Light trucks have captured more of the market, but total sales of vehicles through last December still remain relatively weak.

On balance, economic developments during the last four months of 1992 support a forecast of a shift from 2 percent to 3 percent growth--an expansion weaker than in the past, but enough to remain self-sustaining.

Slow Growth of Output Will Dampen the Growth of Jobs, Wages, and Prices

If the economy grows over the next two years at the 3 percent rate that CBO forecasts, the unemployment rate should improve modestly, with a corresponding drop in the excess productive capacity of the economy. CBO estimates that the potential output of the economy has been growing at a 2.1 percent average rate over the last few years, and it will continue to grow at a similar rate through the forecast period. The shortfall of GDP below its potential, commonly referred to as the GDP gap, has therefore been large (see Figure 1-12). This difference is a measure of the excess capacity of the economy. The persistence of substantial excess capacity throughout the forecast period has important ramifications for the unemployment rate, the growth of wages, and the inflation rate.

The Rate of Unemployment Will Fall Slowly

The unemployment rate is forecast to fall, but it will do so only slowly over the next two years. Although employment is forecast to grow rather slowly, the slow improvement in the unemployment rate stems more from fast growth in the labor force than from slow growth in jobs.

The growth of the labor force has behaved oddly over the last three years. As the economy weakened in 1991, the growth of the labor force slipped dramatically. The labor force usually grows more slowly during recessions, but the extent of the slowdown during the recent recession was unique. Because so many people dropped out of the labor force as the economy worsened, the initial increase in the unemployment rate during 1991 was dampened. Then, in the first half of 1992, the labor force expanded rapidly. As it grew faster than jobs, the unemployment rate rose to its monthly peak of 7.7 percent in June 1992. Between July and October 1992, the labor force again slid down--permitting declines in the unemployment rate in spite of continued lethargic job growth--then surged again late in the year.

The reasons for this unusual pattern of growth in the labor force are not clear, but may be related to the participation of women and teenagers in the retail sector. Teenagers and women account for a large part of both the unusual pattern of the labor force during this business cycle and the number of workers in the retail sector. If a significant fraction of people in the retail sector usually work only limited hours or are otherwise not strongly attached to the labor force, and if jobs in the retail sector were hard to come by, such people may have dropped out of the labor force. Evidence to support this reasoning is given by the number of discouraged workers--those who

say they are not looking for work because they feel they could not possibly get a job--which did not increase inordinately. If a large number of retail workers are only marginally attached to the labor force, they may not have categorized themselves as being discouraged workers.

The CBO forecast assumes that growth in the labor force will increase as job growth (particularly in the retail sector) picks up. The slow decline in the unemployment rate that is forecast during 1993 occurs, therefore, because of the likelihood that a new person will be entering the labor force for virtually every new job created.

Growth of Total Labor Compensation Will Start to Catch Up to Growth of Labor Productivity

The slow recovery has restrained the growth of total labor compensation--wages and salaries, fringe benefits, and employers' share of taxes for social insurance--but CBO expects it to grow faster this year than last, in spite of the slow decline in the unemployment rate. Compensation has already increased moderately from the torpid growth rates of mid-1992, and these gains, combined with low inflation, have increased the real purchasing power of workers. Inflation is expected to remain low, in part because the recent low rates of growth in compensation reflect efforts by employers to cut costs. Compensation is expected to post moderate but sustained gains this year, enabling it to start to catch up to the gains in productivity of past years.

The continued growth of fringe benefits, however, will keep wages from growing as fast as total compensation. In particular, medical benefits continue to grow about 5 percentage points faster than wage and salaries at annual rates.[4] The growth of such benefits will keep long-term growth of wages lower than gains in productivity.

The Rate of Inflation Will Fall

The rate of inflation as measured by the consumer price index is forecast to fall from about 3 percent during the last half of 1992 to about 2.7 percent during 1993 and 1994. With the exception of the period of wage and price controls in 1972, the underlying rate of inflation has not been so low for an extended period since the mid-1960s. Why is it likely to fall this year, particularly since the economy is expanding?

Substantial excess capacity in the U.S. economy and, to a lesser extent, in foreign economies constitutes the principal reason for expecting inflation to ease further in the near term. This excess capacity should be drawn down only slowly because monetary and fiscal policies, both here and abroad, will probably not ease in the near future. In addition, the likelihood of a strong uptrend in commodity prices remains relatively small.

Excess capacity to produce goods and services dampens inflation because suppliers are forced to avoid price increases to keep from losing sales. Inflation often falls in the initial year of recoveries because at least a year of rapid growth is usually required to reduce substantially the excess capacity that developed in the previous recession. The deeper or longer the recession, and the weaker the recovery, the more likely inflation will be mild in the early years of expansion. This recession was not deep, but the recovery was so weak that inflation is likely to ease during 1993 and remain low during 1994. Furthermore, the apparent transition to self-sustaining growth in the United States makes it unlikely that the Federal Reserve will provide more stimulus this year.

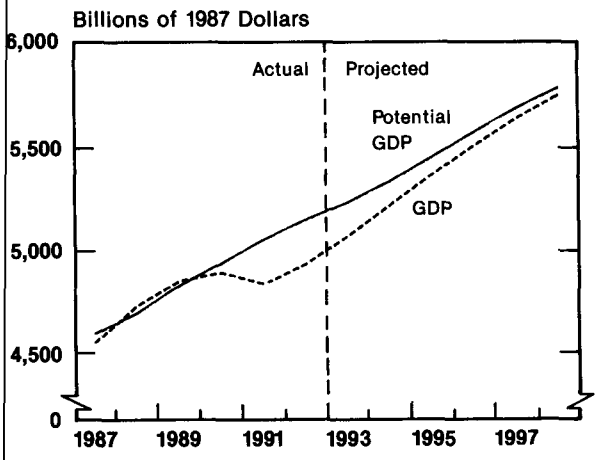
Prices for commodities such as petroleum, natural gas, agricultural goods, and metals have been drifting downward recently, and

4. See Congressional Budget Office, *Projections of National Health Expenditures* (October 1992).

the outlook for supply and demand this year indicates little upward price pressure. A mild expansion in the United States, coupled with slow growth in Europe and Japan, is expected to keep the growth of demand low, and structural or political restraints on supply are not evident. Of course, adverse developments--such as foreign crises, storms, or accidents--could cause a spurt in commodity prices.

Foreign inflation is also easing, and the recent strength of the dollar implies that dollar-denominated prices of foreign goods will not gain much this year. Monetary policies in Europe continue to restrain inflation, and the recent economic weakness in Europe and Japan has brought substantial excess capacity to their economies.

Figure 1-13.
Closing the Gap: GDP Versus Potential GDP



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

CBO's Economic Projections for the Medium Term: 1995 Through 1998

Over the medium term, from 1995 through 1998, CBO projects that real GDP will grow at an average annual rate of 2.5 percent--a rate about 0.4 percentage points faster than CBO's estimated rate of growth for potential real GDP. Given these growth rates, the gap between potential and actual real GDP will reach its historical average of about 0.6 percent of potential real GDP by 1998 (see Figure 1-13). However, because the gap is greater than its historical average through the projection period, inflation is not likely to rise. Therefore, CBO projects inflation to remain steady throughout the medium term at about 2.7 percent. Long-term interest rates are also projected to remain steady at about 6.5 percent, although short-term rates are projected to rise from 3.7 percent in 1994 to 4.9 percent by 1998 (see Tables 1-3 and 1-4).

Those medium-term projections do not reflect cyclical factors in the economy. Instead, they are based on CBO's analysis of fundamental factors underlying the economy, including growth of the labor force, national saving, and productivity. Real GDP is projected beyond the forecast period by assuming that it will grow smoothly to reach its historical relationship with potential GDP by 1998.

The Projection for Growth

CBO projects growth of real GDP to be both historically low and declining. The average annual rate of growth of 2.5 percent over the projection period contrasts with an average of 3.1 percent for the period from the 1960s through the 1980s.

This projection of such historically low growth primarily reflects the fact that a low and declining rate of growth of the labor force will restrain the growth of potential output. Two principal reasons underlie this slowdown. First, all members of the baby boom have reached working age, so the rate of people entering the work force has slowed. Second, the

Table 1-3.
Medium-Term Economic Projections for Calendar Years 1993 Through 1998

	Estimated 1992	Forecast 1993	Forecast 1994	Projected 1995	Projected 1996	Projected 1997	Projected 1998
Nominal GDP (Billions of dollars)	5,943	6,255	6,594	6,942	7,288	7,627	7,953
Nominal GDP (Percentage change)	4.7	5.2	5.4	5.3	5.0	4.7	4.3
Real GDP (Percentage change)	2.0	2.8	3.0	2.9	2.7	2.4	2.0
Implicit GDP Deflator (Percentage change)	2.6	2.4	2.4	2.3	2.3	2.2	2.2
Fixed-Weighted GDP Price Index (Percentage change)	3.0	2.9	2.6	2.6	2.5	2.5	2.5
CPI-U (Percentage change)	3.1	3.0	2.7	2.7	2.7	2.7	2.7
Unemployment Rate (Percent)	7.4	7.1	6.6	6.2	6.0	5.8	5.7
Three-Month Treasury Bill Rate (Percent)	3.5	3.1	3.7	4.4	4.7	4.8	4.9
Ten-Year Treasury Note Rate (Percent)	7.0	6.7	6.6	6.6	6.5	6.5	6.4
Tax Bases (Percentage of GDP)							
Corporate profits	6.6	7.2	7.3	7.2	7.3	7.2	7.1
Other taxable income	20.5	20.3	20.5	20.7	20.9	21.0	21.1
Wage and salary disbursements	49.0	48.8	48.9	49.0	49.1	49.0	48.9
Total	76.1	76.4	76.7	77.0	77.2	77.3	77.2

SOURCE: Congressional Budget Office.

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

proportion of women in the labor force is projected to grow at a slower rate than in the past. Using projections made by the Bureau of Labor Statistics, CBO assumes that the underlying rate of growth of the labor force will average 1.4 percent during the 1995-1998 period, down noticeably from its recent rate of 1.6 percent in the 1980s and 2.0 percent for the longer period of the 1960s through the 1980s.[5]

CBO projects the productivity of labor (output per worker) to grow at an average annual rate of 0.8 percent through the projection period. That rate is nearly the average achieved over the period from 1959 through 1991, when the productivity of labor grew at an average annual rate of 1.0 percent, and somewhat better than the more recent experience of the 1980s, when it grew at an annual rate of 0.7 percent.

The Projection for Inflation

CBO expects a low rate of inflation to remain a continuing legacy of the recession and the

5. Howard N. Fullerton, "Labor Force Projections: The Baby Boom Moves On," *Monthly Labor Review* (November 1991).

Table 1-4.
Medium-Term Economic Projections for Fiscal Years 1993 Through 1998

	Actual	Forecast		Projected			
	1992	1993	1994	1995	1996	1997	1998
Nominal GDP (Billions of dollars)	5,869	6,173	6,508	6,855	7,202	7,543	7,873
Nominal GDP (Percentage change)	4.3	5.2	5.4	5.3	5.1	4.7	4.4
Real GDP (Percentage change)	1.4	2.7	2.9	2.9	2.7	2.5	2.1
Implicit GDP Deflator (Percentage change)	2.8	2.4	2.4	2.3	2.3	2.2	2.2
Fixed-Weighted GDP Price Index (Percentage change)	3.1	3.0	2.7	2.6	2.5	2.5	2.5
CPI-U (Percentage change)	3.0	3.1	2.7	2.7	2.7	2.7	2.7
Unemployment Rate (Percent)	7.3	7.1	6.7	6.3	6.0	5.8	5.7
Three-Month Treasury Bill Rate (Percent)	3.8	3.1	3.5	4.2	4.7	4.8	4.9
Ten-Year Treasury Note Rate (Percent)	7.2	6.7	6.6	6.6	6.5	6.5	6.5
Tax Bases (Percentage of GDP)							
Corporate profits	6.3	7.2	7.3	7.3	7.3	7.2	7.1
Other taxable income	20.6	20.3	20.5	20.7	20.9	21.0	21.1
Wage and salary disbursements	49.2	48.8	48.9	49.0	49.1	49.0	48.9
Total	76.1	76.3	76.7	76.9	77.2	77.3	77.2

SOURCE: Congressional Budget Office.

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

tightness in monetary policy that surrounded it. Projected real growth and the fall in the rate of unemployment through 1998 are too modest to reignite inflation. As with CBO's projections of the real rates of growth and interest rates, the projection of inflation in the medium term reflects an assessment of underlying factors rather than a prediction of cyclical behavior.

For the 1995-1998 period, CBO projects the rate of inflation to average 2.7 percent as measured by the consumer price index for urban consumers (CPI-U), and about 2.2 percent as measured by the implicit GDP deflator. The two measures differ primarily because of the way computer prices affect them. Computers constitute a much bigger share of GDP than they do of the basket of goods used to calculate the CPI-U. Because computer prices are expected to continue to fall significantly, they will dampen the growth of the GDP measure of price far more than that of the CPI-U. Furthermore, computers are projected to grow as a share of GDP. The weight of computers in the implicit GDP deflator grows with its share of GDP, whereas the weight of computers in the CPI-U is fixed at its share of the market basket during the 1982-1984 period.

The Projection for Interest Rates

CBO projects that the three-month Treasury bill rate will rise during the projection period and that the 10-year Treasury note rate will hold steady. The increase in the short-term rate stems from a projected rise in the real short-term rate from its uncommonly low rate of 1.0 percent at the end of the forecast period to a more normal rate of 2.1 percent in 1998. Given the projected inflation rate, this rise translates into a rise in the nominal short-term rate from 3.7 percent in 1994 to 4.9 percent in 1998. The long-term rate remains at about 6.5 percent throughout the projection period.

CBO's projections of real interest rates are based on an analysis of the supply and demand for capital. In the 1990s, an increase in the world's demand for capital is expected to more than offset a more favorable domestic supply and to push up real interest rates. The increased demand should stem from stronger growth in the industrial nations and continued strong growth in the newly industrializing countries, as well as from unusual demand for capital arising from German unification, the integration of Europe, and the development of the former communist-bloc nations. The supply of capital in the United States should increase, principally as a result of a stronger economy, but not by enough to offset the increased demand. So real short-term rates should rise during the projection period. At the same time, the spread between the long- and short-term rates is expected to revert to a historically normal level. Given the projection of the three-month Treasury bill rate in 1998, this historically normal spread would place the 10-year Treasury note rate about at its level today.

Forecast Comparisons and Risks

Both CBO's near-term forecast and medium-term projection for real GDP growth are similar to those of the *Blue Chip* consensus of forecasters. There are, however, important risks associated with both the forecast and the projection, and the uncertainties inherent in predicting the future are greater than the similarity of forecasts would seem to suggest.

The Near-Term Forecast

CBO forecasts real growth through 1994 to be nearly as strong as does the *Blue Chip* consensus survey (see Table 1-5). Not surprisingly, the forecasts for the unemployment rate are also similar, with the stronger real growth in the *Blue Chip* forecast bringing the unemployment rate down a bit further than that of CBO. Consistent with its lower forecast for the unemployment rate, the *Blue Chip* forecasts higher inflation than does CBO. The *Blue Chip* forecast for interest rates then also becomes correspondingly higher; there is little difference in the forecasts for real short-term interest rates.

The main identifiable risks to the forecast stem from the unusual nature of the economy both here and abroad. As discussed above, many of the long-term adjustment processes are difficult to assess because they are not normal characteristics of business cycles.

Dealing with the deficit also remains a long-term problem; the deficit would remain high through 1995 even under the BEA. An effort to reduce the deficit, however, could hurt short-term growth if it is not carefully planned and managed. (Chapter 5 discusses the issues raised by various strategies to cut the deficit.)

The situation in the foreign sector is also unusual, not simply because of recession abroad, but because of the unique demands placed on the European economies by efforts to unify both Germany and Europe.[6] In addition, a trade war between the United States and Europe over farm subsidies remains a po-

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

Table 1-5.
Comparison of Forecasts for 1993 and 1994

	Estimated 1992	Forecast 1993	Forecast 1994
	Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP			
CBO current	5.1	5.4	5.4
Blue Chip	5.3	6.0	6.4
CBO August 1992	5.3	6.3	5.7
Real GDP[a]			
CBO current	2.7	2.8	3.0
Blue Chip	2.7	3.0	3.2
CBO August 1992	2.5	3.2	2.7
Implicit GDP Deflator			
CBO current	2.4	2.5	2.4
Blue Chip	2.6	2.9	3.1
CBO August 1992	2.7	3.0	3.0
Consumer Price Index[b]			
CBO current	3.1	2.8	2.7
Blue Chip	3.0	3.2	3.6
CBO August 1992	3.3	3.4	3.4
	Calendar-Year Averages (Percent)		
Civilian Unemployment Rate			
CBO current	7.4	7.1	6.6
Blue Chip	7.4	7.0	6.5
CBO August 1992	7.5	6.8	6.1
Three-Month Treasury Bill Rate			
CBO current	3.5	3.1	3.7
Blue Chip	3.5	3.5	4.2
CBO August 1992	3.6	3.7	4.8
Ten-Year Treasury Note Rate			
CBO current	7.0	6.7	6.6
Blue Chip[c]	7.0	6.9	7.2
CBO August 1992	7.1	6.9	6.9

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (January 10, 1993); Department of Commerce, Bureau of Economic Analysis.

NOTE: The *Blue Chip* forecasts through 1994 are based on a survey of 50 private forecasters, published on January 10, 1993.

a. Based on constant 1987 dollars.

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

c. *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.

tentially damaging--although remote--possibility.

The lack of a clear pattern in spending and saving by consumers represents one example of the extent of how uncertain the forecasts are. The personal saving rate can quickly move by 1 or more percentage points for extended periods. For instance, if households raised their saving rate to a level just 0.7 percentage points higher than CBO forecasts, then the drop in consumption would lower the growth rate of real GDP over the next year by one-half a percentage point, even if one ignores the effect that such a drop in aggregate demand would have on the rest of the economy.

The Medium-Term Projection

On the whole, the CBO projections over the 1995-1998 period agree quite closely with those of the *Blue Chip* consensus for output, and fairly closely for interest and inflation rates. Both organizations project real GDP to grow at an average annual rate of 2.5 percent over the period (see Table 1-6). CBO, however, projects the annual rate of growth to start at 2.9 percent in 1995 and to decline gradually to 2.0 percent by 1998. The *Blue Chip* consensus projects nearly constant growth at a rate of 2.5 percent for the entire period. Both *Blue Chip* and CBO project fairly constant rates of interest and inflation, but CBO projects higher real interest rates and lower inflation rates, with

Table 1-6.
Comparison of Projections for 1995 Through 1998

	1995	1996	1997	1998
	Percentage Change (Year over year)			
Real GDP[a]				
CBO current	2.9	2.7	2.4	2.0
Blue Chip	2.5	2.5	2.5	2.5
CBO August 1992	2.6	2.4	2.2	n.a.
CPI-U[b]				
CBO current	2.7	2.7	2.7	2.7
Blue Chip	3.7	3.6	3.6	3.5
CBO August 1992	3.4	3.4	3.4	n.a.
	Calendar-Year Averages (Percent)			
Civilian Unemployment Rate				
CBO current	6.2	6.0	5.8	5.7
Blue Chip	6.1	5.9	5.9	5.7
CBO August 1992	5.9	5.7	5.6	n.a.
Three-Month Treasury Bill Rate				
CBO current	4.4	4.7	4.8	4.9
Blue Chip	5.0	5.1	5.2	5.1
CBO August 1992	5.4	5.5	5.6	n.a.

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (October 1992).

NOTE: n.a. = not applicable.

a. Based on constant 1987 dollars.

b. Consumer price index for all urban consumers.

the resulting nominal rate of interest about 0.4 percentage points lower than that of the *Blue Chip*.

Far more uncertainty surrounds these projections, however, than their near agreement might suggest. In order to get a numerical estimate of that uncertainty for the projection of real GDP, CBO examined the historical record of variability in the growth rate of GDP over six-year periods. This exercise indicates that there are about two chances in three that CBO's projection of real GDP in 1998 will be within 6 percent of its actual value. Given the CBO projection for GDP of $5,740 billion (in 1987 dollars) in 1998, this result translates into a likely band of error of plus or minus $344 billion. By contrast, the projections of real GDP in 1998 by the *Blue Chip* consensus differ from CBO's by less than $20 billion.

Chapter Two

The Budget Outlook

In 1992, the federal deficit reached $290 billion, a new record. Under current taxing and spending policies, it will dip slightly from that level through 1995, according to the Congressional Budget Office's latest estimates. The deficit then starts to climb again--not just in dollar terms but, more worrisomely, in relation to the size of the economy as measured by gross domestic product. This message differs little from the one CBO has relayed for the last two years, ever since it became painfully clear that the 1990 budget summit pact, an ambitious plan to chop nearly $500 billion from the deficit over five years, would not balance the budget as first thought but merely prevent the situation from being vastly worse.

This chapter summarizes CBO's new baseline projections. The baseline shows the budget outlook if current taxing and spending policies remain unchanged. It is not a forecast of budget outcomes, but is essential for sketching the consequences of today's policies and serves as a benchmark in weighing proposed changes. Crucially, the projections assume continued compliance with the Budget Enforcement Act of 1990 (BEA), enacted after that year's budget summit talks between Congressional leaders and the Bush Administration. The BEA's key provisions bar lawmakers from increasing the deficit, on balance, through revenue or entitlement legislation and set strict limits through 1995 on total appropriations for programs that are funded annually. This chapter focuses on the deficit outlook, and Chapters 3 and 4 contain more detail about CBO's new projections for federal spending and revenues.

The Deficit Outlook

The most straightforward and widely used measure of the deficit is simply the difference between federal revenues and outlays. Nevertheless, there is a proliferation of other measures, some more useful than others.

The Total Deficit and Its Variants

If policymakers comply with the Budget Enforcement Act, CBO expects the total deficit to drop negligibly through 1995 before rising again (see Table 2-1). This figure--the comprehensive measure of the gap between federal spending and revenues--hits $310 billion in 1993, drifts down to $284 billion in 1995, and then heads back up, with its ascent steepening in 1997 and 1998.

Temporary and cyclical factors, though, can obscure underlying trends in the budget. When these factors are stripped away, even the modest improvement in the deficit through mid-decade proves to be illusory.

Temporary Factors: Deposit Insurance and Contributions for Operation Desert Storm. One variant of the total deficit excludes deposit insurance spending and Desert Storm contributions. CBO has long emphasized that spending for deposit insurance--that is, money spent and received in the course of closing or merging insolvent savings and loan institutions and banks--does not spur the economy like other federal spending. Insured depositors do not become richer when the government honors its commitment to them; rather, the transaction represents a rearrangement of the financial assets and liabilities already present in the economy. Recognizing this, credit markets absorb the Treasury securities issued to pay for deposit insurance with relative equanimity. The true waste of resources--the squandering of physical assets that deposit insurance losses represent--largely occurred in past years, when institutions made bad loans and investments.

Deposit insurance outlays have fluctuated widely in the past few years, marked by spurts of spending or asset sales and interrupted by funding cutoffs. Deposit insurance outlays soared from near zero before 1988 to $66 billion in 1991. They plummeted to just $3 billion in 1992, chiefly because policymakers

Table 2-1.
The Deficit Outlook Under Current Policies (By fiscal year)

	Actual 1992	1993	1994	1995	1996	1997	1998
				In Billions of Dollars			
Total Deficit Assuming Discretionary Caps	290	310	291	284	287	319	357
Deficit Excluding Deposit Insurance and Desert Storm Contributions	292	307	282	273	288	333	367
Standardized-Employment Deficit[a]	201	228	222	230	256	309	351
On-Budget Deficit (Excluding Social Security and Postal Service)	340	361	347	351	365	402	445
Memoranda:							
Deposit Insurance	3	3	10	11	-1	-14	-10
Desert Storm Contributions	-5	0	0	0	0	0	0
Off-Budget Surplus							
Social Security	51	53	59	67	76	82	88
Postal Service	-1	-2	-3	b	2	1	b
Total, Off-Budget Surplus	50	51	56	67	78	83	88
Hospital Insurance Surplus	11	7	-1	-7	-14	-23	-32
				As a Percentage of GDP			
Total Deficit Assuming Discretionary Caps	4.9	5.0	4.5	4.1	4.0	4.2	4.5
Deficit Excluding Deposit Insurance and Desert Storm Contributions	5.0	5.0	4.3	4.0	4.0	4.4	4.7
Standardized-Employment Deficit[a, c]	3.3	3.6	3.3	3.3	3.5	4.1	4.4

SOURCE: Congressional Budget Office.

a. Excludes cyclical deficit as well as deposit insurance and Desert Storm contributions.

b. Less than $500 million.

c. Expressed as a percentage of potential GDP.

have failed since last April to approve additional funds for the Resolution Trust Corporation, the agency in charge of the savings and loan cleanup. This nosedive in outlays for deposit insurance, in fact, is the main reason that the 1992 deficit came nowhere near the $400 billion mark that was so widely publicized a year ago (see Box 2-1).

Box 2-1. Whatever Happened to the $400 Billion Deficit?

Last February, the Bush Administration forecast a $400 billion deficit for 1992; soon thereafter, the Congressional Budget Office published its own forecast of $368 billion. These figures received wide play in the financial community and the press. But as the year progressed, analysts busily retreated from these large figures, and the actual deficit totaled only $290 billion. What happened?

The single leading explanation for CBO's $77 billion overestimate was the abrupt slowdown in deposit insurance spending, chiefly because of a development that neither CBO nor the Administration's Office of Management and Budget had assumed in its projections: the failure of policymakers to approve any new funds for the savings and loan cleanup after March 31. This delay in funding brought the Resolution Trust Corporation's (RTC's) authority to close institutions to a halt, although the RTC could still pay out funds that were previously obligated and sell assets on behalf of institutions that were in its custody.

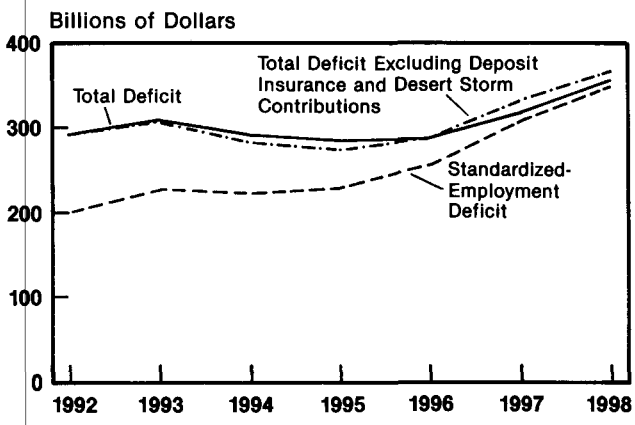
Deposit insurance alone accounted for almost $63 billion of CBO's $77 billion overestimate: almost $50 billion for the RTC, another $11 billion for the Bank Insurance Fund (which did not suffer any funding interruption but whose spending proved to be surprisingly low and its receipts from sales of assets unexpectedly high), and a few billion dollars for the FSLIC Resolution Fund. The remaining error of nearly $15 billion can be traced to stronger-than-expected revenues ($4 billion) and to slower spending in a wide variety of programs, particularly in defense, modestly helped by a package of rescissions adopted by the Congress last spring that trimmed an estimated $2.5 billion from outlays in 1992.

Projected deposit insurance outlays are not terribly volatile in CBO's newest projections: they peak at about $11 billion in 1995, then turn negative as projected losses decline and ongoing sales of assets dominate the totals. But this is a notoriously uncertain category of spending and should be isolated when eyeing the deficit's trend.

Another volatile category, Desert Storm contributions, has already faded from the scene. These contributions--collected from allied nations to help finance the United States' costs in the Persian Gulf conflict two years ago--totaled $43 billion in 1991 and $5 billion in 1992 but have now stopped. As Figure 2-1 shows, the deficit excluding deposit insurance and Desert Storm contributions lies slightly below the total deficit through 1995 but then climbs more steeply.

Cyclical Factors: The Standardized-Employment Deficit. A deficit measure commonly used by economists removes the cyclical effects of a lackluster economy on the budget. When the nation is in recession, and even during recovery when it has not yet caught up

Figure 2-1.
The Deficit Outlook (By fiscal year)



SOURCE: Congressional Budget Office.

to its potential, the deficit automatically worsens--principally because of lower revenues, less dramatically because of extra benefits for unemployment compensation and other programs. These cyclical effects remain very big in 1992 and 1993 but then shrink gradually. As explained in Box 1-2 in Chapter 1, changes in the standardized-employment deficit are used as a measure of the stimulus or drag exerted by fiscal policy. This measure homes in on the deficit that policymakers can fundamentally control, in contrast to the part that stems automatically from a tepid economy. More clearly than the total deficit, the standardized-employment deficit points to a fairly sharp rise in the deficit just as soon as the BEA's caps on discretionary spending expire after 1995 (see Figure 2-1).

All of the deficits discussed so far point to a worsening deficit outlook after the mid-1990s, but they do not illuminate the reasons. Why does the gap between spending and revenues widen? Fingering the culprits is a sensitive task. Blaming a fast-growing area of the budget, for example, is often misinterpreted as a call for slashing it. Conversely, failing to cite a slowly growing area might erroneously imply that no savings are to be found there. But given these caveats, the deficit's upward path clearly demands explanation. A special section at the end of this chapter presents a broadbrush picture of the budget outlook for a full 10-year period and traces the burgeoning deficit largely to the uncontrolled growth of health care spending.

The On-Budget Deficit and Its Variants

A deficit sometimes cited by policymakers, the press, and the public is the on-budget deficit. Unlike the measures just discussed, this measure has no particular usefulness for economic analysis; rather, it is a concept born in legislation that granted special, off-budget status to particular programs run by the government.

On- and Off-Budget Programs. The two Social Security trust funds--Old-Age and Survivors Insurance and Disability Insurance--have enjoyed off-budget status since 1985's Balanced Budget and Emergency Deficit Control Act, known informally as Gramm-Rudman-Hollings. This shift nevertheless did not affect the choice of fiscal policy targets. The 1985 act and its 1987 successor still focused on the total deficit, including Social Security, in setting out a daunting timetable to balance the budget by the early 1990s.

Following adoption of an ambitious deficit reduction package, 1990's Budget Enforcement Act took a respite from fixed deficit targets at least until 1994. Once deficit targets resurface, though, they apply to the on-budget deficit--that is, they exclude Social Security and the much smaller Postal Service, which is also legally off-budget.

A program with somewhat ambiguous status is Medicare's Hospital Insurance, also known as Part A of Medicare. A 1983 law granted this program off-budget status beginning in 1993. But all three of the major budget process laws already mentioned--the 1985 Balanced Budget Act, its 1987 successor, and the 1990 Budget Enforcement Act--included Hospital Insurance in setting deficit targets. Moreover, the Office of Management and Budget has not yet made the switch to presenting Hospital Insurance as off-budget.

The budget picture looks quite different if off-budget programs are excluded (see Table 2-1). In isolation, Social Security runs a surplus; its income from payroll taxes, interest, and other sources exceeds its outlays for benefits and other, minor categories of spending. Thus, removing Social Security makes the remaining deficit even more gaping. The Social Security surplus is entirely in the Old-Age and Survivors Insurance fund. The Disability Insurance fund is hemorrhaging fast and, in the absence of legislative action to raise or reallocate taxes or to stabilize benefits, is expected to exhaust its balances in 1996. Hos-

pital Insurance also faces a mismatch between its earmarked income and its spending. In the face of soaring medical expenditures, the hospital fund incurs worsening deficits after 1993 and exhausts its balances at the turn of the century.

Does the on-budget deficit convey useful information? Most economists would say no. The programs that enjoy off-budget status are huge and fast-growing: Social Security benefits alone account for about one-fifth of federal spending, and its payroll taxes for over one-fourth of government revenues. Hospital Insurance accounts for smaller but still significant shares. If the purpose of analyzing the budget is to summarize the government's role in the economy and its drain on the credit markets, then excluding such big programs wholesale hinders this effort.

