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CONGRESSIONAL BUDGET OFFICE

The Economic and Budget Outlook: Fiscal Years 1995-1999

A Report to the Senate and House Committees on the Budget

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THE ECONOMIC AND BUDGET OUTLOOK: FISCAL YEARS 1995-1999

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NOTES

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

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 each year. It satisfies the requirement of section 202(f) of the Congressional Budget Act of 1974 for CBO to submit periodic reports to the Committees on the Budget with respect to fiscal policy. 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. Joyce Manchester wrote the chapter. Thomas Loo carried out the economic forecast and projection. Robert Arnold, Douglas Elmendorf, Victoria Farrell, Douglas Hamilton, Adrienne Kearney, Kim Kowalewski, Thomas Loo, Joyce Manchester, Angelo Mascaro, Frank Russek, Matthew Salomon, John Sturrock, and Christopher Williams provided comments and background analysis. Derek Briggs, Laurie Brown, Blake Mackey, and Michael Simpson provided research assistance.

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 and Richard A. Kasten wrote Chapter 2. The appendixes were written by James Horney (Appendix A), Kathy A. Ruffing (Appendix B), Leslie C. Griffin (Appendix C), Jeffrey Holland (Appendix D), Karin Carr (Appendix E), and Joyce Manchester (Appendix F). James Horney 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 Michael Boskin, Barry Bosworth, Robert Dederick, Martin Feldstein, Stanley Fischer, Benjamin Friedman, Lyle E. Gramley, Robert Hall, Lawrence Klein, Robert Lawrence, John Makin, Burton Malkiel, Rudolph Penner, William Poole, Paul Samuelson, Charles Schultze, Robert Solow, James Tobin, Murray Weidenbaum, and Janet Yellen. David Blanchflower, William Brown, Sherry Glied, Marvin Kosters, and Charles Lieberman attended as guests. Despite the considerable assistance afforded by these outside advisers, they are not responsible for any errors in the analyses in this document.

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, Leah Mazade, and Christian Spoor. The authors owe thanks to Marion Curry, Dorothy Kornegay, Linda Lewis, and L. Rae Roy, who assisted in the preparation of the report. Michael Simpson of the Macroeconomic Analysis Division produced the figures. Kathryn Quattrone and Martina Wojak-Piotrow prepared the report for final publication.

Robert D. Reischauer
Director

January 1994

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Summary

The economic and budget outlook has not changed substantially since last September, but the deficit picture is significantly brighter than it appeared one year ago when the Congressional Budget Office (CBO) projected that the deficit would soar above $350 billion by fiscal year 1998. CBO now projects that the federal budget deficit will fall from $223 billion in the current year to below $170 billion in 1996, then creep up to around $200 billion in 1999. The dramatic improvement since last January is largely the result of the enactment in August of a major package of tax increases and spending cuts--the Omnibus Budget Reconciliation Act of 1993 (OBRA-93).

Based on recent experience, some observers have doubted that deficits will actually decline as a result of OBRA-93. The Omnibus Budget Reconciliation Act of 1990, which implemented a multiyear deficit reduction plan negotiated by President Bush and Congressional leaders, also significantly improved the budget outlook. Yet despite the fact that the increases in revenues and cuts in spending that it promised were, for the most part, achieved, its deficit goals proved elusive. It quickly became evident that deterioration of the economy, shortfalls in revenues, and unanticipated increases in spending for mandatory programs (largely for Medicare, Medicaid, other benefit programs, and net interest) would result in higher deficits than had been projected before the bill's enactment.

In contrast to that experience, CBO's current economic forecast and estimates of revenues and spending have changed very little from the ones it developed immediately after the passage of OBRA-93. Projected deficits are significantly lower than they were a year ago, before OBRA-93 was enacted. Yet despite that improvement, deficits have not been put on the road to extinction. They begin to grow again as a percentage of gross domestic product (GDP) after 1998, pushed up by continued rapid growth in spending for Medicare and Medicaid and by expiration of the tight caps on discretionary spending set in the Budget Enforcement Act of 1990 (BEA) and OBRA-93.

As always, the economic forecast and the revenue and spending projections presented here are uncertain. Future economic and technical reestimates could still push projected deficits up as they did in 1991 and 1992. Alternatively, changes that are not currently anticipated could further improve the deficit picture.

The Economic Outlook

The economic outlook is essentially unchanged since last September. With the economy settling into an expansion phase of the business cycle, CBO expects growth to continue at a moderate rate, unemployment to decline gradually, and interest rates to edge up.

Forecast for 1994 and 1995

CBO forecasts that real GDP will grow at an annual rate of nearly 3 percent through calendar year 1995 (see Summary Table 1). The combination of moderate economic growth and an increasing number of people actively looking for work will result in a gradual decline in the unemployment rate--from the 6.4 percent reported for December 1993 to 6.0 percent at the end of 1995.

Summary Table 1.
Comparison of Forecasts for 1994 and 1995

	Actual 1992	Estimated 1993	Forecast 1994	Forecast 1995
	Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP				
CBO	6.7	4.9	5.7	5.4
Blue Chip	6.7	5.0	5.6	5.7
Real GDP[a]				
CBO	3.9	2.3	2.8	2.7
Blue Chip	3.9	2.4	2.7	2.6
Implicit GDP Deflator				
CBO	2.8	2.5	2.8	2.6
Blue Chip	2.8	2.5	2.8	3.0
Consumer Price Index[b]				
CBO	3.1	2.7	2.9	3.0
Blue Chip	3.1	2.7	3.1	3.3
	Calendar Year Averages (Percent)			
Civilian Unemployment Rate				
CBO	7.4	6.8	6.4	6.1
Blue Chip	7.4	6.8	6.4	6.2
Three-Month Treasury Bill Rate				
CBO	3.4	3.0	3.5	4.3
Blue Chip	3.4	3.0	3.4	3.8
Ten-Year Treasury Note Rate				
CBO	7.0	5.9	5.8	6.0
Blue Chip[c]	7.0	5.9	5.9	6.1

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (January 10, 1994); Department of Commerce, Bureau of Economic Analysis.

NOTE: The *Blue Chip* forecasts are based on a survey of 50 private forecasters.

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.

The persistence of excess domestic capacity and weak demand from sluggish economies elsewhere in the world will dampen inflationary pressures. The consumer price index is expected to grow at a rate of around 3 percent a year through 1995. But as the expansion continues, the Federal Reserve is likely to allow interest rates to rise in order to ensure that inflation does not heat up. CBO forecasts that the rate on three-month Treasury bills will increase from 3.1 percent at the end of 1993 to 4.5 percent at the end of 1995. It also expects that long-term rates will rise slightly over that same period.

CBO's economic forecast for 1994 and 1995 is similar to the *Blue Chip* consensus of private forecasters. The consensus forecast shows slightly lower growth in real GDP and slightly higher inflation. In addition, the *Blue Chip*'s long-term interest rates are a little higher than CBO's, but the short-term rates are lower.

Projections for 1996 Through 1999

CBO does not attempt to forecast cyclical fluctuations in the economy more than two years into the future. Beyond 1995, its projections are based on trends in fundamental factors that determine the potential growth of the economy, including growth in the labor force, productivity, and national saving.

CBO estimates that potential real GDP will grow at an average rate of 2.4 percent during the 1996-1999 period. Projected growth of real GDP exceeds that rate through 1999; CBO assumes average annual growth of 2.6 percent for 1996 through 1999 (see Summary Table 2). As a result, the gap between

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

	Estimated	Forecast		Projected			
	1993	1994	1995	1996	1997	1998	1999
Nominal GDP (Billions of dollars)	6,370	6,730	7,099	7,483	7,880	8,287	8,700
Real GDP (Billions of 1987 dollars)	5,125	5,274	5,418	5,566	5,717	5,867	6,011
Real GDP (Percentage change)	2.8	2.9	2.7	2.7	2.7	2.6	2.5
Implicit GDP Deflator (Percentage change)	2.6	2.7	2.7	2.6	2.5	2.5	2.5
CPI-U (Percentage change)	3.0	2.7	3.0	3.1	3.1	3.1	3.1
Unemployment Rate (Percent)	6.8	6.4	6.1	5.9	5.8	5.7	5.7
Three-Month Treasury Bill Rate (Percent)	3.0	3.5	4.3	4.6	4.6	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	5.9	5.8	6.0	6.1	6.2	6.2	6.2

SOURCE: Congressional Budget Office.