Federal Trust Funds. Gauged by taxes collected and benefits paid, Social Security and Hospital Insurance are the two biggest federal trust funds. But they share the trust fund label with many other federal programs.

The federal government runs more than 150 trust funds, which together spent more than half a trillion dollars in 1992. Most funds fall under one of three broad rubrics. *Infrastructure funds*, led by the Highway and the Airport and Airway trust funds, are credited with earmarked taxes on users (such as gasoline and airplane ticket taxes) and pay for construction and maintenance. These funds account for barely 5 percent of trust fund outlays. *Staff retirement funds* for federal employees include the Military Retirement and Civil Service Retirement programs and a few smaller ones. These programs are somewhat akin to pension plans for private employees or state and local government workers. Like those counterparts, the federal employees' staff plans are a form of deferred compensation for current workers; unlike those other systems, however, the federal plans are not vulnerable to adverse developments in a particular industry or geographic area, so that the argument for advance funding is not strictly parallel. The staff retirement plans account for about 10 percent of trust fund outlays. And finally, *social insurance funds*, led by Social Security and Medicare, cover nearly the whole population and have no counterpart in the private or state and local sector. This last cluster is by far the biggest, comprising 85 percent of trust fund outlays and attracting by far the most public attention.

Ironically, public understanding of trust funds has seemingly come full circle since the report of the President's Commission on Budget Concepts in 1967. Until then, the budget was typically divided in two: the so-called trust funds budget and the administrative budget, which contained everything else. Combined or consolidated totals were shortchanged in budget presentations. The commission criticized this practice, arguing that consolidated measures most accurately represent the government's overall importance in the economy and its claim on national saving in the form of deficit financing. This goal of clarity and completeness has generally guided budget presentation since then. Yet, in a throwback to the days before the commission's report, many people still think that the deficit excluding trust funds (known as the federal funds deficit) is somehow the "true" deficit.

Viewed in isolation, trust funds run surpluses because their earmarked income exceeds spending for benefits, administration, and other costs. The total trust fund surplus is expected to inch up from about $101 billion in 1993 to $110 billion in 1998 (see Table 2-2). The federal funds deficit mounts from $411 billion to $468 billion in the same period.

But efforts to paint the federal funds deficit as the true deficit--one that is simply being masked by trust funds--are misguided, for two reasons. First, no large federal program is truly self-supporting, whether it is labeled a trust fund program or whether (like defense or Medicaid) it lacks this label. Trust fund receipts come from taxing one group, such as current workers, to confer benefits on others, such as retirees; in other words, the programs are redistributive. And much of their income,

in fact, simply comes from transfers within the budget. Such transfers shift money from the general fund (boosting the federal funds deficit) to trust funds (swelling the trust fund surplus). These intrabudgetary transfers total $209 billion in 1993 and even larger amounts later (see Table 2-2). Prominent among them are interest paid to trust funds (about $83 billion in 1993), government contributions to retirement funds on behalf of its own employees ($66 billion), and the general fund contribution to Supplementary Medical Insurance ($46 billion), which finances three-quarters of that program's costs. Clearly, most of these transfers were instituted purposely--for example, to show the cost of funding future retirement benefits as part of the budgets of federal agencies. 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.

The second reason is more compelling. Setting trust funds aside, and looking only at non-trust-fund programs, can distort budget decisionmaking. The same economic pie, namely GDP, supports trust fund programs and other programs alike. Putting trust fund programs on a favored footing shifts the onus of deficit reduction to other programs that lack this protective label. Sound decisionmaking, in contrast, demands that spending and reve-

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

	1993	1994	1995	1996	1997	1998
Social Security[a]	53	59	67	76	82	88
Medicare[b]	11	-1	-7	-12	-20	-29
Military Retirement	11	10	9	8	7	7
Civilian Retirement[c]	28	29	30	32	33	34
Unemployment	d	3	6	9	9	9
Highway and Airport	-3	-1	-1	-1	-1	-1
Other[e]	2	2	2	2	2	3
Total Trust Fund Surplus[f]	101	101	107	113	113	110
Federal Funds Deficit[f]	-411	-393	-391	-400	-432	-468
Total Deficit	-310	-291	-284	-287	-319	-357
Memorandum:						
Net Transfers from Federal Funds to Trust Funds	209	210	223	244	264	283

SOURCE: Congressional Budget Office.

a. Old-Age and Survivors Insurance and Disability Insurance.

b. Hospital Insurance and Supplementary Medical Insurance.

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

d. Less than $500 million.

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

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

nue proposals be evaluated on their merits and not on their labels.

How Has the Budget Outlook Changed Since August?

Except in 1993, projected deficits are marginally worse than when CBO presented its budget and economic projections in August. The deterioration is chiefly traceable not to the economy's expected performance but to other, technical factors. Major changes are summarized in Table 2-3.

Recent Legislation

Legislative changes have boosted both revenues and outlays slightly since last summer, with little net effect on the deficit. Most of the action took place on the appropriation front. Emergency spending of about $7 billion in 1993--roughly split between domestic programs to aid victims of natural disasters and another installment of Desert Storm-related money for defense--added to outlays. But these extra dollars were largely offset by the decision of legislators to hold defense outlays about $5 billion below the allowable caps. Other major legislation averted a cut in food stamp benefits and raised energy-related taxes and fees. In November, President Bush vetoed a bill that would have made much more extensive changes in taxes and in a few spending programs. In sum, enacted legislation has altered future deficits by no more than $1 billion a year.

Economic Changes

Revisions to the economic outlook worsen the deficit slightly through 1995 but then improve it modestly. This pattern occurs basically because spending takes longer to respond to the economic revisions than do revenues.

CBO has lowered its assumptions about future taxable incomes and has reduced revenues accordingly--by $15 billion in 1993 and by $36 billion in 1997, as shown in Table 2-3. Most of the revision occurs because CBO has shaved its estimates of future inflation; its assumptions about real GDP growth are little altered.

Outlays also respond to lower inflation and to lower interest rates, but with a longer lag. Savings in net interest outlays mount from $5 billion in 1993 to $20 billion in 1997, as interest rates on Treasury notes and bonds and especially on short-term Treasury bills lie below last summer's assumptions. Savings in other programs, mainly benefit programs that have cost-of-living adjustments, pick up steam beginning in 1994. And built-in lags delay adjustments in discretionary spending for inflation, postponing any significant savings in that area until even later.

Technical Reestimates

Technical revisions are any that are not ascribed to a new economic forecast or to legislation. In 1993, all other technical changes pale next to revisions in CBO's outlook for deposit insurance spending, almost wholly the result of the failure of policymakers to grant additional funds last fall. After 1993, revisions are increasingly dominated by the government's two major health care programs, Medicare and Medicaid.

Last fall, the Congress did not pass legislation to fund the Resolution Trust Corporation (RTC) before adjourning, thus prolonging another of the agency's periodic funding droughts. Policymakers have no choice but to fund the RTC (or a successor) eventually, and CBO assumes that they will do so by this spring. Legislators face no procedural hurdle; under the rules of the Budget Enforcement Act, any measure that merely funds the gov-

Table 2-3.
Changes in CBO Budget Projections Since August (By fiscal year, in billions of dollars)

	1993	1994	1995	1996	1997
			Revenues		
August 1992 Estimate	1,162	1,242	1,323	1,390	1,455
Policy Changes	1	a	a	a	a
Economic Assumptions	-15	-23	-27	-28	-36
Technical Reestimates	-6	-4	-5	-6	-5
Total	-19	-27	-32	-34	-41
Current Estimate	1,143	1,215	1,291	1,356	1,414
			Outlays		
August 1992 Estimate	1,493	1,511	1,567	1,644	1,745
Policy Changes[b]	1	2	a	a	a
Economic Assumptions					
Net interest	-5	-12	-15	-17	-20
Benefits and discretionary spending	a	-1	-7	-17	-29
Subtotal	-5	-12	-21	-34	-49
Technical Reestimates					
Deposit insurance[c]	-45	-5	8	8	4
Medicaid	2	5	8	10	12
Medicare	a	5	8	11	14
Other benefit programs	3	2	2	2	3
Net interest[c]	-2	-4	-1	1	3
Other	6	4	4	a	a
Subtotal	-36	7	29	32	37
Total	-40	-4	8	-1	-12
Current Estimate	1,453	1,507	1,575	1,643	1,733
			Deficit		
August 1992 Estimate	331	268	244	254	290
Policy Changes[b]	1	1	a	a	a
Economic Assumptions	9	10	6	-6	-13
Technical Reestimates	-30	11	34	37	42
Total	-21	23	40	32	29
Current Estimate	310	291	284	287	319

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.

ernment's current commitment to depositors--without expanding that commitment's scope--does not demand offsetting tax hikes or spending cuts elsewhere.

The hiatus in the RTC's activity dominates the 1993 reestimates, and its effect is heightened because it also diminishes the RTC's need for working capital. Working capital is money the RTC needs temporarily until it can sell the assets of failed thrifts. But institutions that remain in conservatorship--a stage that precedes resolution--while the RTC awaits funding are already shedding many assets, lessening the RTC's need for working capital once they finally enter the resolution pipeline. Together, the delay in funding and the reduced need for working capital have led CBO to cut its estimate of RTC outlays by $42 billion in 1993; revisions to other deposit insurance spending drive the total reduction for this category to $45 billion (see Table 2-3).

For the five-year period from 1993 through 1997, CBO has lowered its total estimates of deposit insurance spending by $29 billion--by $24 billion for savings and loan resolutions and by $5 billion for the Bank Insurance Fund (BIF), which covers commercial and savings banks. (Excluded from these figures are changes in projected interest payments by the RTC and BIF to the Treasury's Federal Financing Bank; these intrabudgetary transactions do not alter the total deficit.) The deposit insurance agencies also spent slightly less in 1992 than CBO had expected last summer. These revisions reflect a cautious but growing view that the cost of tackling troubled financial institutions is shrinking modestly, as more vigorous regulation and unusually wide spreads between short- and long-term interest rates (a key factor influencing the profits of institutions) leave their mark. More on the outlook for deposit insurance spending appears in Chapter 3.

Offsetting this mildly cheering news is a gloomier outlook for health care spending. Projections of Medicaid and Medicare outlays are up by $9 billion for technical reasons in 1994 and by $26 billion in 1997. Medicaid is witnessing even faster growth--especially for its highest-cost participants, the elderly and disabled--than was previously anticipated. And in Medicare, the Hospital Insurance fund faces burgeoning costs in two areas that, despite the program's name, pay for care in nonhospital settings: at home and in skilled nursing facilities.

Other technical reestimates are much smaller. Revenues are down by between $4 billion and $6 billion a year, with relatively small revisions in several tax sources (as discussed in Chapter 4). Major benefit programs, led by Social Security and Supplemental Security Income, face higher outlays, chiefly because more applicants are seeking and receiving disability benefits. Net interest is up because other technical revisions boost borrowing and, hence, the cost of servicing debt.

The Longer-Term Budget Outlook

The Bush Administration issued its final set of budget projections in early January (see Box 2-2). Although they differ in their details, both CBO's and the Administration's projections convey a common message: the deficit remains large and shows no sign of shrinking under current policies. In fact, it gets worse again after mid-decade.

What about the longer run? CBO has prepared a version of its budget projections through 2003--a full five years beyond the usual baseline horizon. Of course, these projections are not nearly as detailed as CBO's full-fledged baseline. Rather, CBO tries to gauge the apparent trends in broad clusters of the budget.

Under current taxing and spending policies, CBO projects that the deficit would top $650 billion in 2003--more than twice today's level (see Table 2-4). The deficit's climb is not nearly so dramatic when expressed in relation to

Box 2-2.
A Comparison with the Bush Administration's Projections

The Bush Administration published its final budget projections on January 6. In deference to the incoming Administration, this final budget contained no detailed policy initiatives. Instead, the departing team confined itself to presenting its own version of the budget outlook under a continuation of current policies, using economic assumptions borrowed from a survey of private forecasters (last November's *Blue Chip* consensus).

The Administration forecasts bigger deficits than does CBO in 1993 and 1994 but smaller ones thereafter, culminating in a $38 billion difference in 1998 (see table below). A few major reasons stand out.

Comparison of the Administration's and CBO's Deficit Projections
(By fiscal year, in billions of dollars)

	1993	1994	1995	1996	1997	1998
CBO Baseline Deficit	310	291	284	287	319	357
Conceptual Differences						
Discretionary spending	n.a.	-1	-1	-15	-30	-45
Net interest	n.a.	a	a	-1	-2	-4
Subtotal	n.a.	-1	-1	-16	-32	-50
Economic Differences						
Revenues[b]	-5	-17	-23	-33	-48	-75
Benefit programs	a	1	6	13	21	30
Net interest	2	8	12	12	14	14
Subtotal	-3	-8	-5	-7	-13	-31
Technical Differences						
Revenues[b]	a	2	8	11	22	33
Deposit insurance	13	6	-18	-14	2	3
Net interest	3	2	1	1	4	7
Other outlays	4	a	3	5	2	a
Subtotal	21	11	-6	2	30	43
Total Differences	17	1	-11	-20	-14	-38
OMB Baseline Deficit	327	292	272	266	305	320

SOURCES: Office of Management and Budget; Congressional Budget Office.
NOTE: n.a. = not applicable.
a. Less than $500 million.
b. Larger revenues are shown with a negative sign because they reduce the deficit.

GDP, but is still pronounced. The deficit briefly dips from today's level of 5 percent of GDP, but it returns there by 1999 and heads steadily toward 7 percent in 2003.

Revenues and discretionary spending are not at the root of the deficit's growth. From 18.5 percent of GDP in 1993, revenues climb to about 18.7 percent of GDP in 1994 and stay there. Discretionary spending falls by a full percentage point of GDP between 1993 and 1995, disciplined by the BEA's caps, and drifts down less precipitously thereafter. (Following standard baseline methodology, CBO assumes that discretionary spending simply keeps pace with inflation once the BEA's caps expire.)

Since neither revenues nor discretionary spending explains a growing deficit, the search ends up pointing to two other areas: entitlement spending, led by health care programs, and net interest. Both Medicare and Medicaid spending are estimated to grow by 10 percent or more a year, propelling them

Box 2-2.
Continued

The discretionary spending caps that are mandated by the Budget Enforcement Act (BEA) expire after 1995. The figures of both the Congressional Budget Office and the Office of Management and Budget (OMB) assume that policymakers will abide by these caps through 1995, essentially freezing 1993's appropriations in dollar terms for two more years. After 1995, CBO simply adjusts discretionary programs, in the aggregate, for inflation (a long-standing baseline method that predates the BEA). In sharp contrast, OMB continues to freeze discretionary spending for three more years at 1995's dollar level. As a result, discretionary spending is about 8 percent lower in 1998 in the Administration's projections than in CBO's. This single difference in baseline concepts trims OMB's projected deficits by $16 billion in 1996 and $50 billion in 1998.

Contrasting economic assumptions likewise lead OMB to project smaller deficits than CBO. The two agencies' economic assumptions hardly differ on the outlook for real growth. The crucial differences lie in assumptions about inflation: OMB assumes that growth in the consumer price index over the 1993-1998 period will average about 3½ percent a year, nearly a full percentage point above CBO's forecast. And OMB's interest rates, especially for medium- and long-term Treasury notes and bonds, are also higher than CBO's.

Ordinarily, higher inflation would tend to boost revenues and outlays by roughly equal amounts, leaving the deficit virtually unaffected. But the Administration treats a huge category of outlays--discretionary spending--as completely unresponsive to inflation, opting instead simply to freeze it in dollar terms. With discretionary spending frozen, the response of revenues to higher inflation far outstrips that of outlays. Thus, the Administration's economic assumptions lead it to project a smaller deficit than CBO: by negligible amounts through 1996, but by $31 billion in 1998.

A few key technical differences dominate the rest of the story. On the revenue front, differing interpretations of recent trends in corporate income tax collections explain over half of 1998's technical gap of $33 billion. Both the amount and timing of spending for deposit insurance remain contentious. Over the 1993-1998 period, CBO projects higher outlays for deposit insurance of $7 billion. CBO is more pessimistic than the Administration about the outlook for savings-and-loan-related outlays (accounting for an extra $22 billion of spending in the six-year period) but less gloomy about the prospects for the Bank Insurance Fund (accounting for smaller outlays of $15 billion over the same period). CBO envisions a slower pace for the Resolution Trust Corporation's activity in 1993 even if the agency gets its long-delayed funding authority soon.

toward 6.9 percent of GDP in 2003 (up from 3.7 percent today). A milestone of sorts is reached in 1998, when the two big health care programs actually overtake Social Security in size. Social Security benefits barely change in relation to GDP from today's level of 4.9 percent; by 2003, the final year of this projection, the first members of the baby-boom generation are still five years away from eligibility for Social Security retirement benefits.

Net interest is the only major category of spending besides health care that rises steadily in relation to GDP--from 3.2 percent today to 4.5 percent in 2003. Because the economic assumptions (as described below) contain no sharp jumps in interest rates, this growth can be traced squarely to the government's large and growing debt. The debt held by the public climbs to $7.5 trillion in 2003, nearly 78 percent of GDP--a ratio of debt to GDP that

Table 2-4.
The Budget Outlook Through 2003 (By fiscal year)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
					In Billions of Dollars						
Revenues	1,143	1,215	1,291	1,356	1,414	1,482	1,540	1,600	1,664	1,733	1,804
Outlays											
Discretionary	547	539	539	554	569	584	600	616	633	650	668
Mandatory											
Social Security	302	319	335	351	368	385	403	420	439	459	480
Medicare	146	167	188	211	234	259	286	316	350	389	432
Medicaid	80	92	105	118	131	146	162	179	198	219	240
Civil Service and Military Retirement	61	64	67	71	75	79	82	85	89	93	97
Other	180	175	171	163	176	182	187	192	197	203	208
Subtotal	770	816	866	913	984	1,051	1,119	1,193	1,274	1,362	1,457
Deposit insurance	3	10	11	-1	-14	-10	-9	-10	-10	-9	-9
Net interest	198	211	231	250	270	292	314	339	368	400	437
Offsetting receipts	-65	-68	-72	-73	-76	-78	-81	-84	-87	-91	-94
Total	1,453	1,507	1,575	1,643	1,733	1,839	1,943	2,055	2,178	2,312	2,458
Deficit	310	291	284	287	319	357	404	455	513	579	653
Deficit Excluding Deposit Insurance	307	282	273	288	333	367	413	465	523	589	663
Debt Held by the Public	3,290	3,585	3,874	4,169	4,496	4,863	5,275	5,739	6,261	6,850	7,512
					As a Percentage of GDP						
Revenues	18.5	18.7	18.8	18.8	18.7	18.8	18.8	18.7	18.7	18.7	18.7
Outlays											
Discretionary	8.9	8.3	7.9	7.7	7.5	7.4	7.3	7.2	7.1	7.0	6.9
Mandatory											
Social Security	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	4.9	5.0
Medicare	2.4	2.6	2.7	2.9	3.1	3.3	3.5	3.7	3.9	4.2	4.5
Medicaid	1.3	1.4	1.5	1.6	1.7	1.9	2.0	2.1	2.2	2.4	2.5
Civil Service and Military Retirement	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Other	2.9	2.7	2.5	2.3	2.3	2.3	2.3	2.2	2.2	2.2	2.2
Subtotal	12.5	12.5	12.6	12.7	13.0	13.3	13.7	14.0	14.3	14.7	15.1
Deposit insurance	a	0.1	0.2	a	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1
Net interest	3.2	3.2	3.4	3.5	3.6	3.7	3.8	4.0	4.1	4.3	4.5
Offsetting receipts	-1.1	-1.0	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total	23.5	23.2	23.0	22.8	23.0	23.4	23.7	24.1	24.5	24.9	25.4
Deficit	5.0	4.5	4.1	4.0	4.2	4.5	4.9	5.3	5.8	6.2	6.8
Deficit Excluding Deposit Insurance	5.0	4.3	4.0	4.0	4.4	4.7	5.0	5.4	5.9	6.3	6.9
Debt Held by the Public	53.3	55.1	56.5	57.9	59.6	61.8	64.4	67.2	70.3	73.8	77.6

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent of GDP.

was last seen in 1950, when the debt was swollen by the huge deficits associated with World War II.

Of course, tremendous uncertainties surround these projections. One question mark is the economy's performance. CBO's assumptions about the economy for the 1993-1998 period were extensively discussed in Chapter 1, and most of the key barometers of economic performance are assumed to remain steady in the 1999-2003 period. Thus, real economic growth is posited to continue at about 2 percent a year and the unemployment rate to equal 5.6 percent. Short-term interest rates (as measured by three-month Treasury bills) and longer-term rates (such as 10-year Treasury notes) stay at 4.9 percent and 6.4 percent, respectively. Inflation chugs along at 2.7 percent. Although all of these assumptions are reasonable, the economy is bound to deviate from them in one direction or the other in the next decade, with potentially large budgetary effects.

In addition to the economy's performance, other uncertainties surround the budget projections. Developments in particular sectors or programs will influence the continuation of surging health care costs, the amount and timing of outlays for deposit insurance, and so forth. Despite these uncertainties, CBO's 10-year projections clearly challenge the reassuring notion that the deficit will eventually fade of its own accord without concerted action by the nation's leaders.

Chapter Three

The Spending Outlook

The Congressional Budget Office expects federal spending in 1993 to be $1,453 billion, an increase of $71 billion (or 5.1 percent) from the 1992 level. For 1994 and beyond, CBO projects further increases averaging 4.8 percent a year. By 1998, federal outlays will--under baseline assumptions--reach $1,839 billion. This projection represents a leveling off of federal spending at about 23 percent of gross domestic product for the next few years.

As a share of GDP, this spending level is a full percentage point higher than the projection CBO made a year ago; the increase is almost entirely the result of upward adjustments in Medicare and Medicaid outlays. Crucial to the projection is continued compliance with the Budget Enforcement Act of 1990 (BEA), which sets a lid on discretionary spending and prevents policymakers from increasing the deficit through revenue or entitlement action. Failure to comply with the act would make the outlook even worse.

This chapter summarizes the prospects for federal spending through 1998, using the broad spending categories formalized in the BEA. Policymakers had used these categories for a decade before their enactment into law. A key criterion is whether the Congress controls spending directly or indirectly:

- Discretionary spending encompasses programs whose funding levels are determined directly through appropriation bills. For these programs--whether defense, international, or domestic--policymakers decide each year how many dollars will be devoted to continuing old activities and funding new ones. CBO's baseline projections depict the path of discretionary spending through 1995, assuming compliance with the discretionary caps in the BEA, and adjustments for inflation after 1995.

- Entitlements and other mandatory spending consist overwhelmingly of benefit programs, such as Social Security, Medicare, and Medicaid. Spending for these programs is controlled by laws already on the books, which set rules for eligibility, benefit formulas, and so forth. Policymakers do not vote for dollar amounts. For this category, the baseline depicts CBO's best estimates of future spending, assuming that current laws and policies remain unchanged.

- Deposit insurance is subject to special treatment under the BEA because it reflects past commitments that the government made to protect depositors in insolvent institutions. Neither the pay-as-you-go requirements nor the discretionary caps apply to spending for deposit insurance. (Pay-as-you-go requirements demand that new spending or tax cuts be matched, either by spending cuts in other programs or by tax increases in other areas.)

- Offsetting receipts are fees and similar charges that are recorded as negative outlays and controlled indirectly, in the same manner as entitlements and other mandatory spending.

- Net interest spending is not subject to any direct budgetary control because its growth is wholly driven by the government's deficits and by market interest rates.

The major spending categories have waxed and waned since the early 1960s (see Figure 3-1). More detailed historical data can be found in Appendix E, which lists annual spending for each of these broad categories and for the largest entitlement programs.

Discretionary Spending: Defense, International, and Domestic

In 1993, CBO expects discretionary spending to total $547 billion, more than half of which is defense spending (see Table 3-1). Each year, the Congress revisits discretionary programs through the appropriation process, passing appropriation laws to provide funding for virtually the entire defense and international affairs budgets and for about a quarter of domestic spending. (The remainder of domestic spending is for entitlements and other mandatory items.)

Relative to the size of the economy, discretionary spending has declined from the levels typical of the 1960s and 1970s, although the fortunes of defense and domestic programs have shifted several times over the past few decades (see Figure 3-1). The share of GDP devoted to defense discretionary spending has gradually shrunk, with two major interruptions--the Vietnam War of the late 1960s and the defense buildup of the early 1980s. Today, defense spending is about 5 percent of GDP, roughly the same level as that of the late 1970s--before the buildup of the Reagan era. In contrast, domestic discretionary spending climbed slowly in the 1960s and 1970s to almost 5 percent of GDP before its rise was abruptly reversed in the early 1980s. Increases in the past few years have brought domestic discretionary spending back up to almost 4 percent of GDP.

Defense Discretionary Spending

Defense appropriations cover the functions of the Defense Department--for active and reserve personnel, operations and maintenance, procurement of major weapons, research and development, and so forth. In addition, they provide billions of dollars in defense spending for the activities of other agencies (primarily the atomic weapons programs of the Department of Energy). After peaking in 1985, defense spending has gradually decreased in real terms, with a temporary interruption for Operation Desert Storm in 1990 and 1991.

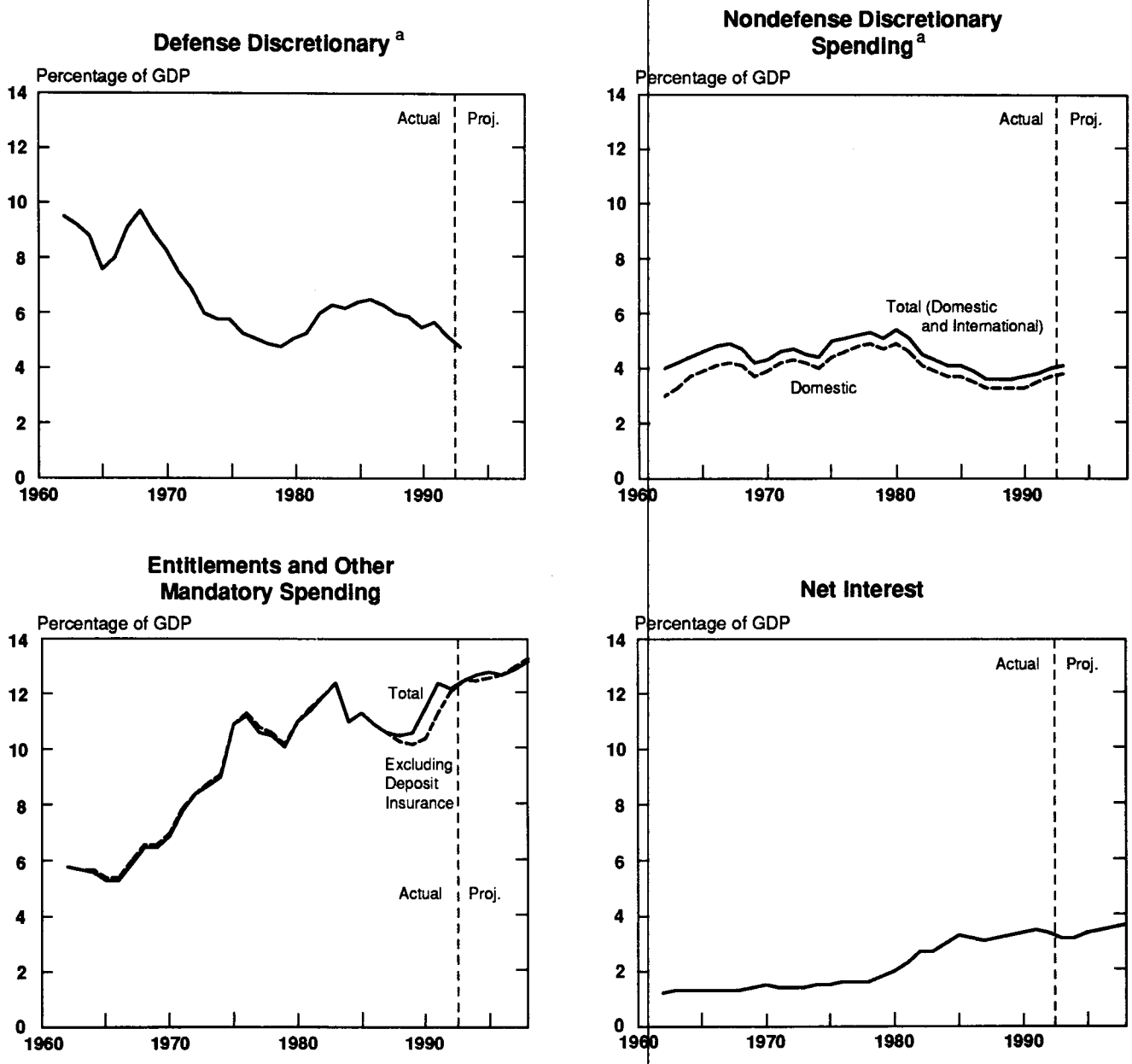
The discretionary caps established in the BEA have helped to push defense spending farther along its downward path. CBO now estimates that in 1993, the final year in which the caps are set separately by category, defense discretionary outlays will be $294 billion, compared with the 1992 level of $304 billion. Because in both 1994 and 1995 the BEA sets a single cap covering all discretionary spending and these caps are below the levels necessary to accommodate an inflation-adjusted baseline, CBO publishes no projection of defense spending beyond 1993.

It is widely anticipated, however, that defense spending will bear the brunt of the cuts required to meet the discretionary caps in 1994 and 1995 and to reduce the deficit in the years that follow. How large might such cuts be? In its budget for fiscal year 1993, the Bush Administration requested defense budget authority of $281 billion in 1993, inching up to $291 billion by 1997. These levels were considered necessary to meet the nation's poten-

tial military requirements after the breakup of the Soviet Union.

Not all analysts agree, however, with the Bush Administration's assessment of the forces needed to meet future military requirements. For example, early in 1992, Representative Les Aspin, recently tapped to be President Clinton's Secretary of Defense, developed four options for reducing defense spending to levels below those in the Bush Administration's request. Aspin's analysis

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.

recognized the diminished Soviet threat but identified other continuing threats, including those from regional aggressors in the Middle East, Southwest Asia, Korea, and elsewhere. The United States might also be called on to deploy forces to stop the spread of nuclear and other weapons, quell terrorism or drug trafficking, or participate in humanitarian or peacekeeping efforts.

Aspin's options describe paths that end in a 1997 budget authority level ranging from $270 billion (option C) to $231 billion (option A). As an illustration, option C would cut

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

Spending Category	Actual 1992	1993	1994	1995	1996	1997	1998
			In Billions of Dollars				
Discretionary							
Defense	304	294	a	a	a	a	a
International	19	21	a	a	a	a	a
Domestic	214	232	a	a	a	a	a
Subtotal	537	547	539	539	554	569	584
Mandatory Spending, Excluding Deposit Insurance	711	770	816	866	913	984	1,051
Deposit Insurance	3	3	10	11	-1	-14	-10
Offsetting Receipts	-69	-65	-68	-72	-73	-76	-78
Net Interest	199	198	211	231	250	270	292
Total	1,382	1,453	1,507	1,575	1,643	1,733	1,839
On-budget	1,129	1,186	1,226	1,285	1,345	1,423	1,516
Off-budget[b]	252	267	281	289	298	310	323
			As a Percentage of GDP				
Discretionary							
Defense	5.2	4.8	a	a	a	a	a
International	0.3	0.3	a	a	a	a	a
Domestic	3.6	3.8	a	a	a	a	a
Subtotal	9.2	8.9	8.3	7.9	7.7	7.5	7.4
Mandatory Spending, Excluding Deposit Insurance	12.1	12.5	12.5	12.6	12.7	13.0	13.3
Deposit Insurance	c	c	0.1	0.2	c	-0.2	-0.1
Offsetting Receipts	-1.2	-1.1	-1.0	-1.1	-1.0	-1.0	-1.0
Net Interest	3.4	3.2	3.2	3.4	3.5	3.6	3.7
Total	23.5	23.5	23.2	23.0	22.8	23.0	23.4
On-budget	19.2	19.2	18.8	18.8	18.7	18.9	19.3
Off-budget[b]	4.3	4.3	4.3	4.2	4.1	4.1	4.1

SOURCE: Congressional Budget Office.

a. Discretionary spending caps are set by category through 1993 and in the aggregate for 1994 and 1995. Projections for 1996 through 1998 represent 1995 spending adjusted for inflation.

b. Social Security and the Postal Service.

c. Less than 0.05 percent of GDP.

three active Army divisions (out of 12), 90 Navy ships (out of 450), and five tactical air wings from the Bush proposal by 1997. Options B and A would make progressively deeper cuts in force structure.

International Discretionary Spending

The budget for international affairs covers assistance to other nations for both security and humanitarian needs, international financial programs, and the conduct of diplomacy. As the smallest category of discretionary spending, international programs total just $21 billion in 1993. The caps have kept real international discretionary spending virtually flat over the 1991-1993 period.

Domestic Discretionary Spending

Despite the variety of activities covered by domestic discretionary spending, this category is relatively small compared with defense and entitlement spending. Domestic discretionary spending is about four-fifths the size of the defense budget; it is dwarfed by spending on entitlements and mandatory programs.

The $232 billion in domestic discretionary outlays in 1993 covers a wide range of federal activities. Nearly half of this amount addresses social needs: $37 billion for education, training, and social services; $20 billion for health care and health research (not including Medicare and Medicaid); and $48 billion for income security and veterans' programs. Other leading claimants are space, science, and energy ($23 billion); environmental and natural resource programs ($21 billion); and transportation ($36 billion). The rest of the domestic discretionary outlays finance activities as varied as the operations of the Internal Revenue Service and Customs Service, the administration of justice, and community development, among others.

Domestic discretionary spending is the category of spending that is most likely to benefit in the upcoming competition for funds within the 1994 and 1995 discretionary caps. The entire category will receive a great deal of attention as a result of President Clinton's stated interest in increasing government investments to stimulate the economy in the short run and to increase the nation's long-term potential for economic growth.

Although no criteria are widely accepted for determining what constitutes an investment (much less what constitutes a worthwhile investment), spending for physical infrastructure such as highways is almost universally considered an investment. Many people also consider spending for purposes such as education, training, research and development, and disease prevention to be investment spending. The domestic discretionary category encompasses all of these types of outlays.

How Tight Are the Caps?

Exactly how tight are the caps on discretionary spending for 1994 and 1995, and how brutal will the competition for funds be among the three categories? The caps have already constrained appropriations in 1991 through 1993. What do they imply for policy decisions in 1994 and 1995? There is no one answer.

In 1994 and 1995, the BEA no longer partitions the caps among the three broad categories of defense, international, and domestic discretionary spending; instead, all of these programs will vie with each other for dollars under a single cap. Table 3-2 shows the tightness of the caps. The dollar caps appear at the top of the table for comparison with two hypothetical paths: one that preserves 1993 funding in real terms (that is, by boosting appropriations in step with inflation) and one that simply freezes 1993's funding without adjusting it for inflation.

The BEA sets limits on both budget authority (the authority to obligate funds, which is the basic currency of the appropriation process) and outlays (actual spending). Not surprisingly, one constraint can at times prove more stringent than the other. The BEA specified the initial caps on budget authority and outlays and also listed a series of required adjustments, chiefly for emergency appropriations and for inflation that was higher or (as it turned out) lower than that anticipated when the act was passed. Both CBO and the Office of Management and Budget (OMB) must keep a running tally of these adjustments. Appendix A explains the derivation of CBO's latest estimate of the caps.

The outlay cap is the stricter constraint in 1994 and 1995. Overall, complying with these caps demands that legislators freeze resources at 1993's nominal level for two more years. Because inflation--even at today's low rates--continues to chip away at real resources, a freeze implies a cut in real funding. A two-year freeze on resources, however, would bring the appropriators into close compliance with the outlay caps (see Table 3-2).

A two-year freeze of this kind would keep total discretionary appropriations at $507 billion in both 1994 and 1995, well under the budget authority cap. The caps seemingly permit more appropriations, but lawmakers

Table 3-2.
How Tight Are the Discretionary Caps? (By fiscal year, in billions of dollars)

	1994		1995	
	Budget Authority	Outlays	Budget Authority	Outlays
Discretionary Caps[a]	513	539	517	539
Amount Needed to Preserve 1993 Real Resources (Including adjustment for inflation)[b]				
Defense Discretionary	287	289	296	293
International Discretionary	22	22	23	22
Domestic Discretionary	215	240	222	249
Total	525	551	540	564
Amount over or under (-) caps	12	13	23	25
Amount Needed to Preserve 1993 Dollar Resources (Without adjustment for inflation)[b]				
Defense Discretionary	278	283	278	280
International Discretionary	21	21	20	21
Domestic Discretionary	208	236	208	238
Total	507	540	507	539
Amount over or under (-) caps	-6	1	-11	c

SOURCE: Congressional Budget Office.

a. The estimated caps are based on those published in Office of Management and Budget, *OMB Final Sequestration Report to the President and Congress for Fiscal Year 1993* (October 23, 1992), as modified by CBO (see Appendix A).

b. Excludes emergencies and International Monetary Fund quota funded in 1993 appropriations.

c. Less than $500 million.

cannot plausibly appropriate funds right up to the budget authority ceilings without flouting the caps on outlays.

The estimates in Table 3-2 provide the raw material to construct a variety of possible approaches to complying with the 1994-1995 caps. For example, if policymakers chose to shield domestic and international discretionary programs by funding them at the 1993 level adjusted for inflation, this strategy would swallow up $262 billion and $271 billion, respectively, of the allowable outlays in 1994 and 1995. Defense would get whatever is left: $276 billion in 1994 and about $268 billion in 1995, with correspondingly deep cuts in budget authority. This level of 1994 spending is $17 billion less than 1993's outlays of $294 billion. Although it is unlikely to be used, another approach would preserve defense spending and let domestic and international programs shoulder the necessary cuts.

In sum, complying with the discretionary caps for the next two years requires that the managers of discretionary programs live with 1993's nominal resources during this period. Within this constraint, policymakers will be forced to pick the programs they consider most deserving of funds.

Entitlements and Mandatory Spending

About half of all federal spending pays for entitlements and mandatory spending programs. Such programs make payments to recipients--usually people, but sometimes businesses or state and local governments--who are eligible and who apply for funds. Formulas set in law govern these payments, which are not constrained by annual appropriation bills. The CBO baseline depicts the likely path of spending for entitlements and mandatory programs under current laws. In the baseline, this spending grows from 12.5 percent of GDP in 1993 and 1994 to 13.3 percent of GDP in 1998.

The BEA lumped mandatory programs together with revenues and subjected them to pay-as-you-go discipline. Consequently, the Congress must match any liberalizations in mandatory programs, such as changes in eligibility rules or payment formulas, with cutbacks in other mandatory spending or tax increases. Similarly, the Congress can fund tax cuts by increasing other taxes or cutting mandatory spending.

A little more than one-fifth of this spending is means tested--that is, paid to beneficiaries who must prove their need based on limited income or assets and, in many cases, age or family status as well. Medicaid, a joint federal and state program, accounts for a little less than half of all means-tested spending.

The remaining four-fifths of entitlement dollars go to beneficiaries who do not have to satisfy a test of means. Social Security is by far the largest non-means-tested program, followed by the smaller but faster-growing Medicare program. The remaining entitlements are retirement and disability programs (chiefly for federal civilian and military retirees and railroad retirees); unemployment compensation (boosted in 1992 and 1993 by the recession and by three separate legislative liberalizations); and other programs, including veterans' benefits and farm price supports.

Means-Tested Programs

Medicaid, the joint federal and state program that provides medical care to some of the poor, currently accounts for almost half of all spending on means-tested entitlements and fuels two-thirds of the projected growth of such spending over the 1993-1998 period. Medicaid spending has grown sharply over the past several years. After climbing an average of about 13 percent annually from 1985 through 1990, the cost of the program jumped by 28 percent in 1991 and 30 percent in 1992; CBO estimates it will increase by 18 percent in

1993. After 1993, the CBO baseline projects that the growth rate will subside to rates typical of the late 1980s, driving federal Medicaid spending to $146 billion by 1998 (see Table 3-3). This growth constitutes a substantial 82 percent rise in spending over the five-year period.

The rapid growth in Medicaid spending continues to be driven by pressures from increasing population and higher costs, and by the fiscal concerns that push state and local governments to secure the maximum in Medicaid funds from the federal government. For example, states that formerly funded programs for mental health services and developmental screening are shifting these activities into Medicaid to gain federal matching payments. The program has also seen a continuing surge in the number of disabled poor people applying for benefits, a change that affects the Supplemental Security Income program as well (see below). The effects of nursing home reforms, enacted in 1987 but only recently effective, are uncertain. Finally, a rash of lawsuits has resulted in sharply higher reimbursements to health care providers under a 1980 law, which requires that Medicaid payments to health care providers be "reasonable and adequate."

CBO projects that spending for other means-tested programs will increase as well. The baseline shows that the Supplemental Security Income program for aged, blind, and disabled people is expected to grow from $20 billion to $30 billion over the 1993-1998 period, as more beneficiaries, especially disabled people, are added to its rolls. Another growing program in this category is the refundable portion of the earned income tax credit (EITC) for low-income working families with children. The budget treats direct EITC payments to families who otherwise owe no income taxes as an outlay because they are tantamount to benefit payments. The rapid growth in EITC outlays between 1992 and 1995 reflects a phased-in benefit increase that the Congress enacted in 1990. These outlays are expected to reach $14 billion by 1998. In contrast, CBO expects that growth in the Food Stamp and family support (Aid to Families with Dependent Children) programs will be modest--particularly in the latter, as financially squeezed state governments place limits on eligibility and benefits.

Non-Means-Tested Programs

Social Security has now overtaken the defense budget as the government's single biggest spending item. The CBO baseline shows Social Security benefits increasing in a relatively modest fashion--from $302 billion in 1993 to $385 billion in 1998. This 27 percent increase over the period is largely the result of relatively slow growth in the number of new recipients of old-age and survivors benefits, and relatively low inflation.

Social Security disability benefits, however, are growing rapidly; CBO estimates that they will increase about 44 percent over the 1993-1998 period. The Disability Insurance Trust Fund faces ever-increasing annual deficits, with the recession and projected slow nominal wage growth eroding the trust fund's income. At the same time, caseloads are expanding because of increased claims, higher rates of claims allowances, and lower rates of termination. CBO estimates that the Disability Insurance Trust Fund will require additional resources by 1996.

Most Social Security beneficiaries participate in Medicare as well. Although Medicare outlays currently are roughly half those for Social Security, the rates of growth projected for Medicare rival those of Medicaid: from outlays of $146 billion in 1993, Medicare is projected to grow to $259 billion in 1998, a 77 percent increase over the period.

During the past decade, Medicare spending grew by an average of 10 percent a year, compared with 6 percent annual spending increases for Social Security. Neither program faced acute demographic pressure during this time: only a small fraction of their growth was driven by increases in their beneficiary populations, which generally grew between 1 per-

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

	Actual 1992	1993	1994	1995	1996	1997	1998
Means-Tested Programs							
Medicaid	68	80	92	105	118	131	146
Food Stamps[a]	23	24	24	24	24	25	26
Supplemental Security Income	18	20	24	24	24	28	30
Family Support	16	17	18	18	19	19	20
Veterans' Pensions	4	3	3	3	2	2	3
Child Nutrition	6	6	7	7	8	8	9
Earned Income Tax Credit	8	9	10	13	13	14	14
Stafford Loans[b]	2	2	3	3	3	3	3
Other	3	3	3	3	4	4	4
Total, Means-Tested Programs	146	165	183	200	214	234	255
Non-Means-Tested Programs							
Social Security	285	302	319	335	351	368	385
Medicare	129	146	167	188	211	234	259
Subtotal	414	449	486	523	562	602	644
Other Retirement and Disability							
Federal civilian[c]	37	39	41	44	48	51	54
Military	24	26	27	28	29	31	32
Other	5	5	5	5	5	5	5
Subtotal	67	70	73	77	82	86	91
Unemployment Compensation	37	33	26	25	25	25	25
Other Programs							
Veterans' benefits[d]	16	16	18	17	16	18	18
Farm price supports	9	16	10	9	9	9	9
Social services	5	5	6	5	5	5	5
Credit reform liquidating accounts	4	3	1	-2	-9	-6	-6
Other	13	13	14	11	9	9	9
Subtotal	47	54	48	40	30	36	36
Total, Non-Means-Tested Programs	565	605	633	666	699	749	796
Total							
All Mandatory Spending, Excluding Deposit Insurance	711	770	816	866	913	984	1,051

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; Medicare premium collections are classified as offsetting receipts.

a. Includes nutrition assistance to Puerto Rico.

b. Also includes Supplemental Loans for Students (SLS), Parent Loans for Undergraduate Students (PLUS), and the direct loan pilot programs.

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.

cent and 2 percent a year. General inflation accounts for the remainder of the increase, supplemented--in the case of Medicare--by rapid increases in the cost of medical care and the use of covered services.

The rapid growth in spending for Medicare and Medicaid (as discussed earlier) is a continuing saga, and it presents the Clinton Administration with one of its most urgent and potentially explosive challenges. Reducing the deficit will be difficult unless this growth is curtailed. At the same time, however, the Clinton Administration's desire to make affordable health care coverage available to all Americans will make it difficult to reduce total spending for health care--even if the Medicaid and Medicare programs are reformed to make them more efficient.

Other retirement and disability programs--which, taken together, are less than one-quarter the size of Social Security--are dominated by benefits for civilian and military retirees of the federal government and railroad retirees. This category includes fast-rising health care costs for Civil Service annuitants, another aspect of the government's growing health care bill. Unemployment compensation and farm price supports are among the few entitlement programs that are expected to shrink in the next few years. Unemployment Insurance benefits totaled $37 billion in 1992, a new record, but will taper off to $33 billion in 1993 and $25 billion by 1998 as the unemployment rate falls. Farm price supports, after peaking at $16 billion in 1993 because of an unusually large harvest that caused market prices to drop, fall to roughly $9 billion annually through 1998.

Other non-means-tested entitlements encompass a diverse set of programs, mainly veterans' benefits and certain social service grants to the states. The credit reform provisions of the BEA created an unusual (and fading) member of this category. The act dictated that, beginning in 1992, the government must measure any new loans on a subsidy-cost basis--the amount that the government expects to lose over the lifetime of the loan--rather than on the old cash flow basis. This accounting change does not affect loans that were obligated before 1992. Instead, those loans have been 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

CBO's projections of outlays for deposit insurance reflect the estimated cost of the savings and loan cleanup as well as the estimated cost of protecting deposits in troubled banks. These estimates depend on a number of factors that are both volatile and difficult to forecast, such as macroeconomic conditions, especially changes in the level and structure of interest rates; economic conditions in certain areas of the country, particularly in the real estate market; the effects of legislation, such as the imposition of risk-based premiums; the availability of funding for the savings and loan cleanup; and regulatory behavior, including how strictly institutions are regulated, how many are closed, the form of the resolutions, and the methods used to dispose of acquired assets. In addition, the failure of even a small number of large institutions can significantly affect outlays in a particular year.

Spending for deposit insurance in the baseline reflects a general pattern, as shown in Table 3-4. It begins with positive net outlays in the short run, as the Resolution Trust Corporation and the Bank Insurance Fund disburse funds to protect the depositors of failed institutions. These net outlays eventually turn negative, as the government receives more proceeds from selling assets acquired from closed institutions than it disburses to resolve newly failed institutions. But net outlays tell little about the overall picture for deposit insurance and merely sum up much larger flows of funds. Deposit insurance outlays include spending for *losses*, which are funds that the government will not recover,

and for *working capital*, which are outflows that the government expects to recoup eventually from the sale of assets. The exact split between losses and working capital will not be known until the last asset is sold, which will be years from now.

The BEA specifies that legislation to provide funding for deposit insurance does not count on the pay-as-you-go scorecard--offsetting tax increases or spending cuts are not required. The reason is that deposit insurance is considered a mandatory obligation of the

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

	Estimate 1992	1993	1994	1995	1996	1997	1998
			Savings-and-Loan-Related				
Resolution Trust Corporation and Savings Association Insurance Fund							
Insurance losses[a]	10	9	11	11	9	5	5
Working capital							
Disbursements	21	12	17	19	15	8	8
Receipts	-43	-32	-24	-22	-21	-19	-14
Interest costs	3	2	2	2	2	2	2
Insurance premiums	0	-1	-1	-1	-1	-1	-1
Total	-9	-9	4	9	4	-5	-1
FSLIC Resolution Fund	8	4	2	1	b	b	0
			Bank-Related and Other				
Bank Insurance Fund							
Losses	c	9	8	7	5	4	4
Working capital	c	14	13	11	8	6	6
Liquidations	-9	-10	-12	-13	-13	-13	-12
Net interest	b	b	1	1	1	1	b
Other outlays (Net)	-6	-5	-5	-5	-6	-6	-7
Total	4	8	4	1	-5	-9	-9
Other[d]	b	b	b	b	b	b	b
			Total				
Total Budget Outlays for Deposit Insurance	3	3	10	11	-1	-14	-10

SOURCE: Congressional Budget Office.

NOTES: The Resolution Trust Corporation is currently scheduled to stop accepting new cases after September 30, 1993, and to turn over responsibility for future resolutions to the Savings Association Insurance Fund. It is possible that the transfer of responsibility could be delayed by the Congress, but the costs incurred would not be significantly affected by such a change. CBO therefore presents the estimates on a combined basis.

FSLIC = Federal Savings and Loan Insurance Corporation.

a. Includes less than $500 million per year in administrative costs.

b. Less than $500 million.

c. Total resolution outlays in 1992 were $19 billion. Details on losses and working capital are not yet available.

d. Primarily activities of the National Credit Union Administration.

government, and legislation that merely funds existing obligations is not considered new spending under the BEA. In addition, unlike other spending, deposit insurance spending is generally believed to have a minimal impact on the economy.

Savings and Loan Institutions

The Resolution Trust Corporation (RTC) is the agency currently charged with resolving failed savings and loans. Initially, the Congress expected the RTC to complete its task in late 1992 and bequeath a smaller but healthier industry to its successor, the Savings Association Insurance Fund (SAIF). Recent legislation, however, has tacked an extra year onto the time that the RTC may accept cases before turning over responsibility for future resolutions to SAIF. Even so, because of the sheer size of the savings and loan problem and delays in the RTC's cleanup efforts, CBO expects that significant losses will persist after the transfer date. The baseline presents the estimates for the savings and loan cleanup on a combined (RTC/SAIF) basis, making no distinction as to which entity will rack up the losses.

Delays in receiving necessary funding have created problems for the RTC. Although the spending to resolve failed institutions must eventually occur, at the moment the RTC lacks legislative authority to complete its work. The savings and loan cleanup from its inception has been chronically underfunded. Although these funding delays reduce the outlays associated with the cleanup in the short run, they boost the eventual cost of resolution. With each delay, a sick institution stays in business longer and incurs further losses that the government eventually will have to pay. Furthermore, such institutions put competitive pressure on other financial institutions, possibly increasing their losses as well.

CBO's baseline reflects the effects of funding delays to date. With its funding interrupted, the RTC can manage institutions in conservatorship but generally cannot resolve them (that is, liquidate them or arrange a merger with a healthier institution) except in the rare case in which this can be done at no cost. The RTC can, however, continue to sell assets from its huge inventory of performing and nonperforming loans, foreclosed real estate, securities, and so forth. The negative outlays in 1992 and 1993 reflect the excess of the sales of these assets relative to disbursements in these years. The outlays associated with new resolutions are pushed into the future and result in positive outlays for fiscal years 1994 through 1996. Fewer savings and loan failures in subsequent years, coupled with proceeds from the sale of assets, result in negative outlays again in 1997 and 1998.

Since the BEA was enacted, both CBO and OMB have highlighted the full cost of honoring the government's commitments for deposit insurance, rather than limit their projections by the funds actually approved to date. CBO's current projections assume that the Congress will provide additional funding in the spring of 1993. They also assume that the Congress will provide subsequent amounts, if needed, in a timely manner.

Projected net outlays for the RTC and SAIF include outright losses, working capital disbursements, interest paid to the Treasury's Federal Financing Bank (FFB), premiums paid by savings and loans, and receipts from the sale of acquired assets (see Table 3-4). CBO believes that the RTC and SAIF could tackle the remainder of the cleanup with additional funding of about $50 billion. Because projections of thrift failures are so uncertain, this figure could vary by as much as $15 billion in either direction. The additional funds, along with premium income, would cover the losses that are currently projected from 1993 through 1998. They would also allow about $7 billion to build up the net worth of SAIF, as required by law.

Underlying CBO's baseline is the assumption that, over the next several years, the RTC and SAIF will resolve, at some cost, institutions with assets totaling between $225 billion and $300 billion. These resolutions would be

in addition to the 653 thrifts that the RTC had closed as of December 1992. Precise caseload estimates are treacherous. Many of the institutions that are still to be resolved are the marginal cases. Some may go out of business on their own, and others may find a merger partner--in either case, at little or no cost to the government. Right now, the Office of Thrift Supervision is moving slowly to shut down weak institutions, opting instead to work with them in developing business plans that might bring their capital up to acceptable standards.

The Congress has already provided the RTC with $87 billion in funding to resolve 653 institutions, and, as mentioned above, CBO projects that the RTC and SAIF will require roughly $50 billion in new funding to finish the job and recapitalize SAIF. Currently projected nominal losses over the 1989-1998 period would therefore be about $137 billion, though that amount could vary by as much as $15 billion in either direction.

On a net present-value basis--a useful measure of the costs of an activity spread out over a long period of time--the costs of the cleanup are now estimated at roughly $120 billion (in 1990 dollars), an amount lower than the $135 billion (in 1990 dollars) cited by CBO in August. Probably the single biggest factor explaining this drop is more favorable interest rates, which allow more of the institutions that formerly were considered on the brink to mend themselves--at least for the time being. In addition, the industry overall has been purged of high-flying, relatively irresponsible institutions, and those remaining have been subjected to more stringent regulation.

Another agency involved in the savings and loan cleanup is the FSLIC Resolution Fund, which inherited the books of the Federal Savings and Loan Insurance Corporation (FSLIC) when that fund was closed down in 1989. Accelerated appropriations in 1991 and 1992 have allowed the federal government to renegotiate contracts with the acquirers of thrifts that failed in 1989 or earlier, thereby reducing future payments dramatically. The outlays for this fund will taper off markedly after 1995 (see Table 3-4). CBO estimates this fund's total costs (in 1990 dollars) at $60 billion, which generally represents losses FSLIC incurred before 1989. This figure, when combined with the $120 billion cited above, brings CBO's estimate of the total cost of the savings and loan cleanup to $180 billion in 1990 dollars.

Commercial Banks

Outlays to resolve failed banks are expected to increase the deposit insurance totals through 1995, although the amounts pale next to those for savings and loan institutions. Furthermore, unlike the thrift industry, the commercial banking industry appears able to finance its own insurance fund. The Bank Insurance Fund (BIF) has had to borrow from the FFB to cover expenses, but it appears that BIF is capable of repaying the loans through premiums paid by banks and proceeds from the sale of assets. CBO's projections for BIF are shown in Table 3-4.

CBO expects BIF's outlays to peak at $8 billion this year and gradually drop to a net negative $9 billion in 1998. The outlook is more encouraging than that depicted in CBO's August 1992 baseline and reflects the fact that, overall, banks are more profitable because of the relatively large spread between long- and short-term interest rates.

CBO believes that these flows can be managed comfortably within resources already provided to BIF--that is, the authority to borrow $30 billion from the Treasury for losses incurred, and to borrow from the Treasury's FFB for working capital. Unlike its previous projections, CBO's current estimates assume no further increases in premiums, which are assumed to average about 25 cents per $100 of insured deposits.

Offsetting Receipts

Offsetting receipts are income that the government records as negative spending. They are either intrabudgetary (reflecting a payment from one part of the federal government to another) or proprietary (reflecting a payment from the public). The revenue side of the ledger is generally reserved for receipts that stem from the government's power to tax (see Chapter 4). Because offsetting receipts do not meet that description, the budget records them as negative outlays.

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

More than half of all offsetting receipts are intrabudgetary transfers representing agencies' contributions for their employees' retirement (see Table 3-5). Because future retirement benefits are an important part of federal workers' overall compensation, failing to charge agencies for these contributions would understate personnel costs. The payments are a component of an agency's budget, and the corresponding deposits in retirement funds (principally Social Security, Military Retirement, and Civil Service Retirement) are offsetting receipts. These intragovernmental flows net to zero, and only the actual benefit payments (which appear in the budget as entitlements) and current administrative costs (which appear in the discretionary category) boost total outlays.

Medicare premiums collected from elderly and disabled people grow from an estimated $15 billion in 1993 to $23 billion in 1998, as the monthly premium climbs from $36.60 in

Table 3-5.
Offsetting Receipts in the Baseline (By fiscal year, in billions of dollars)

Category	Actual 1992	1993	1994	1995	1996	1997	1998
Employer Share of Employee Retirement							
Social Security	-6	-7	-7	-7	-8	-8	-9
Military Retirement	-16	-14	-13	-13	-13	-13	-13
Other[a]	-14	-14	-15	-16	-17	-18	-18
Subtotal	-37	-34	-35	-36	-37	-39	-40
Medicare Premiums	-13	-15	-17	-20	-21	-22	-23
Energy-Related Receipts[b]	-4	-4	-5	-5	-5	-5	-5
Natural Resource-Related Receipts[c]	-3	-3	-3	-3	-3	-3	-3
Other[d]	-11	-9	-8	-8	-7	-7	-7
Total	-69	-65	-68	-72	-73	-76	-78

SOURCE: Congressional Budget Office.

a. Primarily 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 and mineral receipts and various user fees.

d. Includes $5 billion in 1992 for contributions from foreign nations to finance Operation Desert Storm.

1993 to an estimated $50.00 in 1998. Yet despite this growth, the premiums fund less than one-quarter of the Supplementary Medical Insurance (SMI) program (Part B of Medicare), which covers mainly physician and outpatient charges. By 1998, CBO projects that enrollees will be paying less than 19 percent of the program's costs, with general revenues financing the rest. (In contrast, the Hospital Insurance program, or Part A of Medicare, has been designed so as not to rely on general fund appropriations.)

Other offsetting receipts come mostly from charges for energy, minerals, and timber and from various fees levied on the users of government property or services. Not included in the offsetting receipts category are offsetting collections. The budget traditionally counts these collections (for example, deposit insurance premiums) as offsets within particular spending programs. The programs for which they are earmarked are simply recorded on a net basis in the budget.

Contributions from foreign nations to help finance Operation Desert Storm, an unusual category of offsetting receipts, totaled $43 billion in 1991 and $5 billion in 1992. The leading contributors were Kuwait, Saudi Arabia, and Japan. The contributions covered nearly all of the estimated marginal costs of the United States' military operations, although the associated defense spending--much of it to replace items consumed in the conflict--is stretched out over a longer period.

Net Interest

In late 1992, interest rates on short-term Treasury bills briefly slid below 3 percent, their lowest level in three decades. Medium- and long-term rates posted more modest declines. Federal net interest costs have responded dramatically to these declines. In 1993, CBO expects net interest costs to be virtually flat for the third year in a row (see Table 3-6). Interest costs totaled $199 billion in 1992 and are estimated at $198 billion in 1993. This stability is astonishing, given that the government is adding new debt at the rate of about $300 billion a year--a clear testimonial to the powerful budgetary effects of interest rates.

In CBO's baseline projections, net interest resumes its upward march after 1993. As Chapter 1 discusses, the projections assume that the rates on short-term securities such as Treasury bills climb gradually over the 1993-1998 period, whereas medium- and long-term rates show little change. Thus, CBO expects net interest costs to reach $292 billion, or 3.7 percent of GDP, in 1998. As a percentage of GDP, interest will be two to three times the levels typical of the 1960s and 1970s--an unfortunate legacy of record deficits.

Interest costs cannot be directly controlled because they depend on the government's debt and on interest rates. The Congress and the President influence the level of debt 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 the policies of the Federal Reserve.

The importance of interest rates to the budget projections is illustrated in Appendix C, which describes this relationship using a simplified "rule of thumb." If, from 1993 through 1998, interest rates are 1 percentage point higher than CBO assumed, net interest costs will be greater--by about $5 billion in 1993 and $46 billion in 1998. In fact, budget outlays would be even more sensitive to rising (or falling) interest rates, were it not for the Treasury's strategy of borrowing about three-fourths of the debt in medium- and long-term securities, with maturities ranging from two to 30 years. This practice has triggered lively debate recently among some economists, with one camp arguing that the Treasury could save large sums by moving more of the debt into short-term securities. Unfortunately, huge savings from such a shift are unlikely if the economy follows a path similar to CBO's baseline. With short-term interest rates head-

ing up, and the spread between rates for short- and longer-term maturities narrowing, the potential savings are constricted. Hindsight is not necessarily apt in this instance; some advocates of shorter-term debt management look back to the 1980s, when the government sold 30-year bonds at rates as high as 15.8 percent (bonds that are still outstanding). Yet a

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

	Actual 1992	1993	1994	1995	1996	1997	1998
Net Interest Outlays (Billions of dollars)							
Interest on Public Debt (Gross interest)[a]	292	295	310	333	356	380	407
Interest Received by Trust Funds							
Social Security	-24	-28	-31	-35	-39	-44	-49
Other trust funds[b]	-54	-56	-54	-54	-54	-55	-55
Subtotal	-78	-83	-85	-89	-93	-98	-104
Other Interest[c]	-15	-14	-14	-13	-13	-12	-11
Total, Net Interest Outlays	199	198	211	231	250	270	292
Federal Debt, End of Year (Billions of dollars)							
Gross Federal Debt	4,003	4,392	4,789	5,189	5,600	6,044	6,524
Debt Held by Government Accounts							
Social Security	319	372	431	498	573	655	743
Other government accounts[b]	685	730	774	817	858	892	918
Subtotal	1,004	1,102	1,205	1,315	1,431	1,548	1,661
Debt Held by the Public	2,999	3,290	3,585	3,874	4,169	4,496	4,863
Debt Subject to Limit[d]	3,973	4,360	4,757	5,156	5,566	6,010	6,489
Federal Debt as a Percentage of GDP							
Debt Held by the Public	51.1	53.3	55.1	56.5	57.9	59.6	61.8

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 $20 billion) is excluded from the debt limit.

similar plunge in interest rates from today's levels seems less plausible.

Some policymakers and citizens like to use gross interest when discussing interest costs, a preference that often forces them to burrow through stacks of budget documents. For good reason, published reports do not prominently display this measure of interest costs. Gross interest is much less useful as a measure of the government's debt-service burden than is net interest, the figure emphasized by CBO and most budget experts. Gross interest exaggerates the amount of interest the government pays, a figure that is already quite formidable. (See Table 3-6 for the components of the government's interest costs and the corresponding amounts of federal debt.)

Box 3-1. The Debt Ceiling

The government is fast approaching the ceiling of $4,145 billion on public debt that was adopted after the 1990 budget summit. At the start of the fiscal year, the debt subject to limit stood at $3,973 billion, $172 billion below the ceiling; by December 31, it had climbed to $4,085 billion, just $60 billion shy of the ceiling. CBO and most other debt-watchers now expect the government to bump up against the limit in March.

The debt subject to limit far exceeds the debt held by the public--a much more useful measure of what the government owes--mainly because it includes the holdings of Social Security and other government trust funds. The table below presents CBO's projections of the debt subject to limit through 1994 (by fiscal year, in billions of dollars).