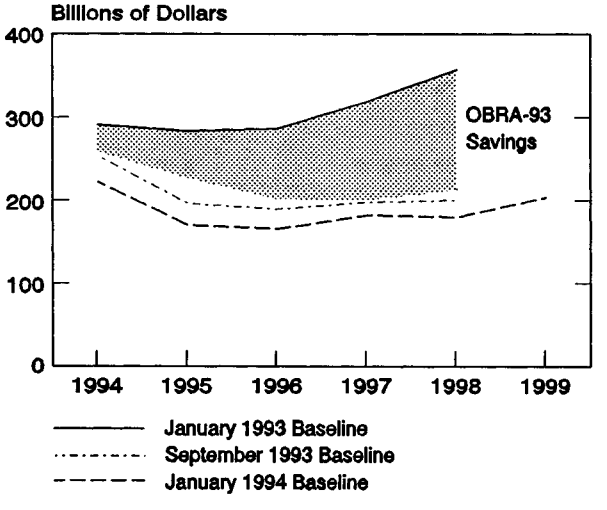
NOTE: CPI-U is the consumer price index for all urban consumers.

actual and potential GDP shrinks from 2.0 percent at the end of 1993 to its historical average of 0.6 percent in 1999. Steady growth of 2.6 percent a year would push unemployment down to 5.7 percent in 1999. Because GDP, on average, remains below its potential, the projected rate of inflation is stable. The projections assume a slight increase in short- and long-term interest rates during the 1996-1999 period.

The Budget Outlook

The outlook for the budget is also essentially unchanged since last September, with the deficit somewhat below the September estimates in each fiscal year. The deficit will shrink from the $255 billion recorded in 1993 to around $170 billion in 1995 and 1996 and then rise slowly to about $200 billion in 1999. This distinctly rosier outlook, compared with a year ago, is mostly a consequence of the substantial tax increases and spending cuts enacted last August in OBRA-93 (see Summary Figure 1). Last January, CBO projected deficits that dipped only a little below $300 billion before rising to more than $350 billion in 1998. Although much improved, the news this year is not all good; the deficit is not on a permanent downward path. In 1999, it begins to grow again as a percentage of GDP, a trend that continues in CBO's extended 10-year projections. As a result, the deficit remains a significant drag on the standard of living in the United States for the foreseeable future.

Summary Figure 1.
Baseline Deficits (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: The shaded area represents the deficit reduction resulting from the Omnibus Budget Reconciliation Act of 1993.

The Outlook for the Deficit

A year ago, it seemed likely that the record-high 1992 deficit of $290 billion would be eclipsed in 1993, with deficits in succeeding years near or above that level. Instead, the 1993 deficit came in at $255 billion, and the combination of OBRA-93 and continued economic growth keeps currently projected deficits well below $300 billion through the end of the century (see Summary Table 3). As a percentage of GDP, deficits dip to 2.2 percent (compared with the 1984-1993 average of 4.2 percent) before beginning to climb slowly in 1999. Essentially the same pattern is seen in the standardized-employment deficit, which removes the effects of the business cycle from federal revenues and spending.

These baseline budget projections assume that the Congress makes no changes in current laws and policies that affect tax revenues and mandatory spending. They also assume that discretionary spending (spending that is controlled by annual appropriations) for 1995 through 1998 will comply with the limits set in the BEA (for 1995) and in OBRA-93 (for 1996, 1997, and 1998). Those caps require the Congress to cut spending for discretionary programs by nearly 10 percent in real terms between 1994 and 1998. CBO assumes that discretionary spending will grow at the same pace as inflation after 1998, when the discretionary caps will have expired.

Increases in spending for Medicare and Medicaid are the dominant force pushing projected deficits back up as the 20th century nears its end. Estimated outlays for those two entitlement programs continue to grow at a rate of about 11 percent a year in 1999. Even with the expiration of the discretionary spending caps, outlays for everything other than Medicare and Medicaid grow only slightly more than 4 percent in 1999, a rate considerably slower than the assumed

increase of 5 percent in nominal GDP. Without the rapid growth of federal health care spending, the deficits would probably decline steadily as a percentage of GDP. Adopting a plan that substantially reforms the nation's health care system might slow the future growth of such spending, but that positive effect on the deficit could be largely offset--at least in the short to intermediate term--by the costs of extending health care coverage to people who are currently uninsured.

Changes in the Projections

The fundamental outlook for the deficit has changed little since CBO's projections last September, although projected deficits are lower for each year. Changes in CBO's economic forecast and technical reestimates are almost equally responsible for the reductions, which average about $20 billion a year (see Summary Table 4). Legislation enacted since the summer has had virtually no effect on CBO's deficit projections.

Revising the economic forecast triggered an increase of $4 billion to $10 billion a year in projected revenues, stemming for the most part from increased wages and other personal income. In addition, CBO lowered its projections of spending for cost-of-living adjustments by $15 billion over the 1994-1998 period, primarily because inflation in 1993 was lower than previously assumed.

An improved business climate for banks and thrift institutions led to a technical reestimate of spending for deposit insurance. The reestimate lowered projected outlays by $18 billion in 1994 and by $21 billion over the 1994-1998 period. CBO made smaller technical reductions in estimates of spending for Medicaid, Medicare, and net interest. Technical revisions reduced all other outlays combined by about $4 billion over the period.

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

	1992	1993	1994	1995	1996	1997	1998	1999
				In Billions of Dollars				
Total Deficit	290	255	223	171	166	182	180	204
Standardized-Employment Deficit[a]	206	215	179	144	149	164	164	191
				As a Percentage of GDP				
Total Deficit	4.9	4.0	3.4	2.4	2.2	2.3	2.2	2.4
Standardized-Employment Deficit[b]	3.3	3.3	2.7	2.0	2.0	2.1	2.0	2.2
Memorandum:								
Gross Domestic Product (Billions of dollars)	5,941	6,295	6,637	7,006	7,386	7,780	8,185	8,597

SOURCE: Congressional Budget Office.

a. Excludes the cyclical deficit, spending for deposit insurance, and contributions from allied nations for Operation Desert Storm. The last of those contributions were received in 1992.

b. Shown as a percentage of potential GDP.

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

	1994	1995	1996	1997	1998
September 1993 Baseline Deficit	253	196	190	198	200
Changes					
Policy changes	2	a	a	a	-1
Economic assumptions					
Revenues[b]	-4	-6	-8	-8	-10
Net interest	-2	-2	-2	-3	-3
Other outlays	-2	-3	-3	-2	-1
Subtotal	-9	-12	-13	-13	-13
Technical reestimates					
Revenues[b]	-3	a	a	a	2
Deposit insurance[c]	-18	-1	-4	2	a
Medicaid and Medicare	-2	-5	-5	-6	-8
Net interest[c]	a	-2	-1	-1	-1
Other outlays	-1	-6	a	1	1
Subtotal	-24	-14	-11	-3	-5
Total Changes	-30	-25	-24	-16	-20
January 1994 Baseline Deficit	223	171	166	182	180

SOURCE: Congressional Budget Office.

a. Less than $500 million.

b. Revenue increases are shown with a negative sign because they decrease 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.

Conclusion

The difficult step taken by the President and the Congress in adopting a major deficit reduction package last August seems likely to achieve the desired outcome--significantly lower deficits than were projected a year ago. There is no indication at this time that the hard-fought gains on the deficit front will be offset by economic decline or unanticipated changes in spending or revenues.

The deficit may have been brought under control temporarily, but it has not been tamed. Measured as a percentage of GDP, the deficit falls to 2.2 percent by 1996, but under the relentless pressure of rapidly growing Medicare and Medicaid spending, the decline is cut short. The deficit climbs a bit in 1999 and continues to grow in CBO's extended 10-year projections. Unless health care reform legislation successfully reins in federal spending for health, or the Congress takes other major deficit reduction steps, high deficits are likely to continue into the foreseeable future.

The large federal deficits of recent years have been particularly troubling because they coincided with levels of private saving that were much lower than those prevailing before the 1980s, thereby limiting the domestic resources available for invest-

ment. Similarly, unless the high deficits projected under current policies are offset by private saving that is substantially higher than the current rate, they will constrain the improvement in the standard of living that can be expected in the United States in the early 21st century.

The presumption that high deficits will not be offset by increased private saving--and will continue to be a drag on economic growth--has motivated calls for a constitutional amendment requiring a balanced budget. These calls have come even though existing procedures and political pressures have combined to produce two substantial deficit reduction efforts in the past four years.

At least one of the proposed versions of such an amendment could be in effect for 1999 if it is passed by the Congress this year and promptly ratified by three-fourths of the states. Under CBO's current budget projections, balancing the budget in 1999 would require $204 billion in deficit reduction in that year. If the Congress adopts an amendment requiring a balanced budget beginning in 1999, it should not ignore the need to enact a multiyear package of tax increases and spending cuts to provide some hope of achieving that goal in an orderly, gradual way. The longer the Congress and the President delay passage of such a package after the Congress has proposed the amendment for ratification, the harder it will be to eliminate the deficit by 1999. In fact, at some point it would become virtually impossible to reach a balanced budget that year without a substantial risk of triggering an economic downturn--which would make it even harder to balance the budget.

A deficit reduction package with cuts beginning in 1995 that was designed to reduce the 1999 deficit by about $200 billion would probably lower the total deficit over the 1995-1999 period by about $600 billion--a substantially larger decrease than the $433 billion achieved by OBRA-93. Deficit reduction of that magnitude is not impossible, but it would be politically difficult. The Congress narrowly enacted the $433 billion in savings in OBRA-93 only after an arduous legislative struggle--and that bill quite naturally included the relatively less painful options from among the tax increases and spending cuts available, leaving the more painful ones for future deficit reduction efforts. Reducing the deficit by an additional $600 billion clearly would require abundant political resolve.

Although CBO has often made the case for deficit reduction, it has also warned against procedural fixes (including a balanced-budget constitutional amendment) that promise action in the future to reduce the deficit (see Chapters 5 and 6 of CBO's January 1993 *Economic and Budget Outlook*). Instituting a constitutional requirement to balance the budget is problematic in any case: it is not clear that achieving balance in every year is an obtainable or even desirable goal. It would be a particular folly to pass a balanced-budget amendment and ignore the need to expeditiously enact legislation that would offer some hope of complying with it.

Chapter One

The Economic Outlook

The U.S. economy has settled into a self-sustaining expansion, while many other major economies remain mired in slow growth. The weakness of the world outlook affects the domestic economy in two ways: it holds down the opportunities for U.S. exports, but it also helps to put off the point at which inflation, now well under control, might begin to pick up. The Congressional Budget Office (CBO) expects that domestic demand, especially business investment, will keep the economy growing moderately for the next two years, despite the drag from a mildly restrictive fiscal policy and a drop in net exports. Although restructuring continues among some large corporations, the business sector is behaving much as it usually does at this point in the business cycle, with fixed investment growing at a healthy pace.

Monetary policy has kept short-term interest rates low for a couple of years, but despite the recent good news on inflation, rates are likely to begin to rise soon. In the next few years, the growth of the U.S. economy, together with recovery in economies elsewhere, will begin to increase the pressure on prices. With growth no longer in question, the Federal Reserve will probably head off any possibility of rising inflation by allowing short-term interest rates to rise somewhat.

As is typically the case, several factors make this outlook for moderate growth uncertain: the pace of economic activity among the major trading partners of the United States, the course of monetary policy over the next few years, and the saving behavior of households. In addition, just how much more room the economy has to expand without putting undue pressure on inflation is unclear.

CBO's Economic Forecast for 1994 and 1995

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 1995 (see Table 1-1 and Figure 1-1). The unemployment rate will fall over the next two years as more jobs are created, but it will fall slowly because more individuals will decide to look actively for work as job opportunities expand.

The mild pace of the expansion will keep inflation and interest rates relatively low, although they will begin to climb slowly as the expansion continues. CBO expects that inflation will hover around 3 percent over the next few years. However, short-term rates are expected to rise throughout 1994 and 1995, with smaller upward movements appearing in long-term rates.

The probable actions of governments, businesses, households, foreign economies, and the Federal Reserve play a key role in determining CBO's forecast. The behavior of federal, state, and local governments will act as a mild restraint on economic growth. Most of this restraint will come from the federal government: the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) imposed higher taxes on high-income individuals and slowed the growth of federal expenditures on top of defense downsizing already in place. The fiscal stance of state and local governments will be approximately neutral, as many of the budgetary pressures of the last few years have eased.

Driven by the need to innovate to increase competitiveness further and helped by a generally good environment for financing new investment, businesses will continue to invest in plant and equipment at a healthy rate. In addition, growing demand for U.S. goods and services increases the likelihood that business will expand and employment will pick up.

After the slow and uncertain first quarter of 1993, households spent more freely during the remainder of the year. As the expansion continues, consumption should grow at a more steady, though not spectacular, rate. Activity in the housing market should be solid, but it is not expected to provide a big boost to national income after the first quarter of 1994.

Slower growth among its trading partners than in the United States signals a significant decrease in net exports. On balance, the foreign appetite for U.S. goods will be less hearty than the American appetite for imports.

As economic growth progressively reduces the amount of excess capacity, the Federal Reserve will probably allow short-term interest rates to rise. Somewhat higher interest rates should not stifle economic activity but merely moderate the momentum of the economy enough to forestall pressures on prices and wages.

Table 1-1.
The CBO Forecast for 1994 and 1995

	Actual 1992	Estimated 1993	Forecast 1994	Forecast 1995
	Fourth Quarter to Fourth Quarter (Percentage change)			
Nominal GDP	6.7	4.9	5.7	5.4
Real GDP[a]	3.9	2.3	2.8	2.7
Implicit GDP Deflator	2.8	2.5	2.8	2.6
Consumer Price Index[b]	3.1	2.7	2.9	3.0
	Calendar Year Averages (Percent)			
Real GDP Growth[a]	2.6	2.8	2.9	2.7
Civilian Unemployment Rate[c]	7.4	6.8	6.4	6.1
Three-Month Treasury Bill Rate	3.4	3.0	3.5	4.3
Ten-Year Treasury Note Rate	7.0	5.9	5.8	6.0

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

c. Unemployment rate based on 1993 methodology; published rates are likely to be higher (see Box 1-1).