	1993	1994
Debt Subject to Limit, Start of Year	3,973	4,360
Changes		
Deficit	310	291
Trust fund surplus	101	101
Other	-24	4
Total	387	397
Debt Subject to Limit, End of Year	4,360	4,757

The $60 billion of elbow room that was left on December 31 will not last long in the face of heavy borrowing. The government will actually register a big surplus in January 1993, the result of a timing fluke: because the first three days of January all fell on weekends or holidays, Social Security benefits that would ordinarily have been paid in early January instead went out on December 31. The January 15 tax deadline for some individuals and corporations will also bolster the government's cash. But after that, the red ink will resume its flow and--starting around mid-February--will be seasonally swollen by the payment of tax refunds. Thus, current signs suggest that the government could reach the debt limit as early as March 1.

The Congress could adopt one or more short-term, temporary ceilings (which would tide the government over until the adoption of a comprehensive budget package later this year) or a longer-term increase designed to last a year or more. More radically, the Congress could scrap the notion of a debt ceiling entirely. CBO and others have long pointed out that a statutory ceiling on debt is an ineffectual way to control borrowing. The Congress has many opportunities to vote on spending and revenues, which determine federal borrowing needs. By the time the debt ceiling comes up for a vote, it is too late to balk at paying the government's bills. Yet discarding the debt ceiling would deprive legislators of a much-prized vehicle for other budgetary and unrelated legislation. In the past, the unpalatable task of raising the debt ceiling has often been linked to budget reforms: the original Balanced Budget and Emergency Deficit Control Act of 1985 (better known as Gramm-Rudman-Hollings), its successor in 1987, and the Budget Enforcement Act of 1990 all coincided with interruptions in the debt ceiling.

The government has sold trillions of dollars of securities to finance the deficit. But it also 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 the government pays to the public. Gross interest, in contrast, includes interest the government pays to itself and thereby exaggerates the debt-service burden. The overstatement is easy to document. In 1993, the government will pay an estimated $295 billion in gross interest costs, but $83 billion of this amount is simply credited to trust funds and does not leave the government or add to the deficit. Moreover, the government collects $14 billion in other interest income, a figure that has tapered off gradually since the mid-1980s and will continue to do so. Net interest costs thus total $198 billion.

The driving force behind net interest costs of the federal government is borrowing. Under CBO's baseline assumptions, debt held by the public--Treasury bills, notes, bonds, and other securities, such as savings bonds, that are sold to raise cash--grows to $4.9 trillion by 1998. This amount, up from $3 trillion at the end of 1992, comes from the government's financing of $1.8 trillion in deficits over the six-year period. Although the deficit is the key factor in determining annual federal borrowing, the two figures do not move in lockstep. Borrowing is influenced by miscellaneous other factors, such as changes in the Treasury's bank balance and cash flows for loan programs, that are not a part of the deficit and thus typically drive a small wedge between it and borrowing.

As a percentage of GDP, debt held by the public reaches nearly 62 percent in 1998. Not since 1952, when the debt was still dominated by the effects of the huge deficits associated with World War II and the debt-to-GDP ratio was falling, has the federal debt been so large in relation to the economy.

Debt held by the public, which represents the government's demand for credit, is the most useful measure of federal debt. But many people 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 that the gross debt is so familiar is that its close cousin, the debt subject to limit, is the focus of periodic legislative wrangling (see Box 3-1 on previous page). The Congress is almost certain to face the need to increase the debt limit in March, a necessity that often brings with it a host of proposals to deal with the deficit and to reform the budget process.

Chapter Four

The Revenue Outlook

The current recovery will boost revenues in 1993 to $1,143 billion, an increase of $51 billion over the 1992 level. This increase of 4.7 percent is the highest rate of growth in revenues since 1989. For 1994 through 1998, the Congressional Budget Office projects that the growth in federal revenues under current tax laws will average 5.3 percent annually, with revenues growing from $1,215 billion in 1994 to $1,482 billion in 1998. As a percentage of gross domestic product, revenues are expected to rise from 18.5 percent in 1993 to 18.8 percent in 1995 and then to remain essentially at this level through 1998.

This chapter presents the outlook for federal revenues under current tax laws, summarizes recent revenue trends, and reviews recent changes in the distribution of the tax burden among income groups.

Baseline Projections

Although the CBO baseline projects a larger increase in revenues in 1993 than in recent years, revenue as a share of GDP will drop to its lowest level since 1986. Revenue growth of more than 6 percent in 1994 and 1995 will raise revenue's share of GDP through 1995. In 1996, however, revenue growth will slow as economic growth slackens and some revenue-raising tax provisions enacted in 1990 expire. (For CBO's baseline projections for each major tax source, see Table 4-1.)

All of CBO's baseline projections for revenue assume that current tax law remains unchanged. However, the projections take into account that some provisions are scheduled to change or expire during the 1993-1998 period. The baseline assumes that these changes and expirations occur on schedule. One category of taxes--excise taxes dedicated to trust funds--constitutes an exception to this rule. CBO assumes that these taxes will be extended, even if they are scheduled to expire. The current baseline thus assumes that the following three taxes will be extended: aviation taxes, Superfund taxes, and taxes to clean up leaking underground storage tanks.

Individual income tax receipts are the largest source of federal revenue, contributing about 45 percent of the total. CBO projects that individual income taxes will grow from $501 billion in 1993 to $531 billion in 1994 and then to $662 billion in 1998. As a percentage of GDP, individual income taxes will grow from 8.1 percent to 8.4 percent between 1993 and 1998. The growth projected for real incomes (adjusted for inflation) pushes up the percentage share of GDP for these receipts, despite the expiration of several revenue-raising tax provisions.

Social insurance taxes (mostly for Social Security) are the second largest source of federal revenue, contributing about 38 percent of the total. CBO projects that this source of revenue will produce $434 billion in 1993 and then rise to $462 billion in 1994 and $559 billion in 1998. Social insurance taxes remain relatively stable as a share of GDP--at about 7 percent--because the tax bases for the two major

components, Social Security and Medicare, are adjusted annually for changes in average wages.

The CBO baseline expects that corporate income taxes, which represent 10 percent of all federal revenues, will grow from $110 billion in 1993 to $120 billion in 1994 and then to $147 billion in 1998. With the economic recovery, CBO expects corporate taxes to reach 1.9 percent of GDP in 1995. However, the expiration on December 31, 1996, of accelerated estimated payment rules for large corporations causes the GDP share of corporate taxes to dip slightly in 1997. The relative stability of this GDP share in the CBO forecast reflects a stable GDP share for corporate profits and a stable ratio of taxes to profits. The Bush Administration's forecast of corporate income taxes also reflects a stable GDP share for profits, but in its forecast, the ratio of taxes to profits falls over the forecast period. This other view produced much of the technical difference between the revenue estimates made by the Bush Administration and by CBO (see Chapter 2).

According to the baseline, excise taxes will provide $48 billion in receipts in 1993; they will peak at $50 billion in 1995 and then drop back to $48 billion in 1998. Excise taxes will provide 4 percent of all federal revenue in

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

Source	Actual 1992	1993	1994	1995	1996	1997	1998
			In Billions of Dollars				
Individual Income	476	501	531	567	600	629	662
Corporate Income	100	110	120	128	135	138	147
Social Insurance	414	434	462	489	515	537	559
Excise	46	48	49	50	46	47	48
Estate and Gift	11	12	12	12	13	14	14
Customs Duties	17	19	20	21	23	24	25
Miscellaneous Receipts	27	19	21	23	24	26	27
Total Revenues	1,092	1,143	1,215	1,291	1,356	1,414	1,482
On-budget revenues	789	825	879	934	981	1,021	1,071
Off-budget revenues	302	317	336	356	376	393	411
			As a Percentage of GDP				
Individual Income	8.1	8.1	8.2	8.3	8.3	8.3	8.4
Corporate Income	1.7	1.8	1.8	1.9	1.9	1.8	1.9
Social Insurance	7.0	7.0	7.1	7.1	7.2	7.1	7.1
Excise	0.8	0.8	0.7	0.7	0.6	0.6	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	0.5	0.3	0.3	0.3	0.3	0.3	0.3
Total Revenues	18.6	18.5	18.7	18.8	18.8	18.7	18.8
On-budget revenues	13.4	13.4	13.5	13.6	13.6	13.5	13.6
Off-budget revenues	5.2	5.1	5.2	5.2	5.2	5.2	5.2

SOURCE: Congressional Budget Office.

1993 and 3 percent in 1998. A major factor in the drop in this source of revenue after 1995 is the expiration on September 30, 1995, of the 2.5-cent portion of the motor fuels tax that is currently deposited in the general fund of the Treasury.

Other receipts included in the CBO baseline (estate and gift taxes, customs duties, and miscellaneous receipts) are also projected to increase--from $50 billion in 1993 to $66 billion in 1998. The baseline projects that one component of this category, miscellaneous receipts, will drop between 1992 and 1993. Miscellaneous receipts include capital gains that the Federal Reserve System earns on its foreign currency. Although capital gains were earned in 1992, losses are expected in 1993. After 1993, however, CBO projects that revenue from these other sources will keep pace with GDP.

Changes from the August Baseline

Relative to its August baseline projections, CBO has lowered its estimates of revenues by $19 billion for 1993, $27 billion for 1994, and $41 billion for 1997 (see Chapter 2). Economic revisions--primarily a reduction in the projected rate of inflation--account for most of the change. However, technical changes also had an effect, reducing projected revenue by between $4 billion and $3 billion per year; new legislation added $0.6 billion in 1993 and smaller amounts in subsequent years.

Changes in CBO's economic assumptions reduced its revenue estimates by $15 billion in 1993 and by more than twice that--$36 billion--in 1997. Although real GDP for 1997 is slightly higher in the current forecast, the estimated rate of inflation is lower, which pushes nominal (not adjusted for inflation) GDP $161 billion below CBO's August projection. Because more than 90 percent of federal revenue comes from income and social insurance taxes, which depend on nominal income, the downward revision of nominal income accounts for most of the economic changes in the revenue forecast.

The technical revisions to the baseline reflect new data about a number of different tax sources. For example, new data from individual income tax returns and self-employment tax returns for 1991 showed lower-than-expected incomes and liabilities. With the tax code constantly evolving, data on tax receipts can provide analysts with more reliable information on taxable incomes than is provided by the incomes shown in the national income and product accounts (NIPAs). As a result of the new data, CBO has reduced its projections of individual income tax and social insurance tax revenues by between $2 billion and $3 billion per year.

In addition, technical adjustments to CBO's estimates of excise taxes reduced revenues by $1 billion to $2 billion per year. Slowdowns in the growth of the taxable receipts of the airline and telephone industries and more rapid growth than expected in the use of tax-favored gasohol were responsible for much of this reduction. Another change in the latest projections is that they include no revenue from two excise taxes that the August baseline assumed would be extended. The tax to provide compensation for vaccine injury expired at the end of December 1992, and the tax to clean up oil spills will be suspended later this year when its trust fund has accumulated $1 billion.

The net effect in the baseline of legislation enacted since the August update will be to increase revenues by less than $2 billion over the 1993-1998 period. The only legislation to have a significant effect on revenues was the Energy Policy Act. This act provided tax relief for certain groups, including the recipients of utility rebates, independent oil and gas producers, and users of clean-fuel vehicles and fuels containing alcohol. It also extended two expiring energy credits. The energy act raised revenue by increasing tax rates on ozone-depleting chemicals, charging premiums to fund health benefits for retired coal miners, and changing withholding and reporting requirements.

Table 4-2.
Effect of Extending Tax Provisions That Expire in 1993 Through 1998
(By fiscal year, in billions of dollars)

Tax Provision	Expiration Date	1993	1994	1995	1996	1997	1998
Provisions Expiring in 1993 or 1994							
Generalized System of Preferences	7/4/93	-0.2	-0.7	-0.7	-0.7	-0.8	-0.8
Reduced Tax Rate for Ozone-Depleting Chemicals Used for Sterilizing Medical Equipment	12/31/93	n.a.	a	a	a	a	a
Deduction for Contributions to Private Foundations	12/31/94	n.a.	n.a.	a	a	a	a
Provisions Expiring in 1995							
Motor Fuels Taxes Remaining in the General Fund	9/30/95	n.a.	n.a.	n.a.	2.6	2.7	2.7
Fees for IRS Letter Rulings	9/30/95	n.a.	n.a.	n.a.	b	b	b
Corporation Tax Dedicated to Superfund	12/31/95	n.a.	n.a.	n.a.	0.4	0.7	0.7
Limitation on Itemized Deductions	12/31/95	n.a.	n.a.	n.a.	1.7	3.8	3.9
Provisions Expiring in 1996							
Phaseout of Personal Exemptions	12/31/96	n.a.	n.a.	n.a.	n.a.	1.1	2.3
FUTA Surtax of 0.2 Percentage Points	12/31/96	n.a.	n.a.	n.a.	n.a.	1.1	1.5
Accelerating Individual Tax Payments	12/31/96	n.a.	n.a.	n.a.	n.a.	2.6	b
Accelerating Corporate Tax Payments	12/31/96	n.a.	n.a.	n.a.	n.a.	4.4	0.9
Nonconventional Fuels Credit for Fuel from Biomass and Coal	12/31/96	n.a.	n.a.	n.a.	n.a.	a	a

SOURCE: Joint Committee on Taxation.

NOTES: No provisions are scheduled to expire in 1997 or 1998.

n.a. = not applicable; IRS = Internal Revenue Service; FUTA = Federal Unemployment Tax Act.

a. Loss of less than $50 million.

b. Increase of less than $50 million.

Expiring Provisions

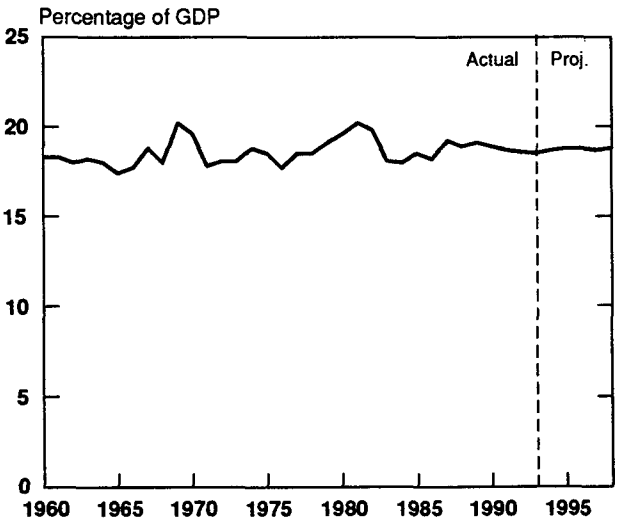
Ten tax preferences expired during 1992, including the low-income housing credit, the credit for research and experimentation, the targeted jobs credit, and the deduction for health insurance premiums paid by the self-employed. If the Congress were to extend all 10 preferences permanently, it would reduce revenue in 1998 by about $6 billion. All but one of the preferences--the exclusion for employer-provided legal assistance--would have been extended, some of them permanently, by the Revenue Act of 1992 (H.R. 11). President Bush, however, vetoed that bill in November of last year. (Other provisions of the Revenue Act would have extended the acceleration of individual and corporate estimated payments, set up enterprise zones, expanded the availability of deductible individual retirement accounts, changed the tax treatment of real estate, and repealed part of the luxury tax.) Two other changes occurred at the end of 1992: the tax to provide compensation for vaccine injury expired, and the top rate of the estate and gift tax dropped from 55 percent to 50 percent.

Twelve tax provisions are scheduled to expire between 1993 and 1996 (see Table 4-2 for the effects on revenue of extending them). Their expiration reduces 1998 revenues by about $11 billion. The three provisions that have the largest revenue effects in 1998--the limitation on itemized deductions, the phaseout of personal exemptions, and the motor fuels taxes that remained in the general fund--were enacted in the Omnibus Budget Reconciliation Act of 1990 (OBRA-90) and were scheduled to expire five years after enactment. In 1992, however, the Congress extended the phaseout of exemptions by another year, through 1996, to partially offset the costs of additional extended unemployment benefits.

Revenue Trends Since 1960

The 18.7 percent average revenue share of GDP that CBO projects for the 1993-1998 period is similar to the average for the past three decades (see Figure 4-1). Since 1960, the revenue share of GDP has dropped as low as 17.4 percent and risen as high as 20.2 percent, but the average share was 18.6 percent. The revenue share surpassed 20 percent in the late 1960s as a result of an income tax surcharge levied during the Vietnam War; it rose above 20 percent again in 1981 after several years of rapid inflation pushed taxpayers' incomes into

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



SOURCE: Congressional Budget Office.

higher tax brackets (so-called bracket creep). Large tax cuts enacted in the Economic Recovery Tax Act of 1981 (ERTA), combined with the back-to-back recessions of 1980 and 1981-1982, brought the revenue share down to 18 percent in 1983. In addition to lowering tax rates, ERTA fundamentally reduced the elasticity of the federal tax system. Beginning in 1985, it indexed for inflation the bracket amounts of the personal income tax, the standard deduction, and the personal exemption, thus removing most of the inflationary bracket creep from the personal income tax. In subsequent years, the revenue share, bolstered by sustained economic growth and deficit reduction measures, climbed, reaching 19 percent by 1989.

Recessions and periods of slow growth tend to reduce the revenue share of GDP, and recent years are no exception to that rule. Despite the tax increases enacted in OBRA-90, CBO expects the revenue share of GDP to be only 18.5 percent in 1993. This contraction, compared with the 1989 rate, is expected because the taxable portion of GDP will shrink between 1989 and 1993, as it normally does during periods of economic weakness. (Taxable personal income plus economic profits were 77.7 percent of GDP in 1989 but are projected to be only 76.4 percent of GDP in 1993.)

Reinforcing the drop in the taxable share of GDP is a drop in individual income tax rates as family income failed to keep pace with inflation. In the recent recession, an unusually large factor in the reduced revenue share has been capital gains. The drop in the value of commercial real estate and closely held businesses led to a sizable drop in capital gains realizations--from $162 billion in 1988 to about $110 billion in 1991.

Stronger economic growth in 1993 through 1995 is projected to push the revenue share of GDP back up to 18.8 percent by 1995. CBO estimates that the recovery will bring the taxable share of GDP back up to 77.0 percent, that growth in real income will push up the individual income tax rate, and that realizations of capital gains will move back to a more normal level. The CBO baseline shows the revenue share remaining at 18.8 percent except for a temporary dip in 1997, when the acceleration in estimated income tax payments, enacted in 1991, will end. Those speedups moved about $6 billion of individual and corporate revenue from 1997--a year that was then outside the budget window--to 1992 and 1993.

Two years ago, in January 1991, CBO estimated that the revenue share of GDP in 1993 through 1995 would be 19.5 percent--0.7 to 1.0 percentage point higher than the current projection. The principal cause for the lower figures in the current projections is a reduction in the GDP share of individual income taxes, with revisions to the forecast of realizations of capital gains accounting for about half of the reduction in that tax source. In January 1991, the most recent final tax data available were for 1988--just before capital gains realizations began to fall. Subsequent data showed that the 1980s boom in realizations was only temporary. Consequently, CBO has cut back its projections of capital gains realizations for 1993 through 1995.

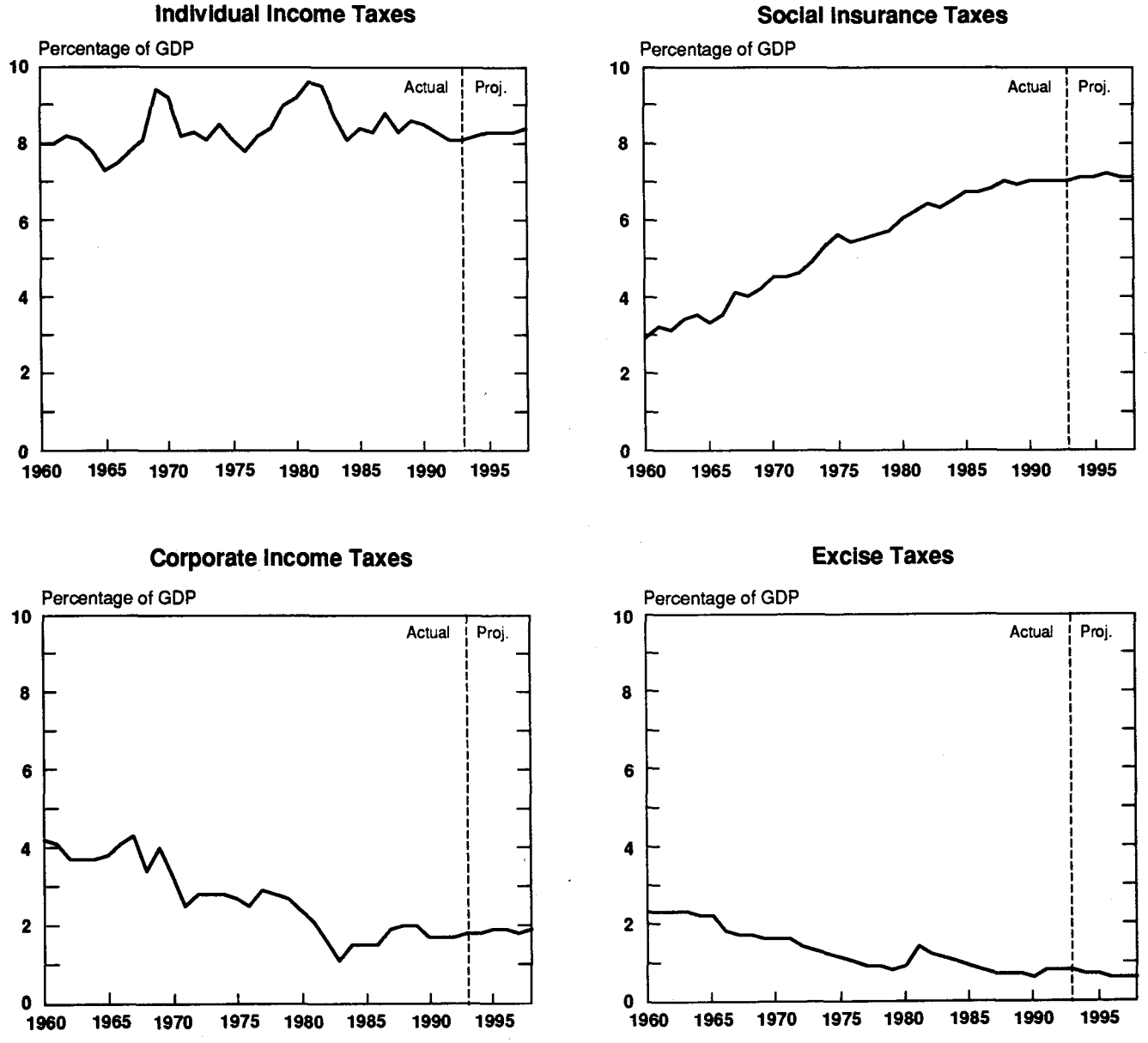
In addition, the trend of increasing inequality in income that had prevailed since the mid-1970s ended after 1988; CBO has therefore reduced the projected share of personal income that is taxed at the highest rates. Other factors that have reduced the projected share of individual income taxes are lower projected real incomes and a drop in the share of NIPA wages that appears on tax returns.

The fluctuation of the federal revenue share of GDP since 1960 mirrors the fluctuation in the share of individual income taxes. These shifts were accompanied by a steady increase in the social insurance tax share and roughly offsetting decreases in the shares for corporate income taxes and excise taxes (see Figure 4-2). The individual income tax has maintained its importance as the primary source of federal revenue, contributing the same proportion of revenues--44 percent--in 1992 as in 1960. Until the mid-1980s, tax cuts periodically offset increases in individual income taxes caused by

inflationary bracket creep. Further cuts in individual income taxes came in the Tax Reform Act of 1986 (TRA), but some of the cuts for high-income taxpayers were offset, at least temporarily, by revenue-raising provisions in OBRA-90. In the CBO baseline, the individual income tax share continues to increase because of real income growth.

The share of GDP claimed by social insurance taxes has increased steadily since 1960 as tax rates, coverage, and the share of wages

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



SOURCE: Congressional Budget Office.

subject to taxation have all increased. These additions have financed expanded benefits provided to current retirees and promised to future retirees. The contribution of social insurance taxes to total federal taxes, just 16 percent in 1960, reached 38 percent in 1992. With no further rate increases scheduled, CBO expects that both the GDP share and the revenue share of social insurance taxes will remain stable at their 1992 levels.

The GDP shares claimed by corporate income taxes and excise taxes have declined since 1960. The corporate revenue share declined steadily until the mid-1980s because of a decline in corporate profits as a share of GDP and legislated reductions in tax liability. The Tax Reform Act of 1986 increased corporate taxes. After temporarily claiming a larger percentage of GDP from 1987 through 1989, the corporate share has shrunk in the past three years as a result of lower profits. In the CBO baseline, the corporate share recovers until 1995 and then holds nearly steady, reflecting a virtually flat share of GDP from corporate profits.

Excise taxes--mostly specific taxes levied on each unit of a good--continue to be the smallest of the four major federal tax sources. These taxes have claimed a decreasing share of GDP since 1960, and their importance as a source of federal revenues has diminished as their share has fallen from 13 percent of total revenues in 1960 to 3 percent in 1990. Nonetheless, increases in rates have kept their growth close to that of GDP in recent years. In the CBO baseline, excise taxes increase somewhat more slowly than does GDP because the growth in number of units sold does not keep pace with the growth in cash incomes on which income and social insurance revenues depend. In addition, two changes produce a significant drop in excise revenues between 1995 and 1996: the 2.5-cent portion of the motor fuels tax that does not go into the Highway Trust Fund expires, and the ban on certain ozone-depleting chemicals eliminates revenue from that tax.

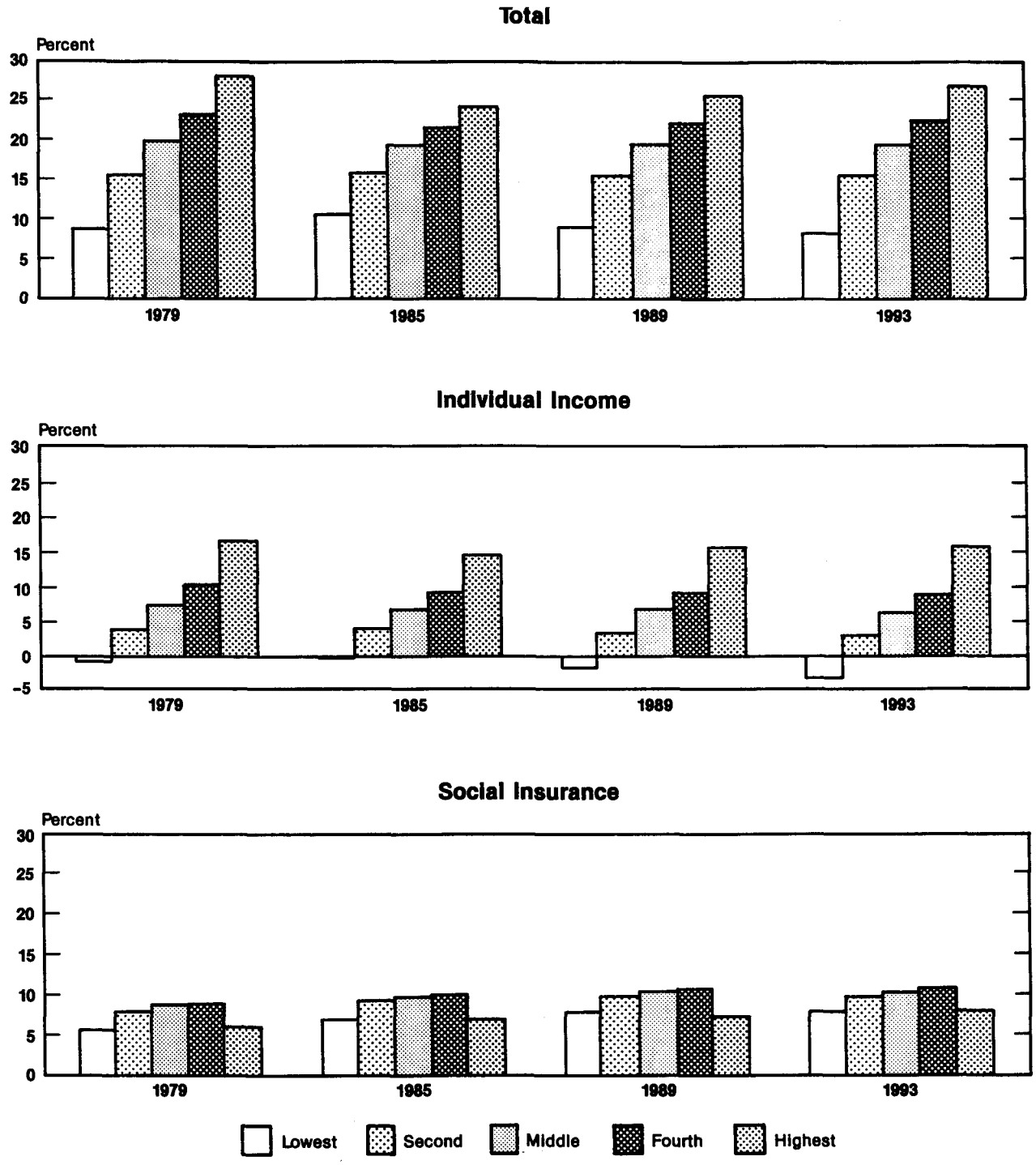
Recent Trends in Tax Progressivity

Between 1981 and 1990, more significant tax legislation passed into law than in any other comparable period in recent U.S. history. The Congress enacted five major tax bills: the Economic Recovery Tax Act of 1981, the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), the Deficit Reduction Act of 1984 (DEFRA), the Tax Reform Act of 1986, and the Omnibus Budget Reconciliation Act of 1990. Over the same period, a series of increases in the Social Security payroll tax, legislated in the Social Security Amendments of 1977, went into effect, with the last increase occurring in 1990. In addition, the Social Security Amendments of 1983 accelerated the effective date of some of the tax increases and made a portion of Social Security benefits taxable under the individual income tax.

The changes in the law have led to a tax structure that is much different from the one in effect before 1981. Today's schedule of income tax rates is lower and flatter, and many tax preferences under the individual income tax have been scaled back or eliminated. The top corporate tax rate today is lower than it was before 1981, but the investment tax credit has been eliminated and other business investment incentives that were expanded in ERTA were scaled back in TRA. The base for social insurance taxes is wider, and rates are higher. Some excise tax rates are higher today than at the beginning of the decade, offsetting in part the decline in the real value of excise tax rates caused by inflation.

Yet despite these sweeping changes in tax policy, little change occurred in the level of the tax burden between 1979 and 1993. CBO expects that in 1993 the total federal effective tax rate (ETR)--the percentage of income paid in federal taxes--will be slightly more than 23 percent, which is almost the same as the rate

Figure 4-3.
Federal Effective Tax Rates for 1979, 1985, 1989, and 1993, by Income Group



SOURCE: Congressional Budget Office.

NOTE: Families ranked by adjusted family income, with an equal number of people per percentile. Rates for 1993 are projected.

in 1979. The total ETR measured here reflects the four major federal tax sources: individual and corporate income taxes, social insurance taxes, and excise taxes (except for the windfall profits tax). It excludes other federal receipts such as customs duties and estate and gift taxes. The measure of income used in computing ETRs is family income. Family income, which includes all cash income received by families plus their share of employer taxes and corporate income taxes, is smaller than GDP.

The way tax burdens are distributed today is little different from their distribution in 1979 except for families with the highest incomes (see Figure 4-3). Although all other income groups saw either no change or a small decline in their ETR, the highest-income group had a decline of more than 1 percentage point. Within the highest-income group, those with the highest income had the largest cuts--the ETR for the income group comprising the 1 percent of families with the highest incomes (not shown separately in the figure) is projected to be 5 percentage points lower in 1993 than it was in 1979. Despite the decline in the ETRs for some income groups, the total ETR did not change because the highest-income groups with the highest ETRs have a larger share of total income in 1993 than in 1979.