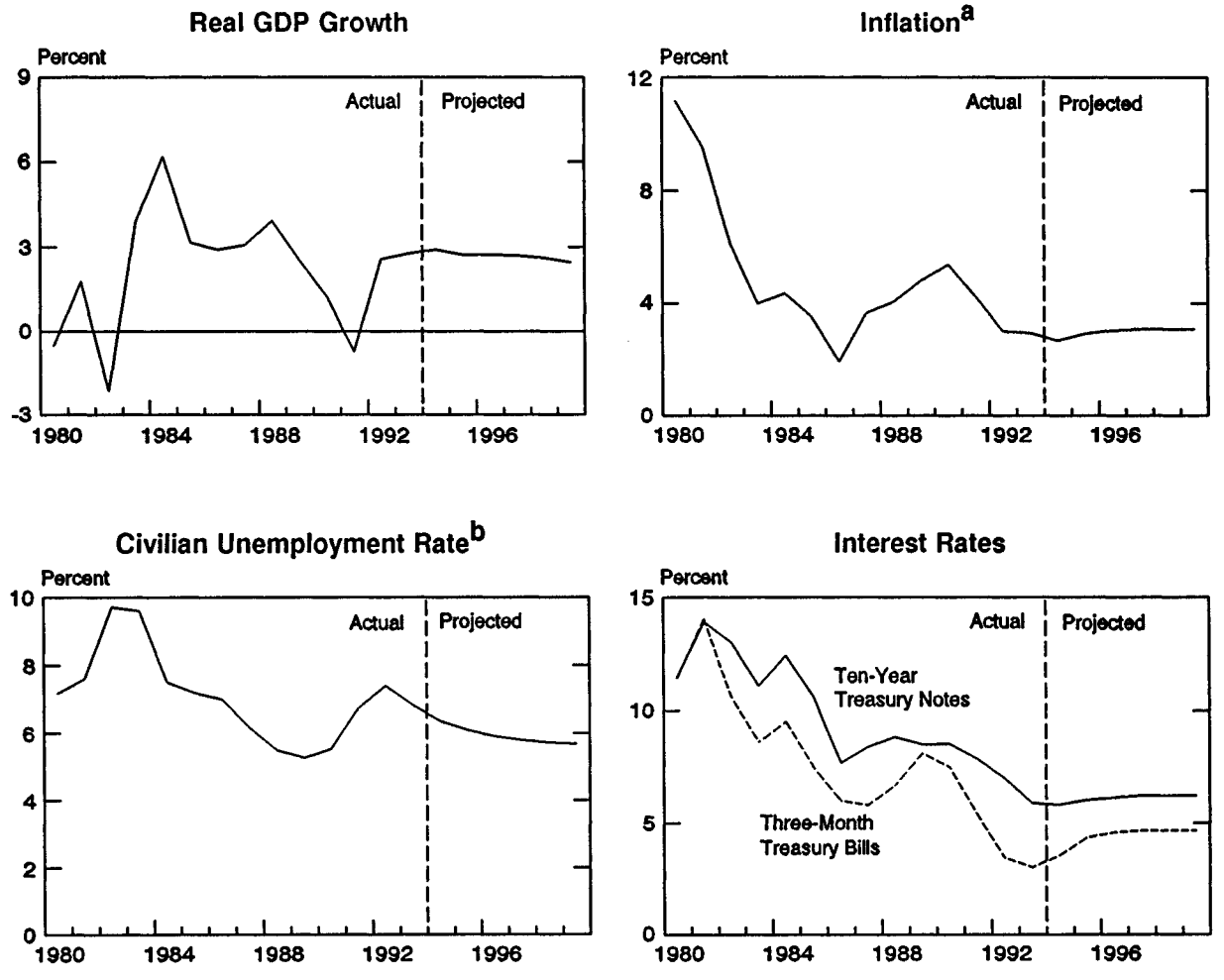
Federal, State, and Local Governments: Fiscal Stance Will Restrain Growth Slightly

Following a neutral stance in 1993, fiscal policy will be moderately restrictive in 1994 and remain so in 1995. This outlook reflects only currently enacted policies and does not incorporate the possible impact of policies, such as health care reform, that the Congress may enact in the future.

Deficit Reduction Will Dampen Growth Somewhat in 1994 and 1995

The passage last summer of the Omnibus Budget Reconciliation Act of 1993 significantly changed the course of fiscal policy. Largely as a result of the

Figure 1-1.
The Economic Forecast and Projection



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

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

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

b. Calculated using the 1993 methodology; published rates are likely to be higher (see Box 1-1).

fiscal tightening contained in that act, the deficit excluding deposit insurance will decline from $283 billion in 1993 to $228 billion in 1994 and $182 billion in 1995. After that, it should remain fairly stable through 1998. That deficit will jump to $208 billion in 1999, however, when the current caps on discretionary spending expire. Of course, the possibility of further deficit reduction at some point is very real, since the Congress is well aware of the future jump in the projected deficit.

In the short run, the fiscal restraint of OBRA-93 will tend to depress economic activity and lower the average growth of output somewhat. Over the long run, however, lower deficits will lead to a higher level of GDP than otherwise would have occurred. Smaller deficits will raise the national saving rate, permit more investment, and eventually result in a higher level of output.

CBO measures the stimulus or restraint that the budget provides the economy by the year-to-year changes in the standardized-employment deficit relative to potential GDP. The standardized-employment deficit differs from the actual deficit by removing the outlays for deposit insurance and the cyclical effects of the economy on the budget. Potential GDP is an estimate of the highest level of output that can be produced with available resources of capital and labor without increasing the rate of inflation.

In the CBO forecast, the standardized-employment deficit drops substantially--by 0.7 percent of potential GDP--from 1993 to 1994, followed by a slightly smaller decline of 0.6 percent in 1995 (see Table 1-2 and Figure 1-2). Tax increases embodied in OBRA-93 are responsible for most of the fiscal restraint. Two new income tax brackets of 36 percent and 39.6 percent were imposed on high-income people, effective in January 1993. In addition, individuals will have to pay the Hospital Insurance (HI) tax on all earnings in 1994, rather than only on the first $141,900 of earnings. Some recipients of Social Security will pay income tax on a larger share of their benefits in 1994. Not least, the federal tax on transportation fuels was raised.

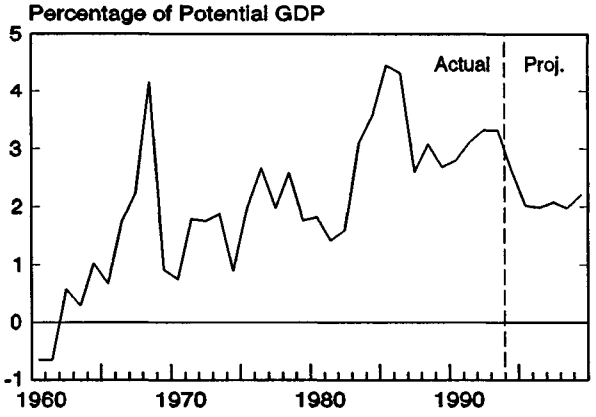
Table 1-2.
The Fiscal Policy Outlook (By fiscal year, on a budget basis)

	1993	1994	1995	1996	1997	1998	1999
	In Billions of Dollars						
Deficit Excluding Deposit Insurance	283	228	182	180	189	184	208
Standardized-employment deficit	215	179	144	149	164	164	191
Cyclical deficit	68	48	38	31	25	20	17
Memorandum:							
Deposit Insurance	-28	-5	-11	-14	-6	-4	-4
	As a Percentage of Potential GDP						
Deficit Excluding Deposit Insurance	4.4	3.4	2.6	2.4	2.4	2.2	2.4
Standardized-employment deficit							
Level	3.3	2.7	2.0	2.0	2.1	2.0	2.2
Change[a]	0	-0.7	-0.6	0	0.1	-0.1	0.2
Cyclical deficit	1.0	0.7	0.5	0.4	0.3	0.2	0.2

SOURCE: Congressional Budget Office.

a. A negative value in this line indicates restraint.

Figure 1-2.
Standardized-Employment Deficit
(By fiscal year)



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

However, this pattern in the standardized-employment deficit may overstate fiscal restraint in 1994 and 1995. One reason is that the increase in income tax rates may partly reduce saving initially rather than spending. If this occurs, short-term effects on economic activity will be smaller, as will the long-term benefits of deficit reduction. Another reason is that some of the fiscal impact of tax increases that were enacted last year took place in 1993, even though most of the tax liabilities incurred in 1993 do not begin to show up as revenues until fiscal year 1994. The biggest tax increase falls on high-income earners who are likely to have reduced consumption in 1993 in response to higher tax rates, even though their payments had not yet risen. Finally, the restraint in 1995 partly reflects approximately $5 billion in one-time receipts from spectrum auctions that should not depress output or incomes; they reflect investment by the private sector.[1] If these factors are taken into account, the actual amount of fiscal restraint would be at most 0.5 percent in 1994 and 0.4 percent in 1995.

1. The Federal Communications Commission will auction licenses for commercial use of a portion of the electromagnetic spectrum previously reserved for the government.

During the 1996-1998 period, the overall stance of fiscal policy is essentially neutral. One of the reasons is that OBRA-93 imposes caps on discretionary spending for the 1996-1998 period that will restrain spending. When the caps expire in 1999, the ratio of federal debt to GDP will begin to rise again unless further deficit reduction is enacted.

Uncertainties Surround Health Care Reform

If adopted, the Administration's health care proposal would have far-reaching economic effects and could have significant budgetary effects (discussed in CBO's forthcoming February 1994 analysis). The Administration's health care proposal is not part of CBO's current policy assumptions, but uncertainty surrounding the outcome of this debate could have some adverse effects on short-term economic growth.

The proposal has three major elements: it would provide coverage for people who are currently uninsured while requiring them and their employers to pay for some of their coverage; it would provide federal subsidies to low-income people; and it would change the way most Americans purchase their health insurance. This last change, which has been the subject of intense public interest, attempts to even out the cost of health insurance to different firms and workers and also to reduce its overall cost. These goals are to be achieved through new institutions--regional "health alliances"--that would operate much like heavily regulated purchasing cooperatives for health insurance.

Even now, uncertainties about the Administration's plan and alternative proposals may be affecting employers' behavior. If the plan passes, some employers will find that the cost of the health insurance they provide their employees will go down; for others, it may rise, and those who do not currently offer health insurance will have to start paying for it. Many employers, particularly in smaller firms, are uncertain about how the plan will affect them, and this uncertainty could discourage some of them from increasing the number of their workers, or giving pay raises, until the situation becomes clearer. How much this uncertainty is holding down current

increases in employment, however, is impossible to say.

The Fiscal Stance of State and Local Governments Is Likely to Be Neutral

In contrast to recent years, the tax and spending policies of state and local governments are not likely to have a major effect on the growth of overall economic activity. The demand for many of the services state and local governments provide--such as education, health care, public safety, and investment in infrastructure--continues to grow, but real overall spending will expand at about the same rate as GDP. Tax policy will be less restrictive than it has been in recent years. The economic expansion and low interest rates have helped to stabilize the financial situations of most state and local governments. Consequently, few states have planned tax increases for 1994.

Two exceptions to the generally neutral fiscal stance of state and local governments are the states of California and New Jersey. California was hit especially hard by declines in defense spending and civilian aerospace orders together with a collapse in construction. Its general fund may have a deficit of about $1 billion in this fiscal year, and it is projected to have a deficit of $1.3 billion next year. New Jersey faces the possibility of a $1 billion shortfall in its general fund for the fiscal year that begins July 1. The possibility of fiscal tightening in these states, however, does not change the overall outlook.

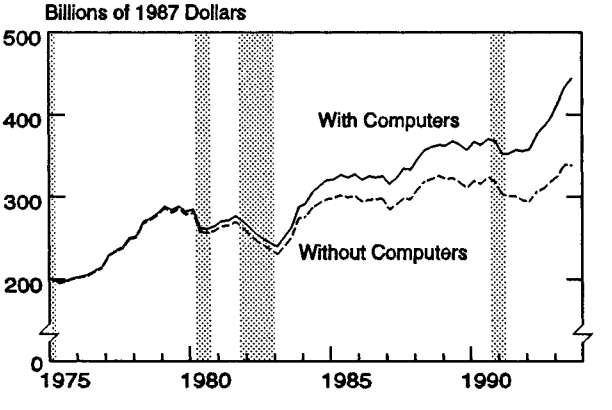
The Business Sector: Investment Will Continue to Be Strong

Even though the pace will be slow relative to that of last year, CBO expects that investment in plant and equipment will be the major engine of growth for the next few years. Investment will be stimulated by continued restructuring, the need to innovate in production, possible pressures on capacity, and easier financing.

Spending on equipment will rise rapidly over the next few years. This spending grew 14 percent in real terms in the past year, and even if it slows somewhat, it will still be the fastest-growing component of output (see Figure 1-3). Its importance to the growth of the rest of the economy is, however, somewhat less than this rate of increase indicates. In recent years, the huge growth in computer purchases has dominated real spending on equipment, the reason being that the price of computers has declined at an astonishing pace while nominal spending has changed much less. Additional investment in computers is probably worth much less to the productive capacity of the economy--and its production requires much less employment and demand for the output of other industries--than its size in the national accounts appears to indicate. But the recent growth of spending on plant and equipment goes beyond what occurred in the computer sector: noncomputer spending also grew strongly (8 percent) over the past year and is set to continue at a healthy pace in the coming year.

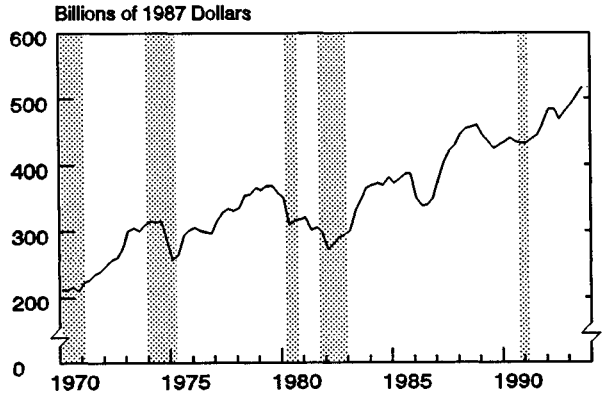
Many businesspeople have cited continued restructuring together with competitive pressures as a cause of strong investment in 1993 and 1994. Firms are reorganizing and trying to make their production methods more innovative to maintain or regain their competitive edge against foreign as well as domestic producers. As evidenced by the auto sector, such measures often pay off in increased profits and market share.

Figure 1-3.
Investment in Producers' Durable Equipment



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

Figure 1-4.
Real Net Corporate Cash Flow



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

NOTE: Real net corporate cash flow is net corporate cash flow divided by the implicit deflator for nonresidential fixed investment.

Commercial vacancy rates remain high enough in many areas to restrain the growth of spending on nonresidential structures. Nevertheless, the huge drop in recent years in commercial construction--a major part of nonresidential construction--has halted, and a slow recovery may be under way. Between 1988 and 1992, the real value of commercial construction dropped over 40 percent--from $69 billion to $41 billion. Construction then remained steady through the fall of last year and currently shows some signs of picking up.

Pressures on the capacity of current plant and equipment could encourage investment in the industrial sector. Capacity utilization rose to about 83 percent in the last quarter of 1993, its highest level since the summer of 1990. If capacity utilization continues to rise, additional investment in industrial structures as well as equipment will occur.

A generally good environment for financing and carrying out investment will also support business fixed investment over the next few years. Low rates of interest in recent years have brought down the nominal cost of borrowing, and strong stock markets have lowered the cost of capital raised in the stock market. In addition, banks are more willing to lend. Banks are generally in a good position to provide credit to business. They have rebuilt their capital bases, and the yields on Treasury securities--an alternative to business loans--are so low as to be less appealing than they have been recently. Further, many firms now find themselves with substantial profits and retained earnings and can finance investments through their cash flows rather than by borrowing (see Figure 1-4). As a result of all these factors, firms will find that financing investments is easier in 1994 and 1995 than has been the case over the past several years.

Households: Expenditures Should Be Buoyant

After a shaky start at the beginning of the recovery, spending by households is now more solid. Consumer outlays rose about 4 percent during the last half of 1993, after adjustment for inflation, with much of the strength coming in durable goods. Renewed strength in housing has led to increased sales of goods ranging from building materials to furniture and home appliances. A surge in spending for home computers and for services such as movies has occurred as well.

The strengthening financial position of households is likely to bolster consumption spending over the next few years, but growth in the housing sector will weaken nonetheless. Consumption will be buoyed by continued growth in real disposable income, low interest rates, and little change in saving propensities in the near term. However, further substantial gains in housing are unlikely, given the slow rate of household formation.