The small drops in the total ETR for all groups between 1979 and 1993 mask a number of offsetting trends. Although individual income taxes are more progressive than social insurance taxes, both became somewhat more progressive over this period. (A tax is progressive if income groups with higher incomes have a higher tax rate than those with lower incomes.) If the relative size of these two tax sources had remained constant during this time, the federal tax system as a whole would have become more progressive. Instead, the share of revenue from income taxes has shrunk and the share from social insurance taxes has grown, making the system slightly less progressive.

The average ETR for the individual income tax will be about 6 percent lower in 1993 than in 1979. Nonetheless, the individual income tax will be more progressive in 1993 than it was in 1979. A rough index of tax progressivity is the difference in the ETR for high- and low-income families. (Individual income ETRs are less than zero for the lowest-income group because those families, on average, receive refundable earned income tax credits, or EITCs.) Between 1979 and 1985, the gap between the highest and lowest individual income ETRs narrowed, but it has since increased. In 1993, the difference between the rates for the highest- and lowest-income groups will be larger than it was in 1979.

The added progressivity of the individual income tax did not come until the enactment of TRA and OBRA-90. Between 1979 and 1985, larger percentage cuts in ETRs went to groups with higher incomes. The net subsidy to the lowest-income group fell slightly as inflation eroded the value of personal exemptions, standard deductions, and the EITC. Both TRA and OBRA-90 lowered the ETRs for the lowest-income groups and raised the ETRs for high-income families.

Although the ETR for individual income taxes will be lower in 1993 than in 1979, the ETR for social insurance taxes will be higher. The progressivity of social insurance taxes has increased slightly since the late 1970s.

Barring further changes in the tax code, the total ETR should change relatively little over the next five years. However, the individual income ETR for the lowest-income group should fall even further after 1993. OBRA-90 greatly expanded the EITC, but it called for phasing in the increases, with the final one scheduled for 1994. The ETR of the highest-income group will drop in 1995 and 1996 when OBRA-90 provisions limiting itemized deductions and personal exemptions expire. Finally, the expiration of 2.5 cents of the motor fuels tax will lower the ETRs for all income groups, especially the lowest-income group.

Chapter Five

The Economic Consequences of Deficit Reduction

The 1992 election and the sluggish growth of the economy during the past four years focused the American public's attention on the possibility that U.S. living standards may advance more slowly in coming decades than they did during most of the period following World War II. In part, the slowdown is a result of the decline in the national saving rate in the last decade. The presidential candidates recognized that reducing the deficit is the most reliable way for policymakers to increase net national saving. Over the long run, a permanently higher rate of saving will stimulate new investment, increase productive capacity, stem the growth in net debt to foreigners, and raise the nation's standard of living. Increased spending on government investment could also raise living standards, although the effects would depend on choosing investments wisely (see Box 5-1).

The long-term benefits of deficit reduction could, however, involve some short-term costs, a dimension of the problem that may not be fully recognized. Cutting the deficit necessarily involves some combination of increased taxes and reductions in valued government programs. Cutbacks in programs will hurt those who benefit both directly and indirectly from these government activities; tax increases will reduce the disposable incomes that individuals and businesses have for consumption and investment. A long time will pass before improvements in living standards that result from a deficit reduction are realized. In the meantime, deficit reduction could disrupt the economy enough to affect most people.

Substantial deficit reductions raise a number of issues. These issues include the appropriate timing and pace of deficit reduction, the magnitude of the long-term benefits, and the potential for short-term economic disruption that is likely to result from such an effort. The crucial importance of the Federal Reserve's monetary policy and the attitude of financial markets toward any deficit reduction plan must also be considered.

The conclusions reported in this chapter are based, in part, on simulations of schedules for balancing the budget, using several macroeconomic models. The models, which are based on diverse views of how the economy works, were chosen to reflect a reasonable range of analytic uncertainty among economists. Although the Congressional Budget Office used the models to estimate the transitional effects of fiscal contractions that would eliminate the federal deficit within five to 10 years, there is nothing magical about the goal of a balanced budget. Some economists have argued that a modest surplus is desirable, given the fall in the private saving rate and the retirement of the baby boomers that will begin at the end of the first decade of the next century. Others have argued that if balancing the budget means shortchanging needed government programs, modest deficits should be tolerated.

Even though the models differ considerably in design, they came to similar conclusions

about the effects of eradicating the deficit. Among the conclusions:

- The level of consumption that the economy can sustain in the next century would be substantially increased by erasing the deficit in the next few years, which would shift the composition of demand away from current consumption and move it toward private investment.

- Efforts to eliminate the deficit within the next five or 10 years could disrupt the economy, but the effect of this disruption on total demand and employment could be largely offset by a monetary stimulus. Even without an offsetting monetary stimulus, a steady reduction of the deficit would not throw the economy into a recession, provided that the actions to erase the deficit were taken at a time when the underlying growth of total demand is at least moderate.

- The amount of time taken to close out the deficit--five or 10 years--has little impact on the long-term benefits of eliminating it, provided that the effort is credible and carried through.

These general conclusions assume that the actions taken to eliminate the deficit are

Box 5-1.
Reducing the Deficit Versus Increasing Government Investment

Although this chapter focuses on the effects of eliminating the federal government's deficit, the economy could gain a similar long-term improvement if the government's spending on consumption could be reduced and its spending on well-chosen investments increased. Both strategies would shift resources from national consumption to national saving and investment, and thus increase the level of living standards attainable in the long run.

Some economists believe that increased government investment, such as that for infrastructure, is actually more powerful than increases in private investment; that is, a dollar's worth of more government investment spending increases the productive capacity of the economy more than a dollar's worth of private investment. The Congressional Budget Office's review of the evidence suggests instead that the measured returns from the average public investment in infrastructure and in research and development have been lower than the returns from the average private investment. There is little evidence on the economic returns from most government investment in human resources. Thus, although careful selection can yield high returns in all areas of public investment, across-the-board increases in public investment are unlikely to boost greatly the productive capacity of the economy. See Congressional Budget Office, *How Federal Spending for Infrastructure and Other Public Investments Affects the Economy* (July 1991).

A strategy of shifting government spending from consumption to investment has the advantage that it need not, if the shift is carefully managed, weaken the economy in the short run. Some industries would be hurt and others helped, as is always the case when the government's policies change, but these effects could be arranged to cancel themselves out roughly in the economy as a whole.

The main difficulty with relying on government investment spending rather than on deficit reduction to boost future incomes is that, unlike private investment that is guided by market considerations, political factors may dominate the choice of public investment projects. Only if government investment choices are based on economic criteria--that is, they meet the ordinary standards of cost-benefit analysis--can they be expected to be as productive as private investments. Finding and evaluating such valuable investments takes time, so that the scope for sharp increases in the nation's level of saving and investment by that route is likely to be limited.

broad-based, including both increases in taxes and cuts in spending. The details depend, of course, on precisely which actions are chosen. In general, a program that relies disproportionately on tax increases would tend to disrupt the economy less in the short run but would yield somewhat smaller long-term benefits because it might reduce private saving and labor supply. Indeed, it is possible that some types of tax increase--such as a large tax on income from capital--would so reduce private saving or investment as to eliminate most of the benefits of reducing the deficit. Reducing the deficit by slashing government investment spending would be similarly counterproductive. But few people advocate such changes.

The Question of Timing

A central question to any deficit reduction effort is, How fast can or should the deficit be eliminated? The question raises two kinds of issues: those related to the management of programs and the budget, and those related to the management of the economy. This chapter focuses on the second group of issues--how different time schedules for eliminating the deficit affect the economy. Very rapid deficit reduction could impose significant and unnecessary hardship if people and businesses cannot adjust in an orderly fashion to the new regime. Eliminating the deficit in two years, for example, would require cuts of around $130 billion per year, and eliminating it in three years would call for cuts of $90 billion per year. If government agencies are disrupted by such sudden large reductions in funding, the orderly functioning even of programs unaffected by cutbacks can be compromised. In short, considerations of equity and good management probably preclude very fast deficit reduction.

Both extremely rapid and extremely gradual approaches to eliminating the deficit are also probably undesirable on economic grounds. Most economists would say that doing the job quickly--say, within two years--could severely disrupt the economy, particularly since the underlying growth of the next few years is likely to be relatively weak compared with past business expansions (see Chapter 1). Rapid deficit reduction does not always bring economic problems; between 1968 and 1969, for example, an income tax surcharge combined with spending cuts eliminated a deficit equal to 3 percent of gross domestic product and replaced it with a small surplus.[1] But the ability to erase the deficit so fast probably owed much to the fact that the budget deficit had only recently surged in 1968, and that the tax surcharge was intended to be temporary (although it was extended into 1970). Consumers took both events in stride without radically changing their spending on consumption. This experience probably has no current application when the nation must deal with a large structural deficit that has existed for more than a decade and will need permanent solutions.

A very gradual approach to controlling the deficit--say, eliminating it over a period of 15 years--could also have disadvantages. Obviously, it would delay the increased productive capacity and reduced debt to foreigners that deficit eradication can bring. A languid pace may not convince financial markets that the deficit will ever be eliminated, because such a pace offers many chances for a reversal of fiscal policy. Thus, long-term interest rates may stay unnecessarily high, and the burden of interest payments on federal debt would continue to increase.

Does It Matter How Long It Takes to Balance the Budget?

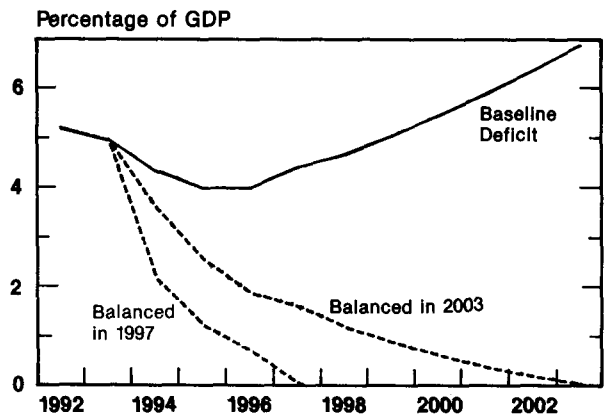
Leaving out these extreme approaches, the economic effects of erasing the deficit over a period of five years are not much different from those of eliminating it over 10 years. The

1. Following the policy changes, the economy continued to grow for nearly a year and a half before a recession started in December 1969.

reason is that much of the rise in the deficit expected over the next decade occurs after 1998. Thus, even a plan to bring the deficit down to zero in five years--and hold it at zero thereafter--must implicitly be able to control the deficit in the late 1990s and the first years of the next century as well. And that is precisely the period over which a 10-year plan would have to accomplish its major work.

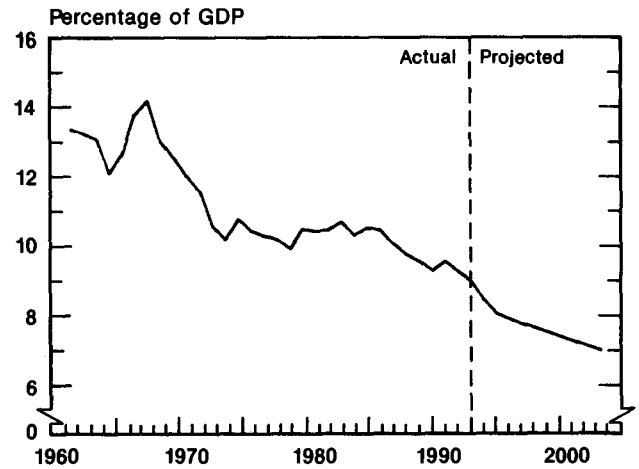
In Chapter 2, CBO has projected the pattern of future deficits, assuming that the limits of the Budget Enforcement Act are adhered to until it expires at the end of 1995, and making somewhat conservative assumptions about spending in the 1996-2003 period (see Figure 5-1). Meeting the act's spending caps will already require substantial real cuts in discretionary spending programs. Beyond 1995, the projection assumes that discretionary spending will grow only with inflation--that is, the share of all discretionary spending in gross domestic product will continue to fall. Indeed, this baseline projection implies a 15-year decline in discretionary spending in relation to GDP (see Figure 5-2).

Figure 5-1.
Baseline Deficit and Alternative Paths to a Balanced Budget



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

Figure 5-2.
Discretionary Spending



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

Despite this fairly conservative assumption, the projection calls for an increase in the deficit, reaching about 6.8 percent of GDP by the year 2003; if the projection were extended farther into the next century, the ratio would continue to increase.[2] The main culprits are the increase in the costs of the government's health care programs and the increase in the cost of paying interest on the national debt (see Chapter 2).

Eliminating the deficit by 2003 would require broad policy changes--tax increases, or reductions in spending programs or entitlements--that would directly reduce the deficit by an average of about $48 billion a year.

2. General Accounting Office, *Prompt Action Necessary to Avert Long-Term Damage to the Economy* (June 1992). This study made similar assumptions about policy, but projected the assumptions without change through the first quarter of the next century. The growth of health care costs, retirement pensions, and interest on the debt would, under these assumptions, bring the federal deficit to 20 percent of gross national product. It is, of course, highly implausible that policies would remain unchanged over such a long period, so the GAO's conclusion must be understood only as pointing out that the current mix of policies cannot be sustained over the long term.

That is, the cuts would reach $48 billion in the first year, $96 billion in the second year, and so on. The deficit need not, of course, be reduced smoothly. But if it is, the deficit would fall to near 1 percent of GDP in 1998 (see Figure 5-1). Policy actions that produced cuts averaging $64 billion a year, just one-third larger, would erase the deficit by 1998.

When Is the Best Time to Reduce the Deficit?

Some times are better than others for reducing the deficit. During periods of recession or anemic growth, few economists would prescribe a major dose of deficit reduction, since to do so would further weaken an already weak economy.[3] For the same reason, the failure to control the deficit during the strong growth years of the 1980s was a serious mistake.

If the deficit reduction is gradual and phased in, the reduction in any one year would probably not precipitate a recession. However, one or more recessions will probably occur for other reasons during the five to 10 years needed to close out the deficit. The deficit will increase during a recession as a result of the effects of the recession itself on revenues and income security programs, and perhaps also because temporary programs of fiscal stimulus might be enacted. It will be important, however, to manage the response to recessions so that the downward path of the deficit is only temporarily interrupted.

3. The most successful action to control the deficit in the past decade was taken in the Omnibus Budget Reconciliation Act of 1990, as the economy slid into recession. Many economists supported the act, despite its unfortunate cyclical timing, because further delay seemed likely to confirm the belief of financial markets that serious action would never be taken. Just how weak the economy had become was not clear at that time.

The Long-Term Benefits of Eliminating the Deficit

Many observers expect the growth in U.S. living standards--one measure of which is the sustainable growth of per capita consumption--to be slower over the next half century than over the last. This slowdown can be attributed to a slower rate of growth in the labor force, an increase in the proportion of the population who are elderly, and a continuation of the recent trend of low rates of growth in productivity. Labor productivity advanced at about a 2.2 percent rate from 1950 to 1972 (after adjusting for the effects of the business cycle), but since 1972 has grown at a rate of only 1 percent.[4]

Although there were many reasons for the slowdown in productivity growth, low saving and investment played a large role in the 1980s. Continued low rates of national saving also are expected to retard growth over the long run, but in this case the potential for policy to offset or even reverse the adverse trends is brighter. During the 1980s, the rate of net national saving fell by 4½ percentage points from its average during the previous decade, with more than half the decline attributable to the period's high federal deficits. Reversal of that trend could substantially improve the long-term outlook.

Unless further action is taken, however, federal deficits will drain increasing amounts of saving away from private investment.[5] Under current policies, the deficit will rise to

4. Numbers are derived from Robert J. Gordon, "The 1992 Spurt in Productivity: Does It Signal Relief from the Long-Term Slowdown?" (paper presented at the American Economic Association panel on productivity measurement issues and recent trends, January 6, 1993).

5. This situation would be much less worrisome if the deficits financed federal investment. However, nonmilitary investment spending by the federal government contributed little to the rapid rise in the deficit during the 1980s. See Congressional Budget Office, *The Federal Deficit: Does It Measure the Government's Effect on National Saving?* (March 1990).

about 6.8 percent of GDP in 2003, by which time deposit insurance spending and the current cyclical weakness of the economy will not be distorting the deficit figures (see Chapter 2). On a comparable basis--that is, excluding spending on deposit insurance and the effects of the weak economy--the structural deficit is likely to be about 3½ percent in 1993. Thus, under current policies, the structural deficit would rise over the next 10 years by more than 3 percentage points of GDP. The deficit will increase despite the substantial policy changes necessary to meet the discretionary spending targets of the Budget Enforcement Act through 1995.

Most economists believe that a sustained and substantial reduction in the structural deficit would raise net national saving and ultimately increase the nation's living standards. In fact, this is the central argument for reducing the deficit. The increased national saving that stems from deficit reduction represents, in effect, an increase in the domestic supply of financial capital. The immediate result of such an increase would be to raise net investment here and abroad by U.S. residents and to lower real interest rates. In time, the increase in the domestic capital stock would raise the economy's productive capacity, and both labor productivity and real wages would rise. Along with lower debt service on borrowing from other countries, higher real wages would raise living standards and the level of consumption per capita. These changes would also lower the exchange value of the dollar for several years. The lower dollar, in turn, would lead to a near-term improvement in the trade balance and to reduced net borrowing from other countries.

How Much Will Erasing the Deficit Add to National Saving?

The size of the increase in national saving that could result from deficit reduction is an empirical question, the answer to which depends in part on how private saving responds. Erasing the deficit may involve higher taxes or lower government transfers, which in the short run cut directly into private saving as well as spending on consumption. Although the size of the effect is highly uncertain, some analysts have estimated that each dollar of deficit reduction could lead to a decline of about 30 cents in private saving.[6]

Early elimination of the deficit--that is, by 1998--could thus increase national saving by around 5 percent of GDP in 2003, or about 70 percent of the reduction in government borrowing. That percentage probably underestimates the effect of eliminating the deficit on national saving early in the next century because the deficit would most likely continue to grow if the baseline projection were extended. But when compared with the current low level of net national saving--only 2½ percent of GDP even before the recession lowered it further--these increases are substantial.

How Much Will the Increase in National Saving Add to Living Standards in the Long Run?

A higher level of national saving works somewhat like an increase in an individual's saving; that is, it increases the resources available for future use, either for consumption or for investment. But as investment is increased, so also is the capital stock that must be maintained. Keeping track of the growth of capital and labor resources, of depreciation, and of how they affect future incomes and consumption possibilities is the job of growth accounting.

That approach accounts separately for the contributions of labor, capital, and total factor productivity (that is, everything, including technical progress, that is not labor or capital

6. See Lawrence H. Summers, "Issues in Saving Policy," in Gerald F. Adams and Susan M. Wachter, eds., *Saving and Capital Formation* (Lexington, Mass.: Lexington Books, D.C. Heath & Co., 1986), p. 65; and Michael J. Boskin, "Concepts and Measures of Federal Deficits and Debt and Their Impact on Economic Activity," in R.J. Arrow and M.J. Boskin, eds., *Economics of Public Debt* (New York: MacMillan, 1988), p. 77.

but contributes to growth) to the expansion of productive capacity. It predicts that for each percentage point of permanent increase in the ratio of national saving to GDP, consumption will eventually be permanently raised by about 1 percent above what it would have been without the saving increase.[7] Thus, eliminating the deficit, which would raise national saving after 2003 by more than 5 percentage points, could add more than 5 percent to the sustainable level of consumption in the next century.

Other approaches suggest the possibility of higher--perhaps much higher--gains, although they are not as well supported and therefore probably should not be the basis for policy decisions. New theories of economic growth suggest that the contribution of capital could be larger than that assumed by the growth-accounting framework, in part because of benefits that spill over from growing firms to the rest of the economy.[8] At the same time, some historical studies appear to show that investment in equipment has disproportionately boosted growth.[9]

However, it is probably prudent to stay with the results of the well-established growth-accounting approach--namely, that deficit elimination will eventually increase consumption forever by more than 5 percent. Most economists are hesitant to rely heavily on apparent empirical regularities--such as the link between equipment spending and growth--that are not well understood, since they could easily turn out to be spurious. Similarly, they are wary of economic theories that lack empirical support. Moreover, there are strong empirical arguments for the traditional growth-accounting approach.[10] Although a good deal of macroeconomic research on new growth theories is taking place, the issue is not yet settled.

Redirecting Spending and Reducing Foreign Borrowing

Deficit reduction works in two ways to increase future real incomes and living standards. First, it makes more resources available for private domestic investment, directly increasing the future productive capacity of the economy. Second, it reduces net capital flows into the country, thus reducing the future burden of repayments on that debt.

The mechanism that underlies both these changes is a reduction in interest rates, both short- and long-term. Short-term interest rates reflect the current scarcity of money in relation to its demand; the fiscal restraint reduces the demand for money, and if the Federal Reserve acts to avoid weakening the economy, the supply of money will go up. Both of these actions will reduce short-term interest rates.

Longer-term rates, which affect business investment decisions more than short-term rates do, will also fall as long as market participants believe that short-term rates will be lower in the future. The market balances returns on long-term bonds with expected short-term interest rates. As a result, aside from compensation for the risk involved in tying up money in a longer-term investment, investments in short- and long-term instruments are about equally attractive. Thus, in order to lower long-term interest rates, the market

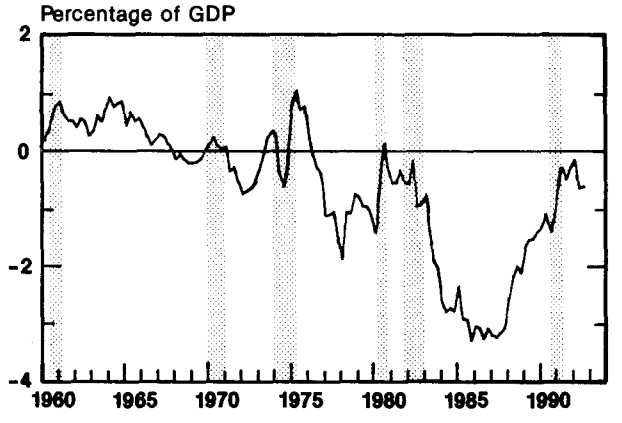
7. See Congressional Budget Office, "Implications of Federal Deficits for Economic Growth," Chapter III in CBO, *The Economic and Budget Outlook: Fiscal Years 1990-1994* (January 1989).

8. For a recent survey of this literature, see X. Sala-i-Martin, "Lecture Notes on Economic Growth (II): Five Prototype Models of Endogenous Growth," Working Paper No. 3564, (National Bureau of Economic Research, December 1990).

9. J. Bradford De Long and Lawrence H. Summers, "Equipment Investment and Economic Growth," *Quarterly Journal of Economics*, vol. 106, no. 2 (May 1991).

10. Martin Neil Baily and Charles L. Schultze, "The Productivity of Capital in a Period of Slower Growth," *Brookings Papers on Economic Activity: Microeconomics 1990* (Washington, D.C.: Brookings Institution, 1990).

Figure 5-3.
Net Exports of Goods and Services



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

NOTE: Shaded areas indicate recessions.

must be convinced that the reduction in government borrowing will persist and also that it will not be offset by some other factor, such as an increase in inflation.

Lower interest rates directly stimulate investment and help bring about another benefit of deficit reduction: lower net capital flows from other countries. Lower interest rates reduce the dollar return on investments in the United States. Such investments will be as attractive as investments abroad only if dollars are cheaper. Thus, if the deficit is reduced, the value of the dollar in relation to other currencies will depreciate for several years. The lower dollar will make U.S. exports cheaper in world markets and raise the price of imports, increasing exports and reducing imports. The dollar would not stay indefinitely at its lower level, however; eventually, as the United States reduces its net debt to the rest of the world, the demand for dollars would increase and the dollar would rise again.

The temporary dollar depreciation that would most likely result from deficit reduction is the exact counterpart of the increase in the value of the dollar that occurred in the first half of the 1980s, when the U.S. government's deficit increased sharply. In the 1980s the dollar's appreciation led to a significant drop in net exports and to a substantial increase in borrowing from abroad. For the first time since the 19th century, the United States became a net debtor to the rest of the world (see Figure 5-3). Erasing the government's deficit would reverse some of those changes, thereby improving net exports and depreciating the dollar.

How much of the reduction in government borrowing would go into increased private investment, and how much into reducing net capital flows from other countries? In a previous study, using an earlier generation of models, CBO estimated that between 32 percent and 47 percent of a deficit reduction would be devoted to reducing net capital inflows.[11] These results are roughly consistent with the experience of the 1980s. Taking into account the decline in private saving that was discussed earlier, private investment might increase by about 30 percent of the decline in government borrowing.

Implications of Deficit Reduction for Monetary Policy

By focusing largely on the long-term benefits of deficit reduction, the discussion so far has avoided the issue of short-term costs. Increased national saving diverts resources to private investment and reduces borrowing from abroad. But investment and net exports do not generally increase immediately or smoothly to take up these resources. Unless there is some offsetting action, reducing the deficit would also temporarily dampen the total demand for goods and services in the

11. Congressional Budget Office, *Policies for Reducing the Current-Account Deficit* (August 1989).

economy, thereby reducing production and GDP below levels that they might otherwise attain.

The Federal Reserve is the obvious source of offsetting action. A temporary increase in money growth, by lowering interest and exchange rates, would encourage both investment spending and net exports, and given enough advance notice, it could largely offset any short-term weakening of the economy as the deficit is cut. The macroeconomic models that CBO examined concur in this general result, though they differ considerably as to how much monetary stimulus would be necessary to avoid weakening the economy in the short run (see Box 5-2).

Two of the models suggest that the stimulus required would be manageable, but the other two indicate that a very large increment to money growth would be necessary. This disagreement among the models mirrors the uncertainties that the Federal Reserve faces when deciding whether and how to undertake stimulative action.

Box 5-2.
The Simulation Models

The Congressional Budget Office used four models for the simulation exercise: the Data Resources, Inc. (DRI) model of the U.S. economy; a multicountry model developed by the staff of Canada's Department of Finance (INTERMOD); the McKibbin-Sachs Global model (MSG); and the Washington University Macroeconomic Model (WUMM).

Two basic criteria governed the selection of these models. First, each would have to be capable, in principle, of yielding long-run benefits to deficit reduction along the lines of the mainstream view described in the text. In each of the models selected, output is determined, over the long run, by the interaction of factor supplies, relative prices, and technological advance. Thus, the increase in the capital stock resulting from deficit reduction will ultimately increase capacity output in these models.

The second criterion is that, taken together, the models would have to reflect adequately the diversity of opinion among economists concerning the short-term impacts of reducing the deficit. The basic distinction here is the extent to which households and businesses take a long view of deficit reduction and allow this view to affect the decisions they make over the short run.

Although each of the models embodied some form of the "income-expenditure" framework by which changes in fiscal (and monetary) policy affect short-term demand, they differed in the extent to which private saving is influenced by income flows or changes in wealth. This difference matters because deficit reduction will tend to lower current income by more than it lowers wealth. At one extreme, the DRI model assumes, to a greater degree than the other models, that private saving is more sensitive to movements in current disposable income than wealth. At the other extreme, in the INTERMOD model, private saving is almost completely determined by wealth, even over the short run.

Another key distinction in this regard concerns the models' treatment of expectations. Of the four models, only two (INTERMOD and MSG) are forward-looking. As a result, only these two models can distinguish between policies that are anticipated and those that are not. In addition, these models can also distinguish between permanent and transitory policy changes in a way that the "backward-looking" DRI and WUMM models cannot. In the forward-looking models, the long-term effects of deficit reduction are transmitted almost immediately to asset markets. As a result, the favorable effects of lower long-term interest rates and dollar depreciation begin to boost domestic investment and net exports more quickly in the INTERMOD and MSG models than they do in the others.

Consequently, the Federal Reserve may not be able to offset so neatly the fiscal restraint implicit in deficit reduction. Indeed, some analysts believe that monetary policy is such a blunt tool, and so hard to handle, that it can be used effectively only to control long-term inflation and the value of money.[12]

The Difficulty of Fine-Tuning the Economy with Monetary Policy

Three considerations make it difficult to use monetary policy to avoid short-term oscillations in the economy. First, although monetary actions operate powerfully on the economy, they do so only indirectly and with an uncertain lag, perhaps more than a year (see Box 5-3). Therefore, it is difficult to time policy actions so that their effects coincide with periods of economic weakness, let alone with fiscal policy actions. Moreover, the Federal Reserve may fear that deficit cuts will be promised but not delivered.

Second, the Federal Reserve probably cannot maintain any desired degree of monetary stimulus or restraint very accurately, particularly over a period of a year or so, because it is extraordinarily difficult to disentangle indicators of monetary policy actions from the effects of the economy on money growth and interest rates.

And finally, there is the fear of inflation. Some analysts believe that even a temporary monetary policy action to offset fiscal restraint carries with it a risk of temporarily higher inflation.

Although the first two factors played a large role in the recent recession, they would apply with somewhat less force to monetary actions taken to offset a planned, credible, and smooth program of deficit reduction. Obviously, the task of anticipating the effects of a planned, credible deficit reduction is easier than that of responding after the fact to all of the other factors that are already affecting the economy. And even if institutional changes in financial markets continue to confuse indicators of monetary policy, it should be easier to set the monetary lever if the fiscal policy lever moves predictably--that is, if deficit reduction occurs reasonably smoothly.

The third factor--the risk of temporarily higher inflation--is not widely held to be of major concern, but does worry some analysts. Most would predict little or no increase in inflation as a result of combined fiscal restraint and monetary stimulus that kept total demand below potential--that is, at roughly the same level as if neither policy change had happened. Inflation changes little because it is closely tied to the level of total demand--or, more precisely, to the difference between total demand and total supply. When, as in the recent recession, that difference is large, inflation will fall. Policies that, in combination, have little effect on the balance between total demand and supply would have correspondingly little effect on inflation.

A possibility of a temporary increase in inflation arises, however, from the depreciation of the dollar that would accompany this combination of fiscal restraint and monetary stimulus. The lower dollar would raise import prices and give a small push to the general price level. Some models predict significant increases in prices (see Box 5-3). But these models employ unrealistic assumptions about how domestic prices adjust to higher import prices. In these models, import prices have an effect on domestic prices that is out of proportion to their approximately 10 percent weight in the economy. This view is not widely shared.

12. See Allan H. Meltzer, "The Attack on Central Banks," *The Wall Street Journal*, December 18, 1992, p. A-10.

Box 5-3.
How Long Does Monetary Policy Work?

Monetary policy cannot permanently change the level of real demand. An increase in the nominal money stock beyond the amount needed to support sustainable real growth will eventually be matched by a corresponding increase in prices; thus, the real money stock is not changed in the long run by monetary policy actions, and the real supply of funds in the credit market is not changed. Consequently, both real interest rates and real economic activity will return to their baseline levels.

This view of the long-term effects of monetary policy is widely accepted, but there is less agreement over how long monetary policy can affect real gross domestic product (GDP). If the effectiveness of monetary policy extends only a year or so before prices catch up, the task of offsetting a protracted fiscal restraint may require a larger increment to the money supply each year. But if monetary policy's effectiveness extends over several years, only a modest increment to the money supply is likely to be necessary.

The models the Congressional Budget Office has examined exhibit both of these possibilities. Two models--the Data Resources, Inc. model and the Washington University Macroeconomic Model--in which prices are largely determined by the level of total demand in relation to its supply, predict that monetary policy remains effective over a substantial period. Consequently, a moderate amount of additional money growth is necessary to keep GDP close to its baseline level while the deficit is being eliminated.