Real Disposable Income Will Increase Further

Despite large layoffs from corporate restructuring, the economy created about 2 million jobs on net during 1993. CBO expects that slightly more will be created during 1994. The hours each employee worked increased last year, and by the last quarter, the average number of hours worked per week was equal to the level at the peak of the last business cycle in early 1990. Given the postwar downtrend in

hours worked per week, this is an unusual development and suggests that output will not be expanded much more by this means. Consequently, firms are likely to hire additional workers during 1994 instead of further boosting the length of the workweek. These job gains will help to bring down the rate of unemployment. (See Box 1-1 for a discussion of revisions in measuring the rate of unemployment.)

In addition to expected job growth, rising wages will continue to boost income in the current economic expansion. Total compensation adjusted for inflation grew about 2 percent in both 1992 and 1993, or about 5 percent in nominal terms, and CBO expects slightly larger gains over the next two years. Wages and salaries, excluding contributions for pensions, health insurance, Social Security, and the like, increased almost 4 percent in 1993 but should grow almost 7 percent in 1994. Contrary to popular perception, hourly earnings have grown in real terms in recent years, though at a slower rate than in the 1950s and 1960s (see Appendix F).

Higher Taxes May Reduce Consumption Slightly. OBRA-93 contained several provisions that raise taxes for particular groups of consumers--high-income people face higher marginal income tax rates plus the HI tax on all earnings, and some recipients of Social Security will pay taxes on a higher percentage of their benefits. These higher taxes will reduce the disposable income of some individuals and will result in less consumption, less saving, or both. Although people with high incomes are generally thought to be forward-looking and therefore may have already planned ahead for higher marginal tax rates on income and for the HI tax to be imposed on all earnings in 1994, other groups of consumers may find that they must cut back on consumption in order to make ends meet. Some recipients of Social Security with more modest incomes may cut their spending as well to cover the increased tax bite out of Social Security benefits.

The Recent Decline in Interest Rates Will Support a Modest Increase in Consumption. The recent decline in interest rates has affected consumer spending in two ways. First, lower interest rates imply a decline in the cost of borrowing on new purchases. The kick from the lower cost of borrowing is unlikely to be large, however, for two reasons. Research shows that the link between borrowing costs and purchases of durable goods is not strong. And the real interest rate on borrowing for consumer durables, after adjustment for tax deductibility, is not low now compared with that of the 1980s, in part because interest on consumer debt is no longer tax-deductible.

Second, lower interest rates reduce the required interest payments on existing debts. Lower interest rates together with reduced indebtedness have decreased household interest payments by roughly 2 percent of disposable income during the past two years. This extra cash should encourage consumer spending.

Although household interest income also falls with interest rates, largely offsetting the decline in debt-service payments, lower interest rates probably do increase consumer spending a little. Households that borrow money and benefit from lower interest rates tend to spend a higher proportion of their extra disposable income than do households that lend money and are hurt by lower interest rates.

The Personal Saving Rate Will Stay Low in the Near Term but Is Likely to Rise Slowly over Time. The personal saving rate dipped to 3.7 percent in the third quarter of 1993, and this rate will probably stay low in 1994 before turning up. Part of the recent decline can be attributed to pent-up demand for durable goods, particularly autos, which has caused spending to rise faster than income. Gains in stocks and bonds over the past few years may explain some of the decline in the saving rate as well. Of course, considerable uncertainty surrounds recent estimates of the personal saving rate, and revisions to the data often result in raising the rate. The saving rate has been revised upward in 11 of the past 15 years, by an average of 1.2 percentage points, though many of the revisions in recent years have been downward.

A couple of fundamental factors point to a gradual rise in the saving rate over the next few years. These fundamentals include the ratio of wealth to income, which is relatively low, and the demographic makeup of the population. As the baby boomers approach the age when adults typically begin to save for the college expenses of their

Box 1-1.
Revisions in the Measure of Unemployment

On February 4 of this year, the Bureau of Labor Statistics (BLS) will report new and more accurate measures of unemployment and other labor market indicators from the redesigned Current Population Survey (CPS). The reported unemployment rate will probably be higher under the new procedures than it would have been under the old, perhaps by nearly half a percentage point. The redesign of the CPS will affect estimates of many other labor market measures, including duration of unemployment, reasons for unemployment, part-time work for economic reasons, weekly earnings, hours of work, size of the labor force, and number of "discouraged" workers. During the early part of 1994, estimates from the household survey will be less reliable indicators of trends in labor markets. BLS suggests that analysts should focus more attention on other measures, such as payroll employment, for comparisons between 1993 and 1994.

This CBO forecast, prepared in late 1993, does not incorporate the new measures. Instead, CBO uses the relationships and trends revealed in past data to predict the unemployment rate according to the old measure. In future reports, the new measure of unemployment will be used.

The primary aim of redesigning the CPS is to improve the accuracy and quality of the data, given that large changes have occurred in society and the economy since the last major revision in 1967. The wording, ordering, and number of questions have been altered to improve the respondent's understanding, recall, and response. The interview process has also been computerized, ensuring that questions are asked correctly and transmission errors minimized. In a few cases, most notably that of discouraged workers, concepts have been clarified and redefined.

A parallel 18-month survey using the new methods indicates some of the possible implications of shifting to the new survey methods, but it can provide no more than pointers. The estimates from the parallel survey are variable--the sample is only one-fifth the size of the sample for the CPS itself--and the difference between the CPS measure and the new estimate based on the parallel survey has fluctuated between 0.1 and 1.0 percentage points since September 1992.

The change in the measures also creates various technical difficulties in producing estimates from the survey data. Seasonal adjustment will be performed using the seasonal pattern from the old series, which may not be fully appropriate. The estimates will also be more uncertain than usual in January because a procedure called "composite estimation" that is designed to smooth the series cannot be used without truly comparable data from the previous month.

Despite the many reasons for caution, the parallel survey offers tentative guidance as to how important estimates may change with the new methods. Most significantly, the unemployment rate could be raised by nearly half a percentage point. That figure was the average difference between the old CPS unemployment rate and the new measure in the parallel survey over the 12 months from September 1992 through August 1993. When the January numbers are released, BLS will report the annual average differences over calendar year 1993.

However, even if the new reported rate of unemployment is half a percentage point or 1 percentage point greater than the old measure would have been, it will not represent a weakening of labor markets.

The main reason that has been advanced to explain the increase in the measured unemployment rate revealed by the parallel survey is that the old survey undercounted the participation of women in the labor market (and, to a lesser extent, that of teens and people over age 65) by a substantial and statistically significant amount. The undercount stems in part from a serious bias in the initial question in the survey. The first question often posed to women about their activities in the previous week was whether they were "keeping house or something else." Women who answered that they were keeping house, but who also worked outside the home or were also looking for work, could be wrongly classified as out of the labor force. Such biases are expected to be removed from the survey with the change to the new methods.

In February, BLS will provide estimates of what the unemployment rate under the new method would have been during 1992 and 1993, and what the rate would have been for January under the old method. Later this year, BLS will also try to assist users by providing a version of the old series that is calculated using a three-month moving average.

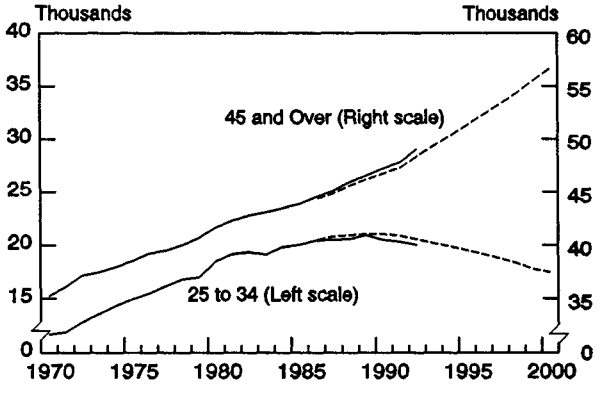
children and for their own retirement, the saving rate may rise gradually.