Stabilizing GDP is much more difficult according to the McKibbin-Sachs Global model and Canada's Department of Finance INTERMOD model. These models allow only a short period before price increases (resulting from the drop in the dollar and the rise in import prices) undermine the effectiveness of monetary stimulus. A simple policy of increasing money growth would therefore do little to avoid the short-term costs of deficit reduction. Since both of these models use forward-looking expectations, much more complicated strategies are available, possibly involving large increases and decreases in money growth in successive years. If such a strategy could be followed, it could, according to one of these models, boost the effectiveness of monetary policy almost to the range predicted by the other models. But it is implausible that the Federal Reserve would be able to calculate, or would be willing to follow, the large annual swings in money growth that this policy would imply.

Most analysts accept the general principle that monetary policy cannot permanently affect real output, but believe nevertheless that monetary policy could help offset the effects of short-term deficit reductions on the level of real GDP. But the range of results from the different models illustrates that this is not a settled question, and the analytic uncertainties that the models imply could deter action by the Federal Reserve.

What Would Happen If the Federal Reserve Did Not Adopt a More Stimulative Monetary Policy?

Closing out the deficit without an additional, offsetting monetary stimulus risks weakening total demand in the short run. The weakening would probably be moderate, provided that the actions taken to erase the deficit were not concentrated in a couple of years.

According to the models CBO examined, erasing the deficit over the five-year period between 1994 and 1998 with smooth policy changes but without monetary offset would reduce the short-term growth of the economy, on average, by around 0.5 percent a year, for a period of between three and five years. The short-term impact on growth rates would be somewhat less, although it would last longer, if the deficit were erased over 10 years rather than five. The forecast described in Chapter 1, which does not reflect any reduction of the

deficit beyond what is already in the Budget Enforcement Act, calls for overall growth of a little below 3 percent for the next five years. Thus, even without monetary offset, erasing the deficit over a reasonable period of five to 10 years need not, on its own, tip the economy into recession.

The consequences of slower growth for the labor market, however, are not so benign. Growth that is 0.5 percent lower than CBO's baseline projection would be barely sufficient to put the unemployment rate on a downward trend. Thus, embarking on a course that would eliminate the deficit, without cooperation from the Federal Reserve, would risk holding the unemployment rate above 6 percent for several more years.

How Much Does Credibility Matter?

Financial markets are now convinced that federal deficits will not quickly be brought under control, and that conviction contributes to the high level of long-term interest rates in relation to recent forecasts of inflation by CBO and others. Eliminating the deficit will presumably reduce long-term rates, but it would be better for long-term rates to come down earlier, in expectation of the deficit reductions, rather than wait until they have actually occurred. Without a credible plan to lower the deficit, long-term rates will not fall.

Achieving credibility in a plan to reduce the deficit will be difficult, given the history of failed attempts during the last eight years. Even the most successful of these--the Omnibus Budget Reconciliation Act and the Budget Enforcement Act of 1990, which succeeded in sharply reducing the deficit below what it would have been otherwise--are not widely perceived as a success. Their successes were obscured by the recession-related growth of the deficit and by the rapid, uncontrolled growth in federal health costs.

Failure to achieve credibility in a deficit reduction plan could sharply increase the difficulties faced by the Federal Reserve in managing the economy. If each year's reduction in the deficit comes as a surprise to the financial markets rather than as a part of a well-anticipated multiyear program, long-term interest rates would fall much more slowly and investors would be less willing to commit themselves to long-term capital projects. As a result, the Federal Reserve might have to take much more vigorous action to avoid a short-term dip in the economy. Such a jump in money growth could well raise fears of inflation so much that the Federal Reserve would be dissuaded from taking strong action.

How can policymakers maximize the credibility of deficit reduction? That is a question for the art of politics rather than that of economics. But some factors are likely to be important:

- Making decisions early, and enacting them into law, is likely to enhance credibility. This injunction is straightforward in the case of taxes and entitlements, each of which is driven by law. But for spending that is determined by annual appropriations, a series of legislated and enforceable caps such as those put in place in 1990 by the Budget Enforcement Act would probably be needed.

- Starting the deficit reduction soon, and not delaying the toughest sacrifices until 1997 or 1998, would avoid concern that the decisions would never be taken.

Conclusion

Reducing the U.S. budget deficit could significantly brighten the nation's economic future, boost the productivity of its workers, and raise their real wages. Failing to act could leave the nation's children and grandchildren

with a disappointing growth in the economic base and in their economic prospects.

The source of these benefits is a switch from fiscal policies that emphasize consumption to policies that focus on investment. As this chapter has indicated, reducing the deficit is a direct way to stimulate private investment and reduce debt to other countries. Higher levels of public investment could, in principle, raise future living standards as well, although research shows that, in practice, these investments must be chosen wisely in order to be effective.

Deficit reduction could bring some short-run economic losses, but they probably would not be large. CBO finds that deficit reduction--if carried out over a five-year period--is unlikely to push the economy back into recession. Furthermore, policymakers could minimize these short-run costs by passing a multiyear--and credible--plan to reduce the deficit. The Federal Reserve could offset all of the contractive effects of tighter fiscal policy with more stimulative monetary policy, although concerns about inflation could make the Federal Reserve hesitant about providing a complete offset.

The most serious problem facing policymakers is not how to avoid short-term economic losses from deficit reduction. The real challenge is deciding what popular spending programs to cut and which unpopular taxes to raise. Moreover, the budget numbers suggest that this task will be extremely unpleasant (see Chapter 2). Ultimately, the decision to reduce the deficit involves a judgment about the allocation of resources between current and future generations--and the legacy that the current generation wishes to leave behind.

Chapter Six

The Budget Process and Deficit Reduction

Some people believe that the budget process is merely the stuff of budget insiders and not terribly important to deficit reduction. Others believe that an appropriate budget process is all that is needed to eliminate the deficit. A review of recent history suggests that although budget procedures are not substitutes for policy actions to address the deficit (nor are they sufficient to force such actions), they can stiffen the resolve of policymakers and provide a certain amount of political protection for those who must make difficult decisions. For this reason, the budget process has an important, though limited, role in any effort to reduce the deficit. Even though no one should expect any process to accomplish miracles, appropriately designed procedures can make compliance with deficit-limiting actions more likely.

The term budget process here refers broadly to all of the rules and procedures that affect the level of federal spending and taxes. The term encompasses two different categories of rules and procedures, although the categories have some overlap. One category might be considered the traditional category. It includes rules and procedures, such as those established by the Budget and Accounting Act of 1921 and the Congressional Budget Act of 1974 (the Budget Act), that guide the formulation and consideration of the federal budget but do not impose any restrictions on budget outcomes. The second category includes rules and procedures that are intended to ensure some predetermined outcome--a balanced budget or a budget that complies with some previously agreed-to budgetary decisions. Such outcome-oriented rules and procedures have been put in place by the Balanced Budget and Emergency Deficit Control Act of 1985 (popularly known as Gramm-Rudman-Hollings) and the Budget Enforcement Act of 1990 (BEA).

Although reforms such as the Budget and Accounting Act and the Budget Act have certainly improved the information available to decisionmakers and rationalized the decisionmaking process, they did not prevent the occurrence of unprecedented peacetime deficits in the 1980s and the early 1990s. These deficits led to experimenting with the category of outcome-oriented budget procedures and to a raft of proposals for additional procedures of this sort. This chapter focuses on whether and how such procedures are likely to aid in reducing the deficit.

Recent history indicates that the best recipe for deficit reduction is to couple enacting long-term deficit reduction (as opposed to enacting promises of future actions) with a process to enforce that reduction. This formula was followed by the architects of the 1990 budget agreement, which led to deficit reduction legislation and the BEA. The best approach to additional deficit reduction is to build on this model by deciding on specific policies to reduce the deficit *and* providing a budget process to enforce this agreement.

The Congressional Budget Office's volume *Reducing the Deficit: Spending and Revenue Options*, which will be published in February

1993, contains specific policy options that could be included in a multiyear deficit reduction package. This chapter discusses the issues that policymakers must address when devising an appropriate process to enforce deficit reduction. A review of budgetary decisionmaking and outcomes under both Gramm-Rudman-Hollings and the BEA yields lessons to guide those who would revamp the budget process. CBO applies these lessons in concluding that extension, perhaps with some modification, of the current BEA procedures, coupled with enactment of a long-term deficit reduction package, offers the best chance of significantly reducing the deficit in the next few years.

Gramm-Rudman-Hollings and the Budget Enforcement Act

Frustration with large deficits led to the enactment in 1985 of Gramm-Rudman-Hollings, which grafted additional rules on top of existing budget procedures. The act established fixed annual deficit targets that declined each year, and required a balanced budget in 1991. It also established a mechanism intended to ensure that the targets were not exceeded: if the estimated deficit at the beginning of a fiscal year exceeded the target for the year, automatic across-the-board cuts in spending for most discretionary and some mandatory programs (called a sequestration) would reduce the deficit to the targeted amount. The targets were amended in 1987, and the goal of a balanced budget was pushed back to 1993.

Although Gramm-Rudman-Hollings may have held the deficits below what they would otherwise have been, it clearly did not lower the deficit to anywhere close to the targeted level. The original deficit target for 1990, the last year the Gramm-Rudman-Hollings procedures were fully in place, was $36 billion. The revised 1990 target, established in 1987, was $100 billion. The actual deficit for that year was $221 billion.

In 1990, the Gramm-Rudman-Hollings procedures were largely replaced by the BEA, which resulted from the budget agreement adopted that year. Enacted in conjunction with a legislative package that provided deficit reduction of almost $500 billion over five years, the BEA set up separate enforcement mechanisms for discretionary spending and for mandatory spending and revenue actions. These mechanisms--a limitation on discretionary spending and a pay-as-you-go requirement for mandatory spending and revenues--replaced the previous focus on fixed deficit targets with a concentration on limiting legislative actions that would increase the deficit. In general, the process the BEA established has been successful in preserving the deficit reductions enacted in 1990, even though other factors have caused a substantial increase in the projected deficits since then.

The first BEA enforcement mechanism limits discretionary spending--spending that is provided in annual appropriation acts. For fiscal years 1991 through 1993, annual appropriation and outlay ceilings were established for each of three categories of discretionary spending--defense, international, and domestic. For the two years after 1993, budget authority and outlay caps exist only for the total of discretionary spending. Any violation of the spending caps is enforced through a sequestration of discretionary spending--in the category in which the violation occurs through 1993, and in total discretionary spending in 1994 and 1995.

The BEA's second major enforcement mechanism is the pay-as-you-go (PAYGO) process that applies to mandatory spending and revenues, which are both controlled by permanent law (or at least laws that do not require annual renewal). Mandatory spending, such as that for Medicare and farm price support programs, is determined by laws establishing eligibility rules, benefit rates, or other provisions that require the federal government to make

Box 6-1.
Changes in the Deficit Outlook Since the Budget Agreement

Shortly after enactment of the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), which put in place deficit reduction agreed to by the President and the Congress that year, the Congressional Budget Office estimated that budget deficits would be reduced by nearly $500 billion over the 1991-1995 period, with the deficit down to $29 billion in 1995. CBO currently estimates that the deficit in 1995 will be $284 billion (see table below). What has happened to cause such a dramatic reestimate in the deficit?

Perhaps as important as what has happened is what has not happened. First, the reduction in the deficit resulting from OBRA-90 has not been dramatically less than was estimated two years ago. If the changes in spending and taxes agreed to in 1990 had never happened, the deficits in 1991 through 1995 would be close to $500 billion higher than current estimates. Second, legislation enacted since 1990 has not significantly increased deficits. In fact, legislated policy changes account for only $2 billion of the estimated $255 billion increase in the projected 1995 deficit.

What has happened is that factors beyond the direct control of the President or the Congress have reduced revenues and increased spending for entitlements and other mandatory programs. Revenues are lower because real economic growth was slower than anticipated. Lower inflation has also pushed down revenues, but this effect on the deficit is approximately offset by lower automatic cost-of-living adjustments in benefit programs, which are tied to inflation. Other expenditures in major benefit programs are up, largely because of dramatic increases in Medicare and Medicaid spending caused by a number of technical factors. Although the estimated overall costs of closing ailing thrifts and banks has not increased since 1990, delays in funding thrift resolutions has increased the estimated 1995 cost. Finally, net interest costs in 1995 are higher because of increased deficits in 1991 through 1995, although lower interest rates partially offset this increase.

Changes in CBO Deficit Projections Since the 1990 Budget Summit
(By fiscal year, in billions of dollars)

	1991	1992	1993	1994	1995
December 1990 Projection	253	262	170	56	29
Policy Changes					
Revenues	-1	3	5	a	a
Outlays					
Desert Storm spending[b]	23	13	10	2	1
Desert Storm contributions	-43	-5	0	0	0
Other	1	7	4	2	1
Subtotal	-19	15	14	4	2
Deficit	-19	13	9	4	2
Economic Changes					
Revenues	-31	-58	-78	-90	-102
Outlays	1	-9	-31	-38	-34
Deficit	32	49	47	52	68
Technical Changes					
Revenues	-24	-38	-42	-38	-36
Outlays					
Deposit insurance[c]	-28	-108	-28	51	37
Medicaid and Medicare	7	19	32	45	60
Other major benefit programs	8	18	24	24	25
Debt service	-1	-2	a	8	18
Other	-7	1	13	13	8
Subtotal	-21	-71	42	140	148
Deficit	3	-34	84	179	185
Total	16	28	140	235	255
Current Projection	270	290	310	291	284

SOURCE: Congressional Budget Office.
NOTE: The December 1990 projections appeared in Congressional Budget Office, "The 1990 Budget Agreement: An Interim Assessment," CBO Paper (December 1990).
a. Less than $500 million.
b. Estimated; Desert Storm outlays are not segregated from other defense outlays.
c. Excludes changes in estimated interest paid by two deposit insurance agencies (the Resolution Trust Corporation and the Bank Insurance Fund) to the Treasury. These payments are intrabudgetary and do not affect the deficit.

expenditures. Revenues are determined by the tax rates and tax rules set forth in laws.

The PAYGO rules require that the net effect of legislative actions taken since 1990 that affect mandatory spending and revenues in the 1991-1995 period must not increase the combined deficit of the current and next fiscal year. If this condition is not met, the PAYGO discipline is enforced through a separate sequestration of the resources available to mandatory programs other than those the BEA specifically exempts from sequestration.

Deficit targets, though they still exist, play no role under the BEA through 1993. Through that year, the President must adjust them for changes in economic and technical assumptions and conceptual revisions. (The President has the option to make similar adjustments for 1994 and 1995.) As long as the targets are fully adjusted, the deficit estimate may increase substantially--because of a deteriorating economy, for example--and no action would be mandated to offset the bleaker deficit outlook.

The BEA has been generally successful in its first two years in enforcing the deficit reduction actions that resulted from the 1990 budget agreement. The discretionary spending caps are holding; the appropriations committees and the Congress lived within their limits for 1991 and 1992 and actually reduced spending to a level below the caps in 1993. The pay-as-you-go process has discouraged major efforts to increase entitlement spending or cut taxes or both.

Nonetheless, the deficit has not come down since the BEA was enacted. It is higher now than it was before the passage of that law, and CBO projects that the long-term deficit problem will worsen without further policy actions (see Chapter 2).

But the deficit's failure to come down cannot be laid at the feet of the BEA. When enacting the BEA, policymakers believed that the budget summit agreement would lower the deficit substantially; the BEA included no requirement for additional deficit reduction if this expectation was not met. The factors that have led to an increase in the projected deficit since 1990 have largely to do with the deterioration of the economy and technical reestimates of revenues and spending, especially for Medicare and Medicaid (see Box 6-1). That virtually none of the change in the deficit outlook results from policies enacted since the BEA is a testament to the act's success in enforcing the budget agreement.

Lessons Learned

The past seven years have provided an experiment in the efficacy of two very different approaches to using the budget process to reduce the deficit. Although neither Gramm-Rudman-Hollings nor the Budget Enforcement Act has resulted in the hoped-for deficit reduction, several lessons emerge from the actual results under each regime.

- First, budget procedures are much better at enforcing deficit reduction agreements than at forcing such agreements to be reached.
- Second, participants in the budget process should be held accountable for results that are under their direct control.
- Third, the enforcement process must be credible.
- Fourth, the process must include a certain amount of flexibility to allow reasonable responses to unexpected events.

Enforcing Agreements Instead of Forcing Agreements

Gramm-Rudman-Hollings was enacted because the President and the Congress could not agree on policies that would reduce long-term deficits. Policymakers hoped that the

specter of sequestration would force the President and the Congress to negotiate and agree to meaningful deficit reduction measures. But agreement could not be reached on enough real, permanent deficit reduction to lower the deficit to the statutory level. Instead, the legal requirement to meet the targets was satisfied by using overly optimistic economic assumptions and outright budget gimmickry, such as shifting military pay dates between fiscal years and moving costly spending off-budget.

The experience under Gramm-Rudman-Hollings demonstrated that if the President and the Congress are unwilling to agree on a painful deficit reduction package, it is unlikely that any budget procedure can force them to agree. Instead, budgetary legerdemain is likely to used to meet the letter of the law, and the hard decisions that would achieve real, permanent deficit reduction will still be avoided. Any budget procedure that establishes fixed deficit targets represents an attempt to force future agreements and is subject to this problem. A constitutional amendment requiring a balanced budget, a particularly prominent proposed means of establishing fixed deficit targets, would be no exception (see Box 6-2). A process that sets fixed amounts of deficit reduction to be achieved in coming years is also an attempt to force future actions and is likely to be less effective than a system that enforces reductions that have already been put in place. At least in the case of fixed reduction targets, however, the magnitude of the required future changes can be set at a reasonable level that is not subject to huge increases resulting from changes in the economy and technical factors.

Conversely, if the President and the Congress agree on and enact a painful package of spending cuts and tax increases to reduce the deficit, budget procedures that highlight and penalize deviations from that agreement can be effective. The procedures succeed in part because the participants in the agreement have an incentive to stick to the original terms, but this success also reflects the fact that it is far easier to block legislation than to enact it. The parliamentary impediments (such as filibusters in the Senate, the need to muster majorities in numerous committees and at various stages of the legislative process, or the two-thirds majority in each House required to override a Presidential veto)

Box 6-2. Would a Balanced Budget Amendment Reduce the Deficit?

The limitations of fixed deficit targets represent one of the biggest problems inherent in adopting one of the most popular proposed changes in the budget process--an amendment to the Constitution that would require a balanced budget. A balanced budget amendment sets a target for the size of the deficit, but does not specify either the policy actions that are necessary to reach the target or a process for enforcing those actions. As was so clearly demonstrated under Gramm-Rudman-Hollings, it is impossible to build a process around the achievement of an annual deficit target without creating incentives to engage in short-term fixes and gimmicks in response.

A balanced budget amendment would lead to several problems. First, there is no consensus on what the budget to be balanced under such a strict rule should include, or on how to measure conformity with the balanced budget rule. Further, a balanced budget amendment lacks credibility because it interferes with the ability of the federal government to combat recessions through automatic stabilizers or discretionary fiscal policy. Most important, a balanced budget rule offers too many opportunities to evade its requirements. The President and the Congress could get around an apparently rigid balanced budget constraint by using timing mechanisms and other budgetary gimmicks to achieve short-run budget targets; basing the budget on overly optimistic economic assumptions; creating off-budget agencies that would have authority to borrow and to spend but whose transactions would not be directly recorded in the budget; and passing costly spending on to states and local governments (through mandates) or private businesses (through regulations).

A balanced budget amendment, if it were to work, would need to be accompanied by legislation that specified particular actions to reduce the deficit and how they would be enforced. The deficit cannot be brought down without making these painful decisions to cut specific programs and raise particular taxes. The balanced budget amendment is not a substitute for such a balanced budget plan. Even if the amendment were passed and ratified by the necessary three-fourths of the states, therefore, the hard work would remain to be done.

that make enacting deficit reduction, or any controversial legislation, so difficult also work against reversing deficit reduction legislation once it is in place.

The durability of enacted deficit reductions was demonstrated by the defeat of several attempts in 1992 to tear down the walls between the defense and domestic discretionary spending categories and use defense savings to fund domestic programs at a level above the domestic cap. Given the demand for additional domestic spending and the political climate at the time, establishing de novo a domestic spending cap at the level of the BEA cap almost certainly would have been impossible in 1992. It was possible, however, to block efforts that would have revised the previously agreed-upon BEA cap to allow more domestic spending.

Promoting Accountability

One of the problems with Gramm-Rudman-Hollings was that the fixed deficit targets made it virtually impossible to identify any budget participants who were responsible if the deficit was estimated to exceed the target. Any excess was the result of numerous factors, including ones not directly under the control of any budget participant, such as slower-than-expected economic growth. The inability to assign responsibility for the excess made it more difficult to reach agreement on how to eliminate it.

In addition, if efforts to cut the deficit were only partially successful and a sequestration did occur, it would apply to all programs that were not specifically exempt from all sequestrations, whether or not those programs had already been cut in the effort to reach the target. Policymakers, therefore, were more hesitant than usual to volunteer cuts for a deficit reduction package. Furthermore, because many programs were exempt from sequestration, advocates of those programs were free to try to increase spending in those programs or defend them from cuts without worrying about whether their actions would trigger a sequestration.

The BEA makes it easy to identify those responsible for deviations from the budget agreement, and it applies the sequestration more precisely than Gramm-Rudman-Hollings. If discretionary spending exceeds the cap, legislation within the jurisdiction of the appropriations committees is clearly responsible, and any resulting sequestration applies only to the discretionary spending within the relevant category (or to all discretionary spending in 1994 and 1995). If the PAYGO scorecard shows a net deficit increase, those who supported legislation that increased mandatory spending or reduced revenues are clearly responsible; any sequestration that does occur applies only to mandatory spending. Because the two committees that write tax legislation--the House Ways and Means Committee and the Senate Committee on Finance--also have jurisdiction over programs that represent a very large share of mandatory spending, the responsibility for avoiding net PAYGO deficit increases is more concentrated than is at first apparent.

As a result of the clear connection between legislation and a sequestration, PAYGO legislation that increases the deficit is the subject of intense scrutiny. The first question asked of anyone proposing an increase in mandatory spending or a cut in taxes since the BEA is almost always "How are you going to pay for it?" No PAYGO sequestration has yet been triggered, because any enacted deficit increases have been offset, at least according to OMB's estimates, by measures that reduce the deficit.

Maintaining Credibility

Gramm-Rudman-Hollings lacked credibility because it promised results that were virtually impossible to achieve, and it invited evasion through phony estimates and budgetary gimmicks.

Reaching the original deficit targets or the revised targets established in 1987 might have seemed possible, though ambitious, when the targets were established. As the performance of the economy fell below expectations and the costs of programs such as Medicaid and Medicare increased above projections, however, it became clear that there was virtually no way to reach the targets.

For example, in October 1990, the Office of Management and Budget (OMB) estimated that a sequestration of $83 billion would have been necessary to meet the Gramm-Rudman-Hollings target of $64 billion in fiscal year 1991. According to OMB, a sequestration of $83 billion would have cut spending for each nonpersonnel defense account by 35 percent and each nonexempt domestic account by 32 percent. The President and the Congress clearly could not allow a sequestration of that size to take effect; therefore, neither the deficit target nor the supposedly automatic enforcement was credible.

The credibility of Gramm-Rudman-Hollings also suffered because of the overly optimistic economic and technical estimates and the budgetary gimmicks it encouraged. Rosy scenarios are almost inevitable in any system that focuses on meeting fixed deficit targets. The effects of changes in economic and technical assumptions on the deficit can easily dwarf the effects of proposed policy changes. Making the forecast of economic growth a little more optimistic is more palatable than including in the budget a deeper cut in a popular entitlement program or a tax increase. Also, any system that focuses enforcement on one year at a time, as Gramm-Rudman-Hollings did, invites schemes that produce apparent deficit savings in the target year while increasing deficits in other years.

The BEA is more credible than Gramm-Rudman-Hollings because it promises only to prevent legislative changes that would diminish the deficit reduction put in place as a result of the 1990 budget agreement. That is not a clearly unobtainable goal. In addition, the automatic sequestrations that enforce the BEA are credible because they are likely to be relatively small. Unlike Gramm-Rudman-Hollings, these sequestrations apply only to deficit increases caused by legislative actions, and such actions are unlikely to increase the deficit in any year by the very large amounts that can result from changes in the economy or technical factors.

The BEA also is less subject to rosy scenarios and budgetary gimmicks. Optimistic economic and technical assumptions have a great effect on estimates of the deficit, which are not relevant in BEA enforcement, but ordinarily have relatively little effect on estimates of the costs of new legislation, which are central to BEA enforcement. Timing shifts and other budgetary gimmicks are harder to use to evade BEA enforcement because the BEA has a multiyear focus. Unlike Gramm-Rudman-Hollings, the BEA does not ignore any current-year deficit increases after initial estimates indicate compliance at the beginning of the year. It also does not allow the possibility that future estimates of lower deficits based on optimistic economic or technical assumptions will eliminate the need to offset increases in future deficits resulting from current legislation. Any estimate that current legislation will increase a future deficit will require lower spending or higher taxes in that future year--at least through 1995, when the BEA expires.

Providing Flexibility

Any budget process must be flexible enough to deal with unforeseen circumstances that require budgetary responses. For example, it is often appropriate for the federal government to engage in countercyclical fiscal policy when the economy is in recession. The federal government also responds to other emergencies, such as natural disasters or international crises, that cannot always be anticipated.

The budget process must recognize these realities; indeed, its continued survival depends on providing policymakers with the flexibility to deal with these unanticipated

events. The BEA assisted in this goal by establishing an explicit exception for discretionary appropriations, mandatory spending increases, or tax cuts that the legislation and the President designate as emergency requirements. Despite some predictions to the contrary, the President and the Congress have resisted the urge to use this safety valve to evade the BEA's strictures on a large scale. Any process designed to enforce future deficit reduction agreements should maintain such exceptions.

The Budget Process in 1993

CBO's budget projections clearly show that significant actions are needed to reduce the deficit. Under current policies, budget deficits will hover around $300 billion in the next few years and then will begin to rise even higher despite the assumption that the economy will grow steadily throughout the period. The deficit reduction enacted in 1990 prevented the deficit from being even higher than it is, but additional cuts in spending or tax increases or both are needed to forestall deficit increases that are unprecedented in a growing peacetime economy.

Based on the lessons of the last seven years, the chances of achieving long-term deficit reduction will be improved if changes in the budget process are not the focus of attention in 1993. The focus should instead be on reaching agreement on a specific long-term deficit reduction plan and enacting cuts in mandatory spending or increases in taxes that are included in that plan. A process should then be put in place that will ensure that future appropriations for discretionary spending do not exceed the planned amounts and that future changes in mandatory spending programs and taxes do not dissipate the deficit reduction that has been enacted.

If subsequent changes in the economy or the costs of mandatory programs lead to deficits that are significantly different than anticipated in the wake of the enacted deficit reduction, the President and the Congress should consider taking additional action at that time. The BEA requires actions in response to events that are under the direct control of policymakers, but does not require the situation to be revisited if the deficit outlook deteriorates for other reasons. Although no process should be put in place that is intended to force future actions, neither should the existence of a process enforcing a previous plan be used as an excuse to avoid taking responsible actions in response to changed circumstances.

Discretionary Spending

Because discretionary appropriations are enacted for one year at a time, it is not possible to enact discretionary savings for future years. However, as the BEA shows, it is possible to enact caps on discretionary spending so that cuts in discretionary spending below a baseline level can be part of a multiyear deficit reduction package. Some people believe that giving the President the authority to veto line items in appropriation bills would also help to achieve savings in discretionary spending, but an item veto seems more likely to affect the composition of discretionary spending than to contribute to deficit reduction (see Box 6-3).

Setting caps that are supposed to ensure future discretionary savings may seem to run counter to the argument that the budget process is not good at forcing future agreements on specific cuts. But the very fact that discretionary spending is annually appropriated is what makes the caps work. Because mandatory spending and taxes are based on permanent law, the President and the Congress can avoid making promised future cuts simply by failing to take action. But appropriators must act every year in order to provide funding for

discretionary programs. They cannot evade the caps by simply failing to act. Instead of the caps being a device to force future actions, they are mechanisms that limit future actions.

If an agreement is reached on a new deficit reduction package that extends beyond 1995, the BEA discretionary caps should be adjusted and extended in order to enforce the level of discretionary spending assumed in that package. Such enforcement is credible as long as the caps are not unreasonably low. One important issue is whether the caps cover only total discretionary spending, as the BEA provides in 1994 and 1995, or whether there should be a return to the separate caps on discretionary categories that existed in 1991 through 1993. Caps on total spending provide decisionmakers with more flexibility in responding to changing needs, but still ensure that the promised discretionary savings are achieved. Having separate caps on categories reduces flexibility, but it leads to deficit reduction if actual funding in any category is below the cap: the deficit is reduced because those savings cannot be used to increase spending in

Box 6-3.
What Is the Likely Effect of the Item Veto?

Many Presidents have sought the authority to reduce or eliminate specific items in appropriation bills, a power possessed by 43 of the 50 state governors. These Presidents have argued that an item veto would empower them, as a representative of the general interest, to reduce low-priority or locally oriented--so-called pork-barrel--projects, thus leading to a reduction in the deficit.

Various statutory alternatives that are designed to have largely the same effect as the item veto have also been proposed. The most popular of these would expand the current powers of the President to propose rescinding appropriated funds under the Congressional Budget and Impoundment Control Act of 1974. Expedited rescission proposals (such as H.R. 2164, which passed the House in the closing days of the 102nd Congress) are the most limited in their grant of authority to the President. They would require the Congress to vote on proposed rescissions, with a simple majority prevailing on the vote. At present, the Congress can kill the proposed rescissions simply by failing to act on the proposal.

Giving the President item veto or similar power would certainly represent a shift in the constitutional balance of powers, but it is unlikely to have any significant effect on deficits. Because the item veto and its statutory substitutes would apply only to discretionary spending, which represents only about 40 percent of total outlays and is growing much more slowly than mandatory spending, the item veto's potential to reduce the deficit or control spending is necessarily limited.

The item veto has limited potential to reduce even the discretionary portion of the budget. Because the Budget Enforcement Act's spending caps represent a statutory agreement between the President and the Congress on the level of discretionary spending, the item veto is unlikely to spur additional reductions. Any reductions in appropriations from line-item vetoes are likely to be replaced by other spending, so the only result would be a shift in the composition of spending.

Even if discretionary spending limits were not in place, Presidents are likely to use the threat of vetoes to gain increases in spending they support rather than to reduce spending overall. Only Presidents who value reduced spending over pursuing their own spending priorities are likely to even try to use the item veto for deficit reduction.

Because an item veto would shift the balance of power between the President and the Congress, it probably would affect the distribution of spending by substituting some Presidential budget priorities for Congressional ones. Evidence from studies of the states' use of the item veto supports this claim; state governors have used it to shift state spending priorities rather than to decrease spending. Some analysts would argue that shifting spending priorities is sufficient reason to adopt the item veto if the President is less likely to engage in pork-barrel spending. An item veto, they claim, would make the President more responsible for spending choices and would lessen the tendency for the two branches to blame each other for the proliferation of "wasteful" spending.

another category. Separate caps also focus accountability by reducing the number of decisionmakers with primary responsibility for ensuring compliance with a cap.

The BEA's current sequestration process for discretionary programs should be used to enforce any limits on appropriations that are part of a new deficit reduction package. Any

Box 6-4.
Will Caps on Mandatory Spending Work?

Approximately half of all federal spending is for entitlements and other mandatory spending (excluding net interest payments). Payments for these programs are governed by formulas that are set in law, and spending is not constrained in the annual appropriation process. The Budget Enforcement Act's pay-as-you-go procedures were designed to prevent enactment of legislation that would erode the mandatory spending cuts and revenue increases that were enacted as a result of the 1990 budget agreement. They were not designed to prevent growth in mandatory spending that results from increases in beneficiary populations, inflation, increased use of services, or any other factors not directly under the control of the Congress and the President.

During the 102nd Congress, the Bush Administration and various Members supported the concept of placing an enforceable cap on mandatory spending. This proposal would tie the growth of spending for individual programs to the increase in the eligible population and inflation, plus a transitional percentage that would allow the change to be phased in. It would also establish a sequestration procedure to enforce a breach of that cap. Savings would be achieved if spending were held to the cap level, because the costs of some programs, notably Medicare and Medicaid, are estimated to grow much faster than their beneficiary populations and general inflation. This rapid growth in Medicare and Medicaid is primarily the result of increases in the use of hospital and physician services, changes in the quality of care, and inflation in the cost of medical care that exceeds inflation in the rest of the economy. In the absence of a fundamental restructuring of Medicare and Medicaid, holding the growth of their costs to the cap level would require real cuts in the health care services that would be available to the elderly and the poor.

Many advocates of this approach do not accompany the call for a mandatory cap with policy proposals to achieve the reductions in individual programs that are needed to avoid sequestration. Because even most advocates of a mandatory cap agree that an across-the-board sequestration is not an acceptable way to achieve the desired reduction in mandatory spending, however, the cap is likely to be met only if such specific policy changes are enacted. The most important of these would be policies that would control the long-term growth in health care costs, which represent the fastest growing part of the budget. These cuts will be hard to achieve, however, because many people will want to use any Medicare and Medicaid savings to provide greater and more affordable access to medical care for citizens who currently are not covered by government health care programs and do not have access to, or cannot afford, private health insurance.

A sequestration of mandatory programs could not be carried out easily. Government benefit checks and other mandatory spending cannot simply stop flowing after the cap is reached without disrupting, and possibly endangering, the lives of millions of citizens. Agencies in the executive branch could estimate the likely shortfall resulting from the cap and adjust all future payments to account for the effect of the limit, but that would involve an enormous amount of bureaucratic discretion and uncertainty about the benefits that will actually be provided. In any case, the courts may be asked to respond to the conflict between the legislation that authorized the mandatory spending and a requirement to sequester that spending.

By their very nature, entitlement programs are not subject to specific annual spending limits. Simply placing a limit on an entitlement program is no substitute for changing the policies controlling it. If policymakers believe that a program such as Medicare should not exceed a particular level of spending in a year, they should revamp the program and turn it into a discretionary program.

sequestration that occurs is aimed only at programs under the jurisdiction of the appropriators--and only within the offending category if there are separate category caps. Also, the scope of the sequestration is comprehensive because almost no discretionary programs are exempt.

Mandatory Spending

In contrast to its annual funding of discretionary programs, the Congress can enact changes now in mandatory programs and taxes that will achieve the multiyear deficit reduction that has been agreed to. The enforcement mechanism then merely needs to prevent legislative actions that would undo the savings that have been achieved, rather than put a cap on future spending or a floor under taxes.

In place of this approach, however, some people have proposed enacting a cap on future mandatory spending as a way to force future action to cut mandatory programs or, failing that, to achieve savings through future across-the-board sequestrations of mandatory programs. As with proposals to set fixed deficit or deficit reduction targets, the mandatory cap approach assumes that establishing a new procedure can force future agreements to take politically difficult steps (in this case, agreements to cut mandatory programs) that are currently not possible. And, as with fixed targets, a mandatory cap is likely to end up promising more than it can deliver--with gimmicks and phony estimates taking the place of real spending cuts and with promised automatic cuts lacking credibility (see Box 6-4). The most effective means of reducing mandatory spending or increasing revenues is to enact laws now that achieve multiyear deficit reduction and to enforce the new deficit reduction package by extending the BEA's PAYGO procedures for a number of years.

The PAYGO mechanism is not as well focused or comprehensive as the discretionary procedures. A tax cut that is not offset by mandatory spending cuts or tax increases would trigger a sequestration of mandatory spending rather than a tax increase. Further, the majority of mandatory spending is exempt from sequestration even though increases in exempt programs might be the cause of the sequestration. Although the current PAYGO system has worked well, expanding the application of sequestration would increase the fairness of the process and expand the number of policymakers with strong incentives to avoid sequestration. The President and the Congress should consider making an automatic increase in taxes a part of PAYGO sequestration and broadening the base of programs that are subject to sequestration to include the vast amount of spending on programs that primarily benefit the middle class. These actions would be likely to ensure that advocates of these benefit programs and advocates of low taxes would actively oppose any legislation that might lead to a PAYGO sequestration.

Conclusion

The past indicates that efforts to reduce the deficit are most likely to be successful if the President and the Congress first agree on policy actions and then set up processes to enforce them: deficit reduction does not work as well if the process changes precede the policy actions. For example, both Gramm-Rudman-Hollings and the proposed balanced budget amendment try to force agreement on specific deficit-reducing actions. Processes are not as good at forcing agreements, however, as they are at enforcing them. Procedures are important, but they should not be asked to do what they cannot. If agreement exists on policy actions, many of the major process changes (such as the balanced budget amendment, the line-item veto, and mandatory caps) that have been advocated are superfluous. The Congress and the President should avoid any temptation to substitute process for policy, but should recognize the importance of process in ensuring that policy changes are realized.

Appendixes

Appendix A

Discretionary Spending Limits

The Budget Enforcement Act of 1990 (BEA) requires the Congressional Budget Office (CBO) to issue a sequestration preview report for the coming fiscal year five days before the President submits the budget and the Office of Management and Budget (OMB) issues its sequestration preview report. For the past two years, CBO's sequestration preview report has appeared as Appendix A of this volume. This year, however, the Presidential transition has delayed the President's budget submission, the OMB sequestration report, and, therefore, the CBO sequestration report. No date for issuing the President's budget and the OMB sequestration report had been set when this volume was prepared.

Although CBO's sequestration preview report will not be issued at this time, CBO did have to calculate the anticipated BEA limits on discretionary spending for 1994 and 1995 because the limits must be used to estimate baseline discretionary spending for this report. Discretionary spending for fiscal year 1993 is simply CBO's estimate of appropriations enacted for that year. In 1994 and 1995, however, the baseline assumes that discretionary spending will equal the estimated limits on total discretionary spending set by the BEA. In 1996 through 1998, discretionary spending in the baseline is the estimated 1995 spending limit adjusted for projected increases in the consumer price index for all urban consumers. This appendix describes how CBO calculated the spending limits used in these baseline estimates.

BEA Discretionary Spending Limits

The BEA established limits on discretionary budget authority and outlays in each fiscal year from 1991 through 1995. For 1991 through 1993, limits were imposed on each of three categories of discretionary spending: defense, international, and domestic. In 1994 and 1995, the limits apply to total discretionary spending.

Besides setting limits for each year, the BEA specified adjustments that should be made to those limits when OMB issues the various sequestration reports required by the act. CBO is also required to issue sequestration reports that include estimates of the adjustments. However, the BEA provides that CBO's reports are merely advisory and that OMB's reports are controlling in enforcing the act.

Some of the adjustments must be made in the sequestration preview report issued when the President submits the annual budget. Other adjustments are made in the sequestration update report issued each year on August 20. Still others are made only in final sequestration reports issued 15 days after the end of a Congressional session or in within-session sequestration reports that may follow enactment of supplemental appropriations. Because the actual amounts of the adjustments depend on future appropriation actions or on

future inflation rates that can only be estimated now, determining the exact level of the future adjustments is not possible.

In this report, the baseline levels of discretionary spending in 1994 and 1995 equal CBO's estimates of the spending limits for those years *after all adjustments required by the BEA have been made.* Because the discretionary spending limits in OMB's sequestration reports are controlling, the starting point for these estimates is the limits specified in the *OMB Final Sequestration Report to the President and Congress for Fiscal Year 1993,* issued on October 23, 1992. These limits have been modified by CBO's estimates of the future adjustments required by the BEA (see Table A-1). These adjustments include both those that will be made in the sequestration preview report that is to accompany the President's budget submission for 1994, and those that will be made in later sequestration reports.

Adjustments in the Sequestration Preview Report for Fiscal Year 1994

CBO estimates that the spending limits will be adjusted in the sequestration preview report for fiscal year 1994 to reflect emergency appropriations, changes in budget categories, differences between anticipated and actual inflation in fiscal year 1992, and changes in the estimated cost of credit programs.

Table A-1.
CBO Estimates of End-of-Session Discretionary Spending Limits for Fiscal Years 1994 and 1995 (In billions of dollars)

	1994		1995	
	Budget Authority	Outlays	Budget Authority	Outlays
Limits as of October 23, 1992	515.3	539.9	522.1	542.3
Adjustments in the Sequestration Preview Report for Fiscal Year 1994				
Emergency appropriations	0	0.1	0	0.2
Category changes	-0.9	-0.5	-0.1	-0.1
Change in 1992 inflation	-4.0	-2.0	-4.1	-3.1
Credit subsidy reestimates	-0.7	-0.6	-0.7	-0.6
Other Future Adjustments				
Internal Revenue Service funding above the June 1990 baseline	0.2	0.2	0.2	0.2
Change in 1993 inflation	n.a.	n.a.	-3.1	-1.5
Special allowance for discretionary new budget authority	2.9	1.4	2.9	2.2
Total	-2.6	-1.3	-4.9	-2.8
Estimated End-of-Session Limits	512.7	538.5	517.1	539.5

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

Emergency Appropriations

The BEA requires that the spending limits be adjusted to reflect the enactment of appropriations that are designated as emergency expenditures both by the legislation providing the appropriations and by the President. Although no emergency appropriations have been enacted since OMB's last sequestration report, some have become available for obligation. In a number of instances, the ability to spend appropriated funds was made contingent on the President's emergency designation. Some of these contingent appropriations were not designated as emergencies by the President when he signed the bills, were therefore not available for obligation at that time, and were not included in OMB's final sequestration report adjustments. Since the OMB final sequestration report, however, the President has designated a number of these appropriations as emergencies. The adjustments to the 1994 and 1995 outlay limits reflect the effects of the 1993 budget authority newly available as a result of these emergency designations.

Category Changes

The BEA provides for adjustments that reflect changes in budgetary concepts and definitions. Adjustments for changes in budgetary categories are made under this authority. The category changes made in these calculations result from the practice of assigning legislated changes in spending to the discretionary or pay-as-you-go (PAYGO) category of the BEA based on the committee that initiated the legislation, rather than on the nature of the spending involved. (In general, the discretionary spending caps control spending for discretionary programs, and PAYGO procedures control revenues and mandatory spending. See Chapter 6 for a description of BEA enforcement.)

The Office of Management and Budget and the budget committees have determined that any current- or budget-year costs or savings that result from provisions in an appropriation bill should be included in the estimate of discretionary spending for that year, even if the costs or savings are in a mandatory spending program. Similarly, any appropriation for a discretionary program provided in an authorizing bill is included in the PAYGO scorecard. Adjusting the discretionary spending limits for future years ensures that the appropriations committees are held responsible for any future-year effects of changes in mandatory programs included in their bills, but are not affected by appropriations for discretionary programs provided by other committees.

For example, the fiscal year 1993 appropriation act for the Departments of Labor, Health and Human Services, Education, and related agencies (Public Law 102-394) mandated a delay in paying fiscal year 1993 Medicare claims made by electronic means. This delay reduced Medicare costs by $185 million in 1993, but 1994 costs will be increased by $185 million when the delayed payments are made. The 1993 savings were included in the estimate of the 1993 appropriation bill, but rather than attributing the 1994 cost to next year's appropriation bill, the 1994 discretionary spending limit is reduced by $185 million.

Similarly, Public Law 102-334 (An Act to Partially Restore Authority Authorized in the Intermodal Surface Transportation Act of 1991), an authorizing bill included in the PAYGO scorecard, increases 1994 and 1995 outlays for discretionary highway programs. Because these outlays will be attributed to the appropriation bills in those years, the discretionary outlay limits must by increased by $82 million in 1994 and $17 million in 1995 to make sure the appropriations committees are not adversely affected by the action of the authorizing committees. Without compromising BEA enforcement, adjustments of this sort provide a simple alternative to keeping track for the duration of the BEA of any mandatory spending effects caused by appropriation actions and any discretionary spending provided by authorizing bills.

Change in 1992 Inflation

The BEA provides that the discretionary limits for 1994 and 1995 be adjusted for the difference between the actual inflation rate in 1992 and the rate that was anticipated when the BEA was enacted in 1990. Because actual inflation (measured by the implicit GNP deflator) was lower in 1992 than had been expected, the adjustment reduces the spending limits. CBO estimated the inflation adjustment using the method that OMB adopted in its 1993 sequestration preview report. This method entails adjusting only nonpersonnel costs instead of adjusting all discretionary spending. As a result, the reduction is smaller, and the resulting limits are higher, than if all spending were subject to the inflation adjustment.

CBO believes, however, that the BEA requires adjusting all discretionary spending--an interpretation endorsed by the General Accounting Office in its November 1992 report *Compliance with the Budget Enforcement Act of 1990*. Nevertheless, because OMB has the final decision in BEA matters, and in order to reduce confusion over differences between CBO and OMB estimates of the spending limits, CBO has adopted OMB's method. If the inflation adjustment were applied to all discretionary spending, however, the 1994 spending limits would be lower than the levels shown in Table A-1 by $2.2 billion in budget authority and $1.1 billion in outlays, and the 1995 limits would be lower by $2.2 billion in budget authority and $1.6 billion in outlays.

Credit Subsidy Reestimates

The BEA requires adjusting the discretionary spending limits to reflect changes in the estimated subsidy rate for discretionary credit programs. This provision was intended to hold the appropriations committees harmless for increases in the estimated subsidy cost of direct loans and loan guarantees, and to prevent a windfall if the subsidy estimates are reduced. It was feared that the subsidy estimates, first required in 1992 when the Credit Reform Act of 1990 was implemented, could be quite volatile because the information required to make the estimates was incomplete at best. The reductions shown in Table A-1 reflect CBO subsidy rates that, on balance, are lower than the rates used by OMB in fiscal year 1993. The largest adjustments result from different estimates of the subsidies involved in mortgage-backed guarantees of the Government National Mortgage Association, general and special risk and mutual mortgage insurance guarantees of the Federal Housing Administration, and direct loans of the Rural Housing Insurance Fund.

Other Future Adjustments

In addition to the adjustments anticipated in the 1994 sequestration preview report, other adjustments will be made in the future for increases in Internal Revenue Service (IRS) funding above the June 1990 baseline, differences between anticipated and actual inflation in 1993, and for a special allowance that is based on a percentage of the 1991-1993 budget authority limits on all categories of discretionary spending.

IRS Funding Above the June 1990 Baseline

The BEA provides that the spending limits be adjusted by the amount that funding for IRS compliance activities exceeds the June 1990 baseline level of such funding, except that the adjustment may not exceed amounts specified in the law for each year. CBO assumes that the level of funding will be sufficient to allow the full adjustment.

Change in 1993 Inflation

The BEA requires adjusting the discretionary spending limits in the sequestration preview report for fiscal year 1995 for the difference between the actual 1993 rate of inflation and the rate anticipated when the BEA was enacted. For that adjustment, CBO once again uses OMB's method of applying the inflation adjustment only to the nonpersonnel portion of discretionary spending. If the inflation adjustment were applied to all discretionary expenditures, the reduction would be greater than that shown in Table A-1--and the resulting 1995 caps lower--by $1.7 billion in budget authority and $0.8 billion in outlays.

Special Allowance for Discretionary New Budget Authority

The BEA also provided that, in the final sequestration reports for fiscal years 1992 and 1993, the limits on budget authority for the international and domestic categories be increased by an amount equal to a specified percentage of the cumulative total of the budget authority limits on all three categories in 1991 through 1993. The outlay limits for those categories would be increased by the outlays that would flow from the additional budget authority. The act also required that the same special budget authority allowance be provided in the final reports for 1994 and 1995 if the President chooses to exercise his option to adjust the BEA maximum deficit amounts (MDAs) for those years for all economic and technical changes. Because there are no separate limits on spending for the international or domestic categories in 1994 or 1995, the total discretionary limits for those years are adjusted.

This report went to press before January 21, 1993, the date set by the BEA for the President to declare his intentions on the MDA adjustments for this year. The estimated spending limits are based on the assumption that the President will choose to adjust the MDAs this year and next. (The BEA gives the President the option to adjust the MDAs again next year if the adjustment is made this year. If the adjustment is not made this year, it cannot be made next year, either.) If the President does not adjust the MDAs, the spending limits assumed in this report would have to be revised to exclude the special budget authority allowance.

An Analysis of Congressional Budget Estimates

In May 1991, the Congress adopted a budget resolution for fiscal year 1992 that anticipated a deficit of $279 billion. Seventeen months later, when fiscal year 1992 ended, the Treasury Department tallied the deficit at $290 billion--just $11 billion higher. This deceptively small overrun, however, conceals many factors that buffeted the budget numbers in the meantime. In this appendix, the Congressional Budget Office contrasts the actual totals in fiscal year 1992 with that year's budget resolution and then presents a 13-year retrospective. But first comes an explanation of how the differences are categorized.

Sources of Differences

CBO divides the differences between budget resolutions and actual outcomes into three categories: policy, economic, and technical.

Policy differences reflect the passage of legislation that was not explicitly anticipated in the budget resolution or legislation that cost (or saved) more money than was assumed. An example is the Tax Reform Act of 1986, which was not explicitly included in the 1987 budget resolution and which brought in a first-year surge of extra revenues. Policy differences can also reflect a failure to enact legislation that was assumed in the resolution.

Economic differences can be blamed on the budget resolution's failure to anticipate the actual performance of the economy. Every budget resolution is accompanied by assumptions about several key economic variables, chiefly gross domestic product, unemployment, inflation, and interest rates. Only the differences that can be linked rigorously to these variables are labeled economic. Such differences occur almost wholly in revenues, benefit programs, and net interest. Other differences that are arguably related to economic performance (for example, higher support payments to farmers in response to weak agricultural exports) are not lumped into this category because their relationship to the published forecast is more tenuous.

Technical differences are all other types of discrepancies. The portions of the budget that have contributed the biggest technical differences in the past 13 years are noted at the end of this appendix. Large technical differences often prompt both CBO and the Administration to review their methods of projection, but some such differences are inevitable given the size and volatility of the budget.

Assigning differences to these three categories is not always simple. In the past few years, where to put the huge differences in deposit insurance outlays has posed a particularly thorny problem. In August 1989, the Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act (FIRREA) to reform deposit insurance, beef up regulation, and fund savings and loan resolutions. It soon became clear that FIRREA did not grant enough resources, and the Resolution Trust Corporation (RTC), the agency in charge of the cleanup, has had to make several

return trips to the Congress for more funds. Because deposit insurance is a legal obligation of the government, CBO and the Administration have recently shown estimates of future outlays on the assumption that necessary funds will be provided. Buttressing this practice, the Budget Enforcement Act of 1990 (BEA) states that funding that merely honors the government's existing commitment does not count as a deficit increase on the official pay-as-you-go scorecard, signifying that it does not require offsetting tax increases or spending cuts. Even so, there have been three droughts in funding for the RTC, including one that has lasted since April 1992.

In theory, it might be possible to separate the huge differences in deposit insurance outlays into those stemming from legislative inaction and those from estimating errors. In practice, this is not only tricky but leads to perverse conclusions. Showing huge "savings" in the policy column from underfunding the savings and loan cleanup would imply that policymakers deserve praise for cutting the deficit. This is hardly the case; as CBO has consistently emphasized, delays in funding do not shrink the cleanup's total cost, but in fact tend to boost it. Thus, by convention, the differences in deposit insurance estimates, whether positive or negative, are now explicitly listed on the technical side of the tally sheet.

Table B-1.
Comparison of 1992 Budget Resolution with Actual Outcomes (In billions of dollars)

	Budget Resolution[a]	Actual[b]	Difference
Revenues	1,169.2	1,091.7	-77.5
Outlays	1,448.0	1,381.9	-66.1
Deficit	278.8	290.2	11.4

SOURCE: Congressional Budget Office.

a. Consolidated totals.

b. As reported by the Department of the Treasury, *Final Monthly Treasury Statement for Fiscal Year 1992* (October 28, 1992).

The Budget Resolution for Fiscal Year 1992

The budget process for fiscal year 1992 began in early 1991, a few months after the successful conclusion of 1990's budget summit agreement. From October through December 1990, policymakers passed tax increases and spending cuts that chopped nearly $500 billion from projected deficits for 1991 through 1995. They simultaneously passed the BEA, spelling out rules to bar legislators from increasing the deficit except under very narrow circumstances (chiefly emergencies). Thus, the act reined in one set of factors--legislative actions--that could balloon the deficit. But the budget remained susceptible to changes in economic conditions or in hard-to-project technical factors, which lie outside the direct control of legislators.

Having just wrapped up a five-year budget agreement, policymakers simply complied with its terms in early 1991 as they crafted the next year's budget blueprint. The resolution thus contained no legislative departures. It directed the appropriations committees to comply with the spending caps spelled out in the BEA. And although it did not rule out changes in tax or entitlement policies, it assumed that any legislative initiatives would comply with the budget summit's strictures, which require any such changes to be, at worst, neutral in their deficit impact.

Although the budget resolution passed the Congress soon after Operation Desert Storm, the resolution did not explicitly include spending for the costs of the conflict. But it did not need to. Under the BEA, Desert Storm was considered an emergency, and--once the Congress and the President agreed on funds--the discretionary caps would be adjusted to accommodate this spending. Thus, by omitting Desert Storm funding from the resolution, the

Congress deferred to its own appropriations committees, which were still considering legislation to cover the operation's costs.

The budget resolution called for revenues of $1,169 billion, outlays of $1,448 billion, and a deficit of $279 billion (see Table B-1). Actual revenues and outlays were sharply lower than projected, and the deficit modestly larger, for reasons that are detailed below and in Table B-2.

Changes in Policies

Policy actions boosted the deficit by $12 billion from the figure in the resolution. As noted, the budget resolution did not specifically address funding for Operation Desert Storm. CBO judges that Desert Storm-related costs totaled about $13 billion in 1992 as the military continued to replace weapons and materiel that were consumed in the conflict. Neither CBO nor other analysts can nail down these outlays precisely, because they are not segregated from other, ongoing defense outlays. Instead, analysts must sift a variety of clues, chiefly the bulges in particular categories of Defense Department outlays. Final contributions from allied nations arrived in 1992 to the tune of $5 billion. In sum, Desert Storm boosted the 1992 deficit by about $8 billion from the budget resolution's figure.

Looking at a single year's numbers can be myopic, and Desert Storm-related spending is a prime example. Total cash contributions from allied nations were $48 billion and

Table B-2.
Sources of Differences Between Actual Budget Totals and Budget Resolution Totals for Fiscal Year 1992 (In billions of dollars)

	Policy	Economic	Technical	Total
Revenues	3.0	-46.3	-34.1	-77.5
Outlays				
Defense				
Desert Storm spending	13.4	0	0	13.4
Desert Storm contributions	-4.9	0	0	-4.9
Other	-2.3	0	-3.1	-5.4
International discretionary	0.2	0	-0.8	-0.6
Domestic discretionary	1.8	0	0.5	2.2
Entitlements and other mandatory spending[a]	7.1	-0.4	17.1	23.9
Deposit insurance[a]	0	0	-88.9	-88.9
Net interest[a]	b	-18.6	1.7	-16.8
Offsetting receipts	0	0	0.4	0.4
Maximum deficit amount adjustment	0	-2.5	13.1	10.6
Total	15.2	-21.4	-59.9	-66.1
Deficit	12.2	24.9	-25.7	11.4

SOURCE: Congressional Budget Office.

NOTE: Differences are actual outcomes less budget resolution assumptions.

a. The estimates are adjusted for differences in intrabudgetary payments (interest paid to the Treasury Department by the Resolution Trust Corporation, the Bank Insurance Fund, and the Federal Housing Administration). These payments do not affect total spending or the deficit.

b. Less than $50 million.

almost entirely cover the costs of prosecuting the conflict. But most of the contributions arrived in fiscal year 1991, whereas the spending--much of it for replacement purposes--is estimated to occur over several years. So, on balance, Desert Storm reduced the deficit in 1991 but raised it slightly in later years.

Legislative action also increased other outlays, though it is important to recognize that these actions did not violate the budget resolution or the BEA. International and domestic discretionary spending together were increased by $2 billion, chiefly to cover emergencies--natural disasters, the Los Angeles riots, and the Chicago flood. However, a rescission package adopted in the spring of 1992 cut that year's discretionary outlays by about $2.5 billion, mostly in defense. Entitlements and other mandatory spending were increased by $7 billion, primarily because of three separate extensions of unemployment insurance, which were partly financed by savings in the guaranteed student loan programs and by about $3 billion in revenue increases.

Economic Factors

The economy's failure to perform as projected caused the 1992 deficit to exceed the budget resolution's target by $25 billion. The recession that began in late 1990 was deeper and the recovery weaker than expected, dampening revenues by an estimated $46 billion. But economic factors also trimmed outlays by an estimated $21 billion, almost wholly because of savings in interest costs on the public debt as short-term interest rates plunged to their lowest levels in three decades.

Technical Factors

Technical factors reduced the 1992 deficit by more than $25 billion from the level contemplated in the budget resolution--the result of sharply lower spending for deposit insurance that was only partly offset by weak revenues and greater spending for entitlements.

Deposit insurance spending fell short of expectations by $89 billion in 1992, almost wholly traceable to savings-and-loan-related outlays. Because of two interruptions in funding, the RTC was severely fettered in its operations for all of fiscal year 1992 except the January-March period; the second hiatus, which began last April, continues today. Although this legislative inaction clearly accounts for the bulk of the gap, CBO's practice is to label this particular difference as technical, for reasons that were explained earlier.

Entitlements and other mandatory spending topped expectations by $17 billion. Two-thirds of this overrun stemmed from the two soaring health care programs, Medicaid and Medicare, and the rest was scattered among Social Security, unemployment compensation, student loans, food stamps, the Postal Service, and other programs. Although the reasons for the surge in health costs are subject to debate, the most widely accepted explanations cite pressures from greater use of health services, from costly new technologies, and from the adoption of policies by many hard-pressed states to maximize their collections from the federal Medicaid program.

Revenues fell short of expectations by about $34 billion for technical reasons. In CBO's judgment, about $7 billion stemmed from moves by the Administration last February to liberalize the withholding schedules for individual income taxpayers, thereby boosting workers' take-home pay, and to change required reserve ratios for banks. (These moves did not require legislation.) The remaining shortfall of $27 billion simply means that tax collections sagged even more than the economy's performance could readily explain; capital gains tax collections account for nearly all of this difference.

The Maximum Deficit Amount Adjustment

An unusual entry in Table B-2 is the maximum deficit amount (MDA) adjustment. Al-

though the Budget Enforcement Act essentially scrapped fixed deficit targets, at least through 1993, the Congressional budget committees were still sensitive to the resolution's bottom line. In early 1991, the Office of Management and Budget (OMB) was forecasting a slightly lower deficit for 1992 than was CBO. The budget committees opted to include a downward estimating adjustment of $10.6 billion in the resolution, summarily bringing the resolution's on-budget deficit (that is, the deficit excluding Social Security and the Postal Service) down to OMB's figure. This item is displayed in Table B-2 and allocated almost wholly to technical factors, the chief area of disagreement between CBO and OMB. It is important to realize that this MDA adjustment, and similar entries in previous resolutions, merely made the resolution's totals look better; they did not take funds away from (or award money to) any particular program.

Budget Resolutions in 1980 Through 1992

The 1992 budget resolution maintained a sobering pattern. For the 13th year in a row, the actual deficit was higher than the resolution's target. The amounts of past overruns and their causes--policy, economic, and technical--are summed up in Table B-3.

Policy action or inaction (the failure to achieve savings called for in budget resolutions) has generally added to deficits. There were only three major exceptions: in fiscal year 1982, the first Reagan-era budget, when tax cuts fell shy of the resolution's assumption; in 1987, as the new Tax Reform Act temporarily swelled collections; and in 1991, when contributions from foreign nations for Operation Desert Storm poured into government coffers.

Because the budget process for a fiscal year begins roughly nine months before the year starts, economic performance is a major source of uncertainty. With just one exception (in 1989), the budget resolution has nearly always used short-term economic assumptions that proved overly optimistic. The worst errors, not surprisingly, were in years marked by recession or early stages of recovery--namely, in 1982 and 1983 and again in the 1990-1992 period. The economic differences were most pronounced in revenues and, on the spending side of the budget, in net interest.

The causes of large technical errors have varied over the years. On the revenue side, such errors were generally not very large through 1990 but soared in 1991 and 1992. On the outlay side, farm price supports, receipts from oil sales, and benefit programs generally dominated errors through the mid-1980s. Underestimates of benefit outlays, especially for health care, have continued to loom large. But since 1990, even they have paled next to huge and volatile errors in estimating outlays for deposit insurance.

Table B-3.
Sources of Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1992 (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
1992	3.0	-46.3	-34.2	-77.5
Average Difference	0.2	-18.4	-6.8	-25.0
Average Absolute Difference	6.7	26.9	9.8	31.0
		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
1992	15.2	-21.4	-59.9	-66.1
Average Difference	10.2	3.0	3.9	17.1
Average Absolute Difference	13.5	10.8	21.2	34.9
		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
1992	12.2	24.9	-25.7	11.4
Average Difference	10.0	21.4	10.7	42.1
Average Absolute Difference	17.0	24.5	19.3	42.1

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.

How the Economy Affects the Budget

The federal budget is highly sensitive to the economy. Revenues largely move with gross domestic product or, more accurately, with taxable incomes--wages and salaries, interest and other nonwage income, and corporate profits. Many benefit programs are pegged directly (like Social Security) or indirectly (like Medicare) to the inflation rate; others (chiefly unemployment compensation) are closely linked to the unemployment rate. And the Treasury is constantly borrowing and refinancing the government's debt at market interest rates.

Erroneous economic assumptions have been a chronic source of error in past budget estimates. Appendix B presented 13 years' worth of Congressional budget resolutions and noted, soberingly, that in every year but one policymakers chose economic assumptions that proved to be overly optimistic. On average, these errors caused the next year's deficit to be underestimated by more than $20 billion.

The Congressional Budget Office has distilled the links between economic assumptions and budget projections into rules of thumb for four key economic variables: real growth, unemployment, inflation, and interest rates. Table C-1 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 1993. As noted below, such rules of thumb are highly simplified and should be used with caution.

Real Growth

Strong economic growth narrows the federal deficit, and weak economic growth worsens it. In its baseline, CBO assumes that real economic growth (as measured by GDP) will approach 3 percent in 1993 through 1995, as the gap between potential and actual GDP that widened during the recession continues to narrow, and then gradually settle down to 2 percent. 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 1993 implies pallid growth of less than 2 percent annually through 1995 and even poorer performance thereafter. By 1998, the fifth year, total GDP lies more than 5 percent below CBO's baseline assumption.