Housing Has Recovered, but Further Gains Are Uncertain

The general pattern of real investment in residential property during this recovery has not been radically different than in the past, though growth in multifamily housing has been particularly weak. Demographic factors do not augur well for a strong housing sector in the next few years, but increases in the average value of new homes and in home improvements could lead to solid gains in residential investment. Lower interest rates will also offset some of the gloomy demographic outlook.

In general, a decrease in the number of households headed by young adults together with a surplus of apartment buildings built in the mid-1980s--construction that was stimulated in part by changes in the tax code in 1982--indicate that investment in multifamily housing will continue to decline. The number of households headed by people ages 25 to 34 will shrink by about 17 percent from 1990 to 2000 (see Figure 1-5). At the same time, growth in the number of households headed by people over age 45 will continue at a more rapid pace than in the 1980s. As a result, the net new demand for multifamily units will come not, as in the past, from households headed by young people but from older households. Many of these older households may be headed by divorced individuals who are relatively well off and want different kinds of apartments than the typical resident of multifamily housing in the 1980s.

Figure 1-5.
Number of Households Headed by People Ages 25 to 34 and Ages 45 and Over

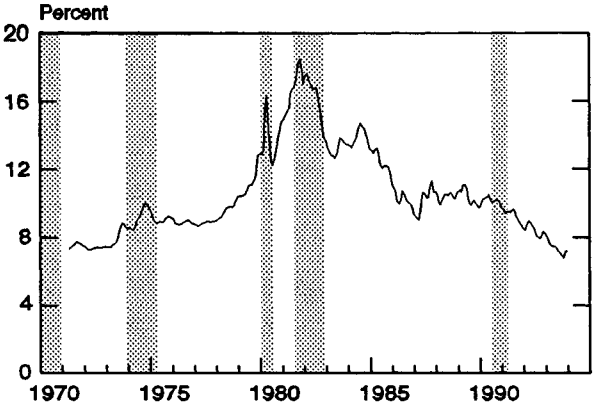


SOURCES: Congressional Budget Office; Department of Commerce, Bureau of Economic Analysis.

NOTE: Solid lines are actual; dashed lines are projections.

The Census projections were made in 1986. The last actual data point is 1992.

Figure 1-6.
Interest Rate on Conventional Mortgages

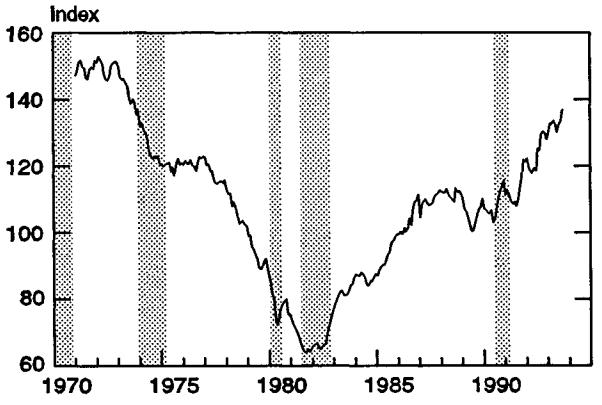


SOURCES: Congressional Budget Office; Federal Reserve Board.

The demographic trends also imply that investment in single-family homes for middle-aged people will be vibrant, even as the market for starter homes weakens. The number of households headed by people ages 45 to 54 will grow rapidly during the 1990s, as the baby-boom generation ages, and these households will probably demand homes with more amenities. Therefore, even if the number of single-family housing starts does not rise, an increase in the average value of new homes built and an increase in additions and alterations to existing homes are likely to support residential investment.

Lower interest rates have offset some of the dampening effect of demographics in recent months and may continue to boost home sales and housing starts during early 1994. Interest rates for conventional, fixed-rate mortgages have reached levels not seen since the early 1970s (see Figure 1-6). The affordability index compares median family income

Figure 1-7.
Housing Affordability Index



SOURCES: Congressional Budget Office; National Association of Realtors.

NOTE: Index equals 100 when median family income is just sufficient to qualify the family to purchase a median-priced home.

with the income required to purchase a house of median price, and it too has returned to levels not reached since the early 1970s (see Figure 1-7). In October 1993, the median family income was about 30 percent higher than was necessary to purchase the median-priced house, assuming 80 percent financing and a monthly mortgage payment that cannot exceed 25 percent of total income.

Foreign Economies: Slow Growth Implies Lower U.S. Net Exports

The outlook for U.S. net exports is expected to darken over the next year. Foreign economies are likely to grow more slowly than the United States, while demand for foreign goods by U.S. businesses and consumers remains strong. Although foreign growth in 1994 is expected to improve slightly from that of 1993, the trade deficit is expected to widen, depressing economic growth. Exports will rise as a share of U.S. output, but not as fast as imports are rising.

Painfully slow recoveries in two of the United States' major trading partners, Japan and Germany, help to explain the relatively weak export picture. In Japan, the economy registered almost zero growth in 1993, and forecasters anticipate less than 1 percent growth this year. As of late 1993, industrial production was continuing the decline that began in early 1992, and it still shows no signs of recovery. Labor market indicators also continued to weaken. The ratio of job offers to applicants fell during 1993, and the unemployment rate, which rose from 2.2 percent in 1992 to approximately 2.5 percent in 1993, is forecast to increase further this year. Japan's recovery is likely to be delayed by structural factors similar to those that hampered the recent recovery in the United States. Corporations have significant overcapacity, reducing the need for capital spending, and Japanese firms are also undergoing restructuring. Japan's financial system is saddled with many bad loans, and real estate prices continue to weaken. Income tax cuts amounting to about 1.5 percent of GNP are being considered, but political problems have delayed passage of the cuts, which now appear unlikely to be implemented until mid-1994.

Because of structural problems in the labor market, tight fiscal and monetary policy, and sagging private consumption, economic activity in Germany in 1994 is also expected to be sluggish. The rate of unemployment in Germany for 1993 approached 10 percent, yet wages continued to rise and profits fell. Recent government spending cuts aimed at reducing welfare and unemployment benefits may restrain the budget deficit of the public sector despite rising unemployment. The central bank of Germany, the Bundesbank, continues to keep a tight rein on monetary policy, largely in response to the extremely expansive fiscal policy of past years that accompanied unification. In light of these restraining influences, unemployment will continue to increase. Uncertainty over the course of reunification may also hold down consumer spending. Moreover, as a result of the slow growth in the rest of the European Community, exports to those areas will not rise much.

Other parts of the world should enjoy slightly faster growth in 1994, and this growth will strengthen exports. Growth in Latin America will ease somewhat but still proceed at a healthy pace of about

3 percent. Countries in Asia and the Pacific region as a whole will expand moderately at about 2 percent. At the same time, Canada is expected to show solid but not exceptional growth of approximately 3.5 percent. Growth in these countries explains why U.S. exports will grow faster than U.S. GDP.

Demand for imported goods by U.S. households and businesses will continue to expand at a good clip in 1994, as it did in 1993. Since imports make up approximately 15 percent of consumer goods, growth of consumption in 1994 will spur imports of these goods. And because imports make up a large share of capital goods, business expansion in the United States will require imports of capital goods to grow as well. Increased investment in computers and the high proportion of computers and peripherals imported from abroad suggests that net imports of computers will grow in 1994.

The value of the dollar will affect net exports as well. Expectations about relative changes in interest rates indicate a stronger dollar during 1994. Faster growth in the United States than in Germany and Japan over the next year or so will cause short-term interest rates in the United States to rise faster than those in the rest of the developed countries. This widening gap in interest rates will push up the value of the dollar temporarily.

Monetary Policy: The Federal Reserve Will Probably Let Short-Term Rates Rise

Long-term interest rates fell considerably during the first half of 1993 as fears of rising inflation subsided, worldwide demand for capital declined, and deficit reduction became more probable. Short-term rates continued to ease through the first quarter of 1993 and have remained low since then. As the economy continues to gain momentum and close the gap between potential and actual GDP, however, the Federal Reserve will probably let short-term rates rise.

The Policy Problem Faced by the Federal Reserve

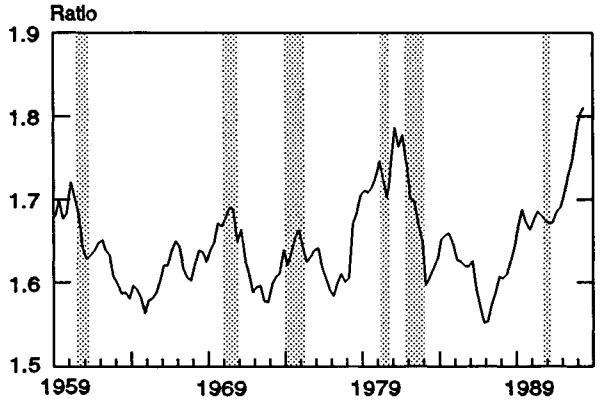
The goal of the Federal Reserve is to promote economic expansion together with low inflation. In pursuing that goal, the Federal Reserve has used a wide variety of indicators to formulate monetary policy over the years, particularly monetary aggregates and interest rates. Currently, however, interest rates have become a primary indicator. The previous relationship between the monetary aggregates and the level of economic activity is no longer a reliable gauge. Movements in interest rates now convey more information on the stance of monetary policy.

In its midyear 1993 report to the Congress, the Federal Reserve announced that it would downplay the role of the monetary aggregates in assessing the stance of monetary policy. Most analysts had abandoned these aggregates even earlier. In the past, the relationship between the broad measure of money known as M2 and GDP had been reasonably stable, so the Federal Reserve was able to use that relationship to guide monetary policy. But in recent years, the economy has grown much faster than M2. As a result, M2 velocity--the ratio of GDP to M2--has become highly unpredictable, reducing the usefulness of M2 as a policy tool.

M2 has been growing so slowly that its velocity is at its highest level since official data on M2 were first made available in 1959 (see Figure 1-8). Recent data suggest that M2 and the even broader measure M3 may expand more quickly, perhaps signaling recovery in the expansion of bank credit. Meanwhile, narrow measures of monetary thrust, such as M1 or total reserves held by banks and thrifts, show rapid growth.[2] But since the relationships between these measures and GDP have not been as reliable as

2. M1, M2, and M3 are measures of the U.S. money supply. M1 consists of the public's holdings of currency, travelers' checks, and checkable deposits. M2 is primarily M1 plus small (less than $100,000) time and savings accounts, money market deposit accounts held at depository institutions, and most money market mutual funds. M3 primarily consists of M2 plus large (more than $100,000) time deposits, term repurchase agreements, term Eurodollars, and money market mutual funds owned by institutions.

Figure 1-8.
Velocity of M2



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

NOTE: M2 velocity is the ratio of nominal GDP to the M2 measure of the money supply. M2 consists primarily of currency, traveler's checks, checkable deposits, small time and savings accounts, money market deposit accounts held at depository institutions, and most money market mutual funds.

the M2 relationship in the past, they are not apt to be useful indicators of the stance of monetary policy now.

Since the monetary aggregates have given such an unclear message, movements in interest rates may yield more information about whether monetary policy is constricting or encouraging economic activity. Interest rates, however, move not only because of policy changes but also because of changes in the economy, and distinguishing between the two causes is difficult. As interest rates rise, analysts will not know for sure whether they are increasing because of a higher level of economic activity, fears of higher inflation, or tightening by the Federal Reserve.

Some analysts view the currently low rates of interest on short-term Treasury securities as highly expansionary, lending credence to the notion that the Federal Reserve will allow short-term rates to drift upward as the expansion continues. The rate on three-month Treasury bills hovered around 3 percent throughout 1993 as the economy picked up steam. With inflation as measured by the consumer price index close to 3 percent as well, the real rate of interest--that is, the rate of interest after adjusting for inflation--has been approximately zero. The Federal Reserve has expressed its concern that low real interest rates, if maintained for too long, could lead to an overheated economy and higher inflation such as that which occurred in the late 1960s and in the 1977-1978 period.

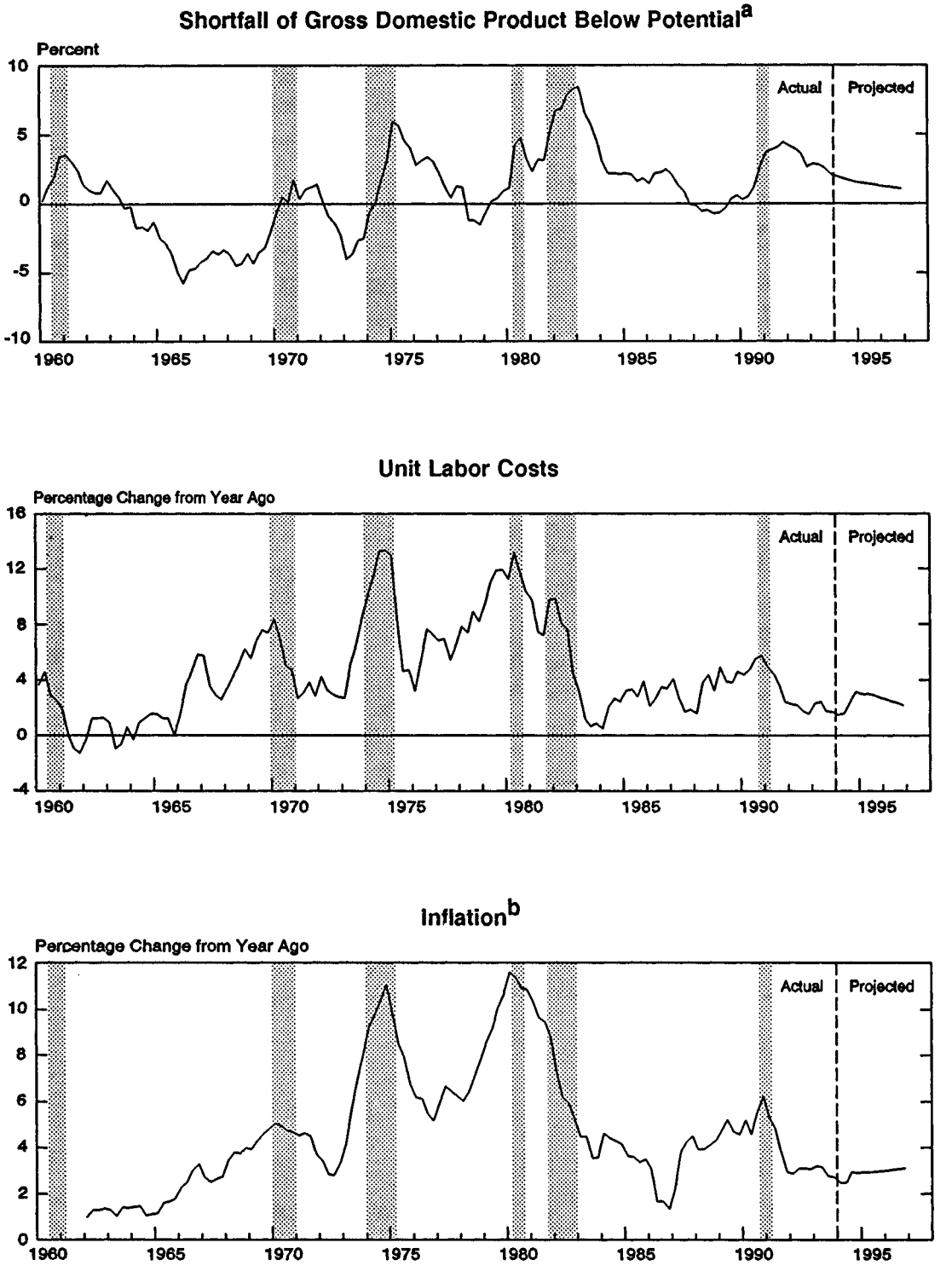
CBO's forecast assumes that the Federal Reserve will continue to emphasize the importance of restraining inflation without unduly restricting economic activity. If so, the Federal Reserve will probably allow a modest increase in short-term rates of interest. In