Sluggish growth, in this scenario, is assumed primarily to reflect a weakness in demand--as opposed to, say, sharply lower gains in labor productivity. Thus, weak growth delivers a blow to the labor market as well, as businesses employ fewer workers; the unemployment rate inches up to 7.8 percent in 1998, 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 1993 and $97 billion by 1998 (see Table C-1). In 1998, the revenue loss is about 6.5 percent of baseline revenues, slightly greater than the loss in GDP. Outlays

Table C-1.
Effects on CBO Budget Projections of Selected Changes in Economic Assumptions (By fiscal year, in billions of dollars)

	1993	1994	1995	1996	1997	1998
Real Growth: Effect of One-Percentage-Point Lower Annual Rate Beginning January 1993						
Change in Revenues	-7	-22	-40	-58	-77	-97
Change in Outlays						
Net interest (Debt service)	a	1	3	7	12	18
Other	1	2	4	6	9	11
Total	1	3	7	13	20	29
Change in Deficit	8	25	47	70	98	126
Unemployment: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1993						
Change in Revenues	-29	-43	-43	-43	-43	-44
Change in Outlays						
Net interest (Debt service)	1	3	6	10	13	17
Other	3	5	5	5	5	5
Total	4	8	11	15	18	22
Change in Deficit	33	50	54	58	61	66
Inflation: Effect of One-Percentage-Point Higher Annual Rate Beginning January 1993						
Change in Revenues	6	18	32	46	60	76
Change in Outlays						
Net interest						
Higher rates	5	15	21	26	31	36
Debt service	a	a	a	1	1	2
Other	1	5	13	26	41	57
Total	5	20	34	53	73	95
Change in Deficit	-1	2	3	7	13	19
Interest Rates: Effect of One-Percentage-Point Higher Annual Rates Beginning January 1993						
Change in Revenues	0	0	0	0	0	0
Change in Outlays						
Net interest						
Higher rates	5	15	21	26	31	36
Debt service	a	1	2	4	6	9
Other	a	a	a	1	1	1
Total	5	16	24	31	38	46
Change in Deficit	5	16	24	31	38	46

SOURCE: Congressional Budget Office.

a. Less than $500 million.

for benefit programs, mainly Unemployment Insurance, are boosted by a modest $1 billion in 1993 but by larger amounts thereafter, culminating in $11 billion in extra spending in 1998. But over time, an even bigger impact on spending occurs in net interest. As revenues falter, the government borrows more and incurs greater debt-service costs. In sum, the deficit in 1998 would be an estimated $126 billion greater--about one-third bigger--than in CBO's baseline projection if real growth were 1 percentage point lower than projected.

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 rule that expresses this relationship is named after economist Arthur Okun. Okun's law generalizes that an extra percentage point of unemployment is accompanied by a 2½ percent loss in GDP.

In CBO's baseline, the unemployment rate gradually drops from 7.1 percent in 1993 to 5.7 percent in 1998. This second rule of thumb assumes instead that unemployment shoots up to 8.1 percent in 1993 and averages 6.7 percent in 1998. 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. Together, these effects push the deficit up by $33 billion in 1993 and $66 billion in 1998.

It is illuminating to compare this example with the first rule of thumb, which depicted the effects of prolonged feeble growth. Under Okun's law, it takes about 2½ years of lower growth, as posited in the first rule, to generate an extra percentage point of unemployment. GDP and taxable incomes in the first scenario thus lie above their counterparts in the second rule of thumb through mid-1995, but farther and farther below them thereafter. The budgetary impacts closely follow this pattern.

Inflation

Inflation has mixed effects on the federal budget. If inflation is higher than CBO assumes--but other economic variables, chiefly real growth, are unaffected--taxable incomes and, hence, revenues will be greater. But higher inflation also boosts spending. Nearly all benefit programs would pay more; so would discretionary programs, albeit with a lag, unless policymakers were content to ignore the steady erosion of real resources. And interest rates would almost surely rise with inflation, fueling higher debt-service costs.

Greater inflation would narrow the deficit marginally in the first year or two, because revenues would respond more or less instantly but outlays would react with a lag. These lags occur because many spending programs (for example, those with cost-of-living adjustments that take place every January) would not respond at all in the first year, and because, as noted below, the refinancing of the federal debt at prevailing interest rates takes place only gradually. But this short-term bonus fades with time, and after a few years, the deficit is bigger. If inflation is 1 percentage point higher than CBO assumes--that is, if the consumer price index grows by about 4 percent annually in 1993 through 1998 and other measures of inflation rise in tandem--the extra spending would eventually exceed the additional revenues, as shown in Table C-1. By 1998, the deficit is up by $19 billion. Of course, nominal incomes and GDP are commensurately larger; relative to GDP, the deficit is 4.5 percent, the same as in the baseline.

The effects of inflation on the budget are subtle, and different conclusions are possible if one or two key assumptions are varied. The assumption that interest rates rise in tandem with inflation is crucial; $5 billion of the extra spending in 1993 and $36 billion in 1998 hinge on it (see Table C-1). And the policy regarding discretionary programs is also critical. CBO explicitly assumes in its rule of thumb that policymakers would appropriate

more dollars in response to a jump in inflation, preserving the real resources of the programs they are funding. The Budget Enforcement Act of 1990 pushes discretionary spending, in the aggregate, on a downward path through 1995, but still provides explicitly that the dollar caps must be adjusted for higher (or lower) inflation. In 1995 and 1998, the extra discretionary spending that CBO incorporates in this rule of thumb amounts to $1 billion and $18 billion, respectively--about equal to the deficit increase. Relaxing this assumption would imply that higher inflation trims the deficit, but at a hidden sacrifice: a continuing erosion in the real resources of discretionary programs.

The Office of Management and Budget (OMB) typically presents its own rules of thumb in its budget reports. In this year's version, OMB's rules of thumb strongly resemble CBO's, with one conspicuous exception.[1] OMB shows that higher inflation has a beneficial effect on the deficit, boosting revenues by more than outlays. This apparent disagreement is almost wholly traceable to the absence of any adjustment to discretionary spending in OMB's version--highlighting yet again the vital importance of this assumption.

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. Assuming that interest rates are 1 percentage point higher than in the baseline for all maturities in each year would drive up interest costs by an estimated $5 billion in 1993. The initial effects are dominated by the extra costs of refinancing the government's short-term Treasury bills, which make up about one-fourth of the marketable debt; more than $600 billion worth of Treasury bills are now outstanding, and none have a maturity of more than a year.

The bulk of the marketable debt actually consists of medium- and long-term securities, chiefly those with initial maturities of two to 10 years, rather than short-term bills. Many of these come due for refinancing gradually but inexorably over the next few years. And the Treasury continuously adds new debt to finance the deficit. Thus, the budgetary effects mount as more and more debt is hit by the higher rates. By 1998, almost all of the debt is affected. Of the marketable debt outstanding in that final year, CBO estimates that nearly 40 percent was initially borrowed during the 1993-1998 period and was therefore affected by the higher rates; about 45 percent was already outstanding in early 1993 but was refinanced during the 1993-1998 period; and only 15 percent was unaffected. The resulting increase in the 1998 deficit is $46 billion. This final rule of thumb incorporates small changes in other interest-sensitive spending programs, chiefly student loans. It does not, however, include any changes in revenues or in deposit insurance spending, since the impact of higher interest rates on these areas is not obvious.

Conclusions and Caveats

The rules of thumb vividly illustrate the sensitivity of budget projections to economic assumptions. The rules are roughly symmetric: higher real growth, lower interest rates, and so forth would also affect the budget, changing the deficit in each case by roughly the same amount but in the opposite direction as their counterparts in Table C-1.

Although rules of thumb are a good, simple way to illustrate the links between economic performance and budget outcomes, they have their limitations. Sustained errors of 1 percentage point are used for simplicity; they do not represent typical forecasting errors. Neither the size nor the timing of errors is likely

1. Office of Management and Budget, *Budget Baselines, Historical Data, and Alternatives for the Future* (January 1993), pp. 158-161.

to match these smooth paths. Some variables, such as interest rates, are notoriously harder to predict than others; a sustained error of 1 percentage point in interest rates is much likelier than a similar error in the projection of real growth. In addition, 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 and are not directly related to economic forecasting; there is no similarly easy way, however, to capsulize the variability of budget outcomes that can stem from technical uncertainty.

Appendix D

The Federal Sector of the National Income and Product Accounts

The economic influence of the federal government can be measured through the national income and product accounts (NIPAs), an alternative to the usual budget presentation. 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. One example is the shift of selected dollars from the spending to the receipts side of the budget (or, less commonly, in the other direction). Such shifts are referred to as netting and grossing adjustments. They mostly affect certain receipts that the budget displays as negative outlays because they are voluntary or intrabudgetary in nature and are not deemed to result from the government's taxing power. In order to portray a more comprehensive measure of receipts from all sources, the NIPAs shift these negative outlays from the expenditures to the receipts side of the ledger (see Table D-1). This shift obviously does not affect the deficit.

Foremost among netting and grossing adjustments are intrabudgetary receipts for retirement contributions on behalf of federal workers ($53 billion in 1993) and voluntary premiums for Medicare coverage ($15 billion in 1993). In recent years, another growing item has been deposit insurance premiums. Deposit insurance outlays are financed in part by premiums levied on banks and thrift institutions; these premiums have correspondingly boosted the netting and grossing adjustment.

Another difference between the federal budget and the NIPAs, the treatment of lending and financial transactions, does affect the deficit. The NIPA totals exclude 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).

Sometimes the gap between the budget totals and their NIPA counterparts is wider than can be readily explained. A conspicuous example is federal receipts in fiscal year 1992. Even after the familiar adjustments--chiefly for netting and grossing and geographic exclusions--are made, NIPA receipts appear surprisingly low in 1992 (as evidenced by the negative $18 billion in "other adjustments" in Table D-1, an entry that is normally close to

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

	Estimate 1992[a]	1993	1994	1995	1996	1997	1998
				Receipts			
Revenues (Budget basis)[b]	1,092	1,143	1,215	1,291	1,356	1,414	1,482
Differences							
Netting and grossing							
Government contributions for employee retirement	52	53	56	59	62	66	69
Medicare premiums	13	15	17	20	21	22	23
Deposit insurance premiums	7	8	8	9	9	9	10
Other	1	1	c	c	-1	-2	-2
Geographic exclusions	-2	-2	-3	-3	-3	-3	-3
Other	-18	6	3	1	2	7	3
Total	53	81	82	86	90	99	99
Receipts (NIPA basis)	1,145	1,223	1,297	1,377	1,446	1,513	1,581
				Expenditures			
Outlays (Budget basis)[b]	1,382	1,453	1,507	1,575	1,643	1,733	1,839
Differences							
Netting and grossing							
Government contributions for employee retirement	52	53	56	59	62	66	69
Medicare premiums	13	15	17	20	21	22	23
Deposit insurance premiums	7	8	8	9	9	9	10
Other	1	1	c	c	-1	-2	-2
Lending and financial transactions							
Deposit insurance	-5	-7	-15	-15	-4	8	2
Other	-11	-10	-6	-3	4	c	1
Defense timing adjustment	4	4	3	3	3	2	2
Geographic exclusions	-8	-8	-8	-9	-9	-10	-10
Other	-2	-6	-9	-6	-3	-6	-6
Total	51	50	47	57	81	89	88
Expenditures (NIPA basis)	1,433	1,503	1,554	1,632	1,724	1,822	1,927
				Deficits			
Deficit (Budget basis)[b]	290	310	291	284	287	319	357
Differences							
Lending and financial transactions	-16	-17	-21	-18	c	8	3
Defense timing adjustment	4	4	3	3	3	2	2
Geographic exclusions	-6	-6	-6	-6	-6	-7	-7
Other	17	-12	-12	-7	-5	-13	-9
Total	-1	-31	-35	-29	-9	-10	-11
Deficit (NIPA basis)	289	279	257	255	278	309	346

SOURCE: Congressional Budget Office.

a. Differences estimated by CBO.

b. Includes Social Security and the Postal Service.

c. Less than $500 million.

zero). Such a large gap suggests that NIPA receipts are ripe for upward revision. Under the Bureau of Economic Analysis's usual schedule, the likeliest opportunity for such a revision will come next July. In its 1993-1998 projections, CBO does not assume that this large, unexplained difference will persist.

NIPA Receipts and Expenditures

The federal sector of the NIPAs generally portrays receipts according to their source and expenditures according to their purpose and destination. Table D-2 divides receipts and expenditures into their NIPA categories.

The leading source of receipts for the federal government in the 1993-1998 period is taxes and fees paid by individuals. Following this category closely are contributions (including premiums) for social insurance such as Social Security, Medicare, and federal employees' retirement. Both sources are expected to top $500 billion in 1993. The remaining categories are corporate profits tax accruals, including the earnings of the Federal Reserve System, and indirect business tax and nontax accruals (chiefly from excise taxes and fees).

Classifying government expenditures according to their purpose and destination is somewhat more problematic. Defense and nondefense purchases of goods and services clearly enter directly into gross domestic product. The effect of the remaining expenditure categories is less straightforward, however, because their effect on GDP hinges on the recipients' use of the funds. For example, transfer payments (led by Social Security) may be used for a variety of purchases--from durable goods to services--or may be saved, and they will not be counted as part of GDP until the funds are spent. Another category, grants to state and local governments, ultimately translates into state and local transfers (such as Medicaid) or purchases (such as highway construction).

Although both the budget and the NIPAs contain a category labeled net interest, the two measures differ slightly. Two major areas of difference are the treatment of the Federal Financing Bank's (FFB's) 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 simultaneously dampens net interest in the budget totals and swells deposit insurance. The NIPAs, by contrast, reflect this particular cost of deposit insurance agencies in net interest. In 1993, interest paid to the FFB by the deposit insurance funds is estimated to be about $4 billion.

An opposing difference pushes estimates of NIPA net interest below those in the unified budget. The NIPAs consider interest received on late payments of personal and business taxes to be offsets to federal interest payments, thereby lowering net interest payments by $10 billion to $13 billion each year through 1998. Finally, recent data on federal net interest expenditures from the Bureau of Economic Analysis contain a fairly large downward adjustment (about $5 billion) without obvious explanation.

The category labeled "subsidies less current surplus of government enterprises" contains two components, as its name suggests. The first--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 two-thirds of 1993 subsidy outlays.

The second portion of the category is the current surplus of government enterprises. Government enterprises are certain business-type operations of the government--for example, the Postal Service. The operating costs

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

	Estimate 1992	1993	1994	1995	1996	1997	1998
			Receipts				
Personal Tax and Nontax Receipts	470	509	539	576	609	638	672
Corporate Profits Tax Accruals	111	122	132	140	148	156	161
Indirect Business Tax and Nontax Accruals	80	84	86	89	87	89	92
Contributions for Social Insurance	484	509	540	572	602	629	655
Total	1,145	1,223	1,297	1,377	1,446	1,513	1,581
			Expenditures				
Purchases of Goods and Services							
Defense	315	308	305	311	318	326	334
Nondefense	132	139	147	152	156	160	166
Subtotal	446	447	452	462	474	486	500
Transfer Payments							
Domestic	595	632	667	712	758	805	855
Foreign	10	13	14	14	14	15	15
Subtotal	604	645	680	726	772	820	870
Grants-in-Aid to State and Local Governments	169	192	207	222	238	255	274
Net Interest	188	187	199	218	237	255	275
Subsidies Less Current Surplus of Government Enterprises	25	32	28	28	27	29	31
Required Reductions in Discretionary Spending	n.a.	n.a.	-13	-25	-24	-23	-23
Total	1,433	1,503	1,554	1,632	1,724	1,822	1,927
			Deficit				
Deficit	289	279	257	255	278	309	346

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

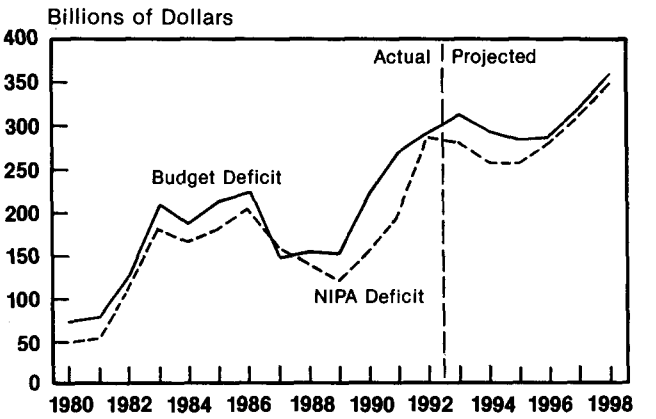
of government enterprises are mostly covered by the sale of goods and services to the public rather than by tax receipts. The difference between sales and current operating expenses is the enterprise's surplus or deficit. In 1993, the current surplus of government enterprises will be approximately $2 billion. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs), private entities established and chartered by the federal government to perform specific financial functions, usually under the supervision of a government agency. 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 in the federal sector of the NIPAs.

As emphasized in Chapter 3, policymakers must comply with discretionary spending caps in future years, but may do so in any number of ways. The final category in Table D-2 depicts these unspecified savings in 1994 and beyond. The savings cannot be assigned to particular NIPA categories, but are most likely to come from defense and nondefense purchases and from grants.

NIPA Deficits

In the early and mid-1980s, the NIPA deficit and the unified budget deficit generally paralleled each other, with the NIPA deficit several billion dollars lower than its budget counterpart (see Figure D-1). Since then, variations in the relationship between the two have fluctuated more widely because of large swings in lending and financial exclusions. For example, sizable deposit insurance outlays in 1989 through 1991 widened the gap between the NIPA and unified budget deficit significantly. In 1992, when deposit insurance spending was minimal, the gap between the NIPA and unified measures narrowed.

Figure D-1.
A Comparison of NIPA and Budget Deficits, Fiscal Years 1980-1998



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

NOTE: NIPA = national income and product accounts.

In the Congressional Budget Office's current baseline projections, the NIPA deficit runs approximately $30 billion below the budget deficit through 1995, after which the gap shrinks to around $10 billion. As Table D-1 shows, lending and financial transactions in general, and deposit insurance in particular, are primarily responsible for this pattern.

Appendix E

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 1992 are reported in Table E-1, along with estimates of potential gross domestic product, actual GDP, and the nonaccelerating inflation rate of unemployment (NAIRU). Data consistent with the budget projections in the report are available for fiscal years 1962 through 1992 and are reported in Tables E-2 through E-11. 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 E-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 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 E-2 and E-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 E-4 and E-5. Social insurance taxes and contributions include employer and employee payments for Social Security, Medicare, Railroad Retirement, and 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 wind-fall 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 E-6 and E-7. In order to compare historical outlays with the projections discussed in Chapter 3, 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 E-8 and E-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 E-10 and E-11. Net interest is identical to the budget function with the same name (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.

Table E-1.
Standardized-Employment Deficit and Related Series, Fiscal Years 1956-1992 (In billions of dollars)

	Standardized-Employment			Gross Domestic Product		NAIRU[a]
	Revenues	Outlays	Deficit(-)	Potential	Actual	(Percent)
1956	73.1	71.2	1.9	416.2	416.3	5.1
1957	79.5	77.3	2.2	439.1	438.3	5.1
1958	84.3	82.0	2.3	448.0	448.1	5.0
1959	82.4	91.2	-8.8	477.9	480.2	5.1
1960	95.2	92.1	3.1	505.9	504.6	5.2
1961	100.5	96.8	3.7	516.9	517.0	5.2
1962	103.4	106.5	-3.0	554.4	555.2	5.2
1963	109.8	111.4	-1.7	585.0	584.5	5.4
1964	112.6	118.9	-6.3	626.5	625.3	5.4
1965	114.7	119.3	-4.5	671.4	671.0	5.6
1966	124.1	136.7	-12.7	738.6	735.4	5.6
1967	142.6	160.1	-17.5	791.3	793.3	5.6
1968	146.5	181.1	-34.7	849.8	847.2	5.6
1969	178.6	187.6	-9.1	925.6	925.7	5.6
1970	190.8	199.0	-8.1	985.8	985.4	5.6
1971	191.2	210.9	-19.6	1,051.8	1,050.9	5.7
1972	210.6	231.2	-20.6	1,146.0	1,147.8	5.8
1973	224.6	247.8	-23.2	1,278.3	1,274.0	5.8
1974	260.6	272.3	-11.7	1,403.7	1,403.6	5.8
1975	296.7	327.7	-30.9	1,511.3	1,509.8	6.0
1976	317.5	363.7	-46.3	1,685.5	1,684.2	5.9
1977	367.4	405.7	-38.4	1,919.8	1,917.2	6.0
1978	402.4	457.7	-55.3	2,156.4	2,155.0	5.9
1979	462.7	505.3	-42.7	2,431.9	2,429.5	5.9
1980	538.9	586.7	-47.7	2,644.5	2,644.1	5.9
1981	633.0	670.4	-37.4	2,964.8	2,964.4	6.0
1982	683.5	730.3	-46.7	3,124.9	3,122.2	5.9
1983	677.8	783.1	-105.2	3,317.0	3,316.5	5.9
1984	704.9	837.9	-133.1	3,696.8	3,695.0	5.8
1985	760.5	938.0	-177.4	3,970.9	3,967.7	5.8
1986	794.2	978.9	-184.7	4,219.6	4,219.0	5.7
1987	875.6	994.5	-118.9	4,453.3	4,452.4	5.7
1988	902.7	1,053.9	-151.2	4,810.0	4,808.4	5.7
1989[b]	979.5	1,125.2	-145.7	5,175.8	5,173.3	5.6
1990[b]	1,035.1	1,196.0	-161.0	5,468.0	5,467.1	5.6
1991[b]	1,111.8	1,291.6	-179.8	5,814.2	5,632.6	5.6
1992[b]	1,163.9	1,365.4	-201.5	6,140.3	5,868.6	5.5

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 E-2.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1992 (In billions of dollars)

			Deficit (-) or Surplus				Debt
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	Held by the Public[a]
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	263.7
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	1,143.2	-205.2	52.4	0.3	-152.5	2,189.3
1990	1,031.3	1,252.7	-278.0	58.2	-1.6	-221.4	2,410.4
1991	1,054.3	1,323.8	-321.7	53.5	-1.3	-269.5	2,687.9
1992	1,091.6	1,381.8	-340.3	50.7	-0.6	-290.2	2,998.6

SOURCE: Congressional Budget Office.

a. End of year.

Table E-3.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1992 (As a percentage of GDP)

			Deficit (-) or Surplus				Debt Held by the Public[a]
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	
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	41.2
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	42.3
1990	18.9	22.9	-5.1	1.1	b	-4.0	44.1
1991	18.7	23.5	-5.7	1.0	b	-4.8	47.7
1992	18.6	23.5	-5.8	0.9	b	-4.9	51.1

SOURCE: Congressional Budget Office.

a. End of year.

b. Less than 0.05 percent.

Table E-4.
Revenues by Major Source, Fiscal Years 1962-1992 (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
1992	476.5	100.3	413.7	45.6	11.1	17.4	27.1	1,091.6

SOURCE: Congressional Budget Office.

Table E-5.
Revenues by Major Source, Fiscal Years 1962-1992 (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
1992	8.1	1.7	7.0	0.8	0.2	0.3	0.5	18.6

SOURCE: Congressional Budget Office.

Table E-6.
Outlays for Major Spending Categories, Fiscal Years 1962-1992 (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	175.6	189.7	-0.6	26.7	-19.6	371.8
1977	197.1	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	308.2	340.6	-1.4	68.8	-37.9	678.2
1982	326.2	372.7	-2.2	85.0	-36.0	745.8
1983	353.4	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	465.1	494.2	10.0	151.8	-57.0	1,064.1
1989	489.7	526.2	22.0	169.3	-63.9	1,143.2
1990	501.7	567.4	58.1	184.2	-58.8	1,252.7
1991	534.8	634.2	66.3	194.5	-106.0	1,323.8
1992	537.4	711.2	2.6	199.4	-68.8	1,381.8

SOURCE: Congressional Budget Office.

Table E-7.
Outlays for Major Spending Categories, Fiscal Years 1962-1992 (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
1992	9.2	12.1	a	3.4	-1.2	23.5

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Table E-8.
Discretionary Outlays, Fiscal Years 1962-1992 (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	319.7	19.7	195.4	534.8
1992	304.3	19.2	213.9	537.4

SOURCE: Congressional Budget Office.

Table E-9.
Discretionary Outlays, Fiscal Years 1962-1992 (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	6.1	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	6.2	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	6.1	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	5.7	0.3	3.5	9.5
1992	5.2	0.3	3.7	9.2

SOURCE: Congressional Budget Office.

Table E-10.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1992 (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	31.0	437.4	526.2
1990	41.1	58.8	99.9	246.5	107.4	59.9	17.5	6.5	29.8	467.5	567.4
1991	52.5	69.7	122.2	266.8	114.2	64.4	25.1	10.1	31.4	512.0	634.2
1992	67.8	78.7	146.5	285.1	129.4	66.6	36.9	9.3	37.5	564.7	711.2

SOURCE: Congressional Budget Office.

a. Less than $50 million.

Table E-11.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1992 (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	8.6	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
1992	1.2	1.3	2.5	4.9	2.2	1.1	0.6	0.2	0.6	9.6	12.1

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Appendix F

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
Matthew Melillo	Excise taxes, national income and product account receipts
Linda Radey	Excise taxes
John Stell	Customs duties, miscellaneous receipts
David Weiner	Individual income taxes, social insurance contributions

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Eugene Bryton	Defense
Kent Christensen	International affairs
Victoria Fraider	Veterans' benefits, defense
Raymond Hall	Defense
Barbara Hollinshead	Defense
William Myers	Defense
Mary Helen Petrus	Veterans' compensation and pensions
Amy Plapp	Defense
Kathleen Shepherd	Veterans' benefits
Lisa Siegel	Defense
Joseph Whitehill	International affairs

Human Resources

Wayne Boyington	Civil Service Retirement, Railroad Retirement
Paul Cullinan	Social Security
Alan Fairbank	Hospital Insurance
Scott Harrison	Medicare
Jean Hearne	Medicaid
Lori Housman	Medicare
Julia Isaacs	Food stamps, foster care, child care
Deborah Kalcevic	Education

Lisa Layman	Medicare
Josh Leichter	Social service programs, Head Start
Jeffrey Lemieux	Federal employee health benefits
Cory Oltman	Unemployment Insurance, training programs
Pat Purcell	Supplemental Security Income, Medicaid
Connie Takata	Public Health Service
John Tapogna	Aid to Families with Dependent Children, child support enforcement

Natural and Physical Resources

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

Other

Janet Airis	Appropriation bills
Edward Blau	Appropriation bills
Michael Campbell	Computer support
Karin Carr	Budget projections, historical data
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support
Glen Goodnow	Authorization bills
Alice Grant	Appropriation bills
Leslie Griffin	Budget projections, civilian agency pay
Vernon Hammett	Computer support
Ellen Hays	Other interest, credit programs
Sandra Hoffman	Computer support
Jeffrey Holland	Net interest on the public debt, national income and product accounts
Terri Linger	Computer support
Fritz Maier	Computer support
Kathy Ruffing	Treasury borrowing, interest, and debt
Robert Sempsey	Appropriation bills

Glossary

The definitions of terms in this glossary reflect their usage in this report. Some entries sacrifice precision for brevity and clarity to the lay reader. Where appropriate, sources of data for economic variables are indicated as follows:

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. (Bureau of Economic Analysis)

appropriation act: A statute under the jurisdiction of the House and Senate Committees on Appropriations that provides budget authority. Enactment generally follows adoption of authorizing legislation unless the authorization itself provides the budget authority. Currently, 13 regular appropriations acts are enacted annually. When necessary, the Congress may enact supplemental or continuing appropriations.

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 and Emergency Deficit Control Act of 1985: Also known as Gramm-Rudman-Hollings or the Balanced Budget Act, 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 new budget procedures as well as revised targets through fiscal year 1995, which exclude the Social Security trust funds. The President has the option of adjusting the deficit targets for revised economic and technical assumptions when submitting the budget for 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 (BEA), the baseline for revenues and entitlement spending generally assumes that laws now on the statute books will continue. The discretionary spending projections are based on the discretionary spending caps set by the BEA in 1994 and 1995 and are adjusted for inflation in 1996 through 1998.

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

budget authority: Legal authority to incur financial obligations that will result in spending of federal government funds. Budget authority may be provided in an authorization or in an appropriation act. 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 (BEA): 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 BEA provides for new budget targets, sequestration procedures, pay-as-you-go procedures, credit reform, and various other changes.

budget function: One of 20 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. Three functions--net interest, allowances, 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, 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 resolution sets guidelines for Congressional action, but it is not signed by the President and does not become law. 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 the funds raised by an individual, business, or government by issuing securities, such as a mortgage, stock certificate, or bond. *Human capital* is a term for education, training, health, and other attributes of the work force that increase its ability to produce goods and services.

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. (Bureau of Economic Analysis)

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. One such index is constructed by the University of Michigan Survey Research Center based on surveys of consumers' views of the state 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. (Bureau of Economic Analysis)

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 on 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, which was part of the Budget Enforcement 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 of interest and principal, adjusted for 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. See **present value**.

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. (Bureau of Economic Analysis)

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 deficit**. (CBO)

debt held by the public: Debt issued by the federal government and held by nonfederal investors (including the Federal Reserve System).

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.

debt service: Payment of scheduled interest obligations on outstanding debt.

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 an authorization, (b) entitlement authority (including mandatory spending contained in appropriation acts), and (c) the Food Stamp program. A synonym is **mandatory spending**. Compare with **discretionary spending**.

discount rate: The interest rate the Federal Reserve System charges 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 whose funding levels are determined through the appropriation process. Congress has the discretion each year to determine how many dollars will be devoted to continuing current programs and funding new ones. Discretionary spending is divided among three categories: defense, international, and domestic. Compare with **direct spending**.

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: Annual 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. (Bureau of Economic Analysis)

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. (Bureau of Economic Analysis)

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. Although the level of spending for these programs is controlled by the authorizing legislation, funding may be provided either in an authorization or in an appropriation act. The best-known entitlements are the major benefit programs, such as Social Security and Medicare; other entitlements include farm price supports and interest on the federal debt. See **direct spending.**

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: See **trust funds.**

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: As the central bank of the United States, the Federal Reserve is responsible for conducting the nation's monetary policy and overseeing credit conditions.

final sales to domestic purchasers: Gross domestic product minus both net exports and the change in business inventories during a given period. (Bureau of Economic Analysis)

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 deficit.

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 short-term growth of output and income, whereas a "tight" fiscal policy restrains their growth. Movements in the standardized-employment 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 determine 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 1992 began October 1, 1991, and ended September 30, 1992.

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 expenditures because they exclude transfer payments (which include grants to state and local governments and net interest paid). (Bureau of Economic Analysis)

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. (Bureau of Economic Analysis)

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. (Bureau of Economic Analysis)

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.

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. (Bureau of Economic Analysis)

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. *Investment in human capital* is spending on education, training, health services, and other activities that increase the productivity of the work force. Investment in human capital is not treated as investment in the national income and product accounts.

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 October 1, 1992 (the effective date of 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.

mandatory spending: Another term for **direct spending**.

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 transactions of the financing accounts established under credit reform.

means-tested programs: Programs that provide cash or services to people who meet a test of need based on income and assets. 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. (Bureau of Economic Analysis)

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 are easily convertible 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.

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. (Bureau of Economic Analysis)

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. (Bureau of Economic Analysis)

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.

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**.

nonresidential structures: Primarily business buildings (such as industrial, office, and other commercial buildings) and structures (such as mining and well shafts). (Bureau of Economic Analysis)

off-budget: Spending or revenues excluded from the budget totals by law. The revenues and outlays of the two Social Security trust funds and the net surplus or deficit of the Postal Service are currently off-budget and (except for discretionary Social Security administrative costs) are not included in any Budget Enforcement Act (BEA) calculations. Medicare Hospital Insurance revenues and outlays are also designated as off-budget, but the BEA treats them as on-budget.

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.

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 promissory notes, such as those of the former Federal Savings and Loan 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, legislation affecting direct spending and receipts does 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. (Bureau of Economic Analysis)

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)

present value: A single number that expresses a flow of current and future income (or payments) in terms of an equivalent lump sum received (or paid) today. The calculation of present value de-

pends on the rate of interest. For example, given an interest rate of, say, 5 percent, today's 95 cents will grow to $1 next year. Hence, the present value of $1 payable a year from today is only 95 cents.

private saving: Saving by households and businesses. Private saving is equal to personal saving plus after-tax corporate profits less dividends paid. (Bureau of Economic Analysis)

producers' durable equipment: Primarily nonresidential capital equipment--such as computers, machines, and transportation equipment--owned by businesses. (Bureau of Economic Analysis)

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.

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 expected inflation rate. 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 that collect money arising from the exercise of the government's sovereign powers are included as 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. (Bureau of Economic Analysis)

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. (Bureau of Economic Analysis)

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 legislation affecting direct spending and receipts increases 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 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 deficit: Same as **standardized-employment 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. (Bureau of Economic Analysis)

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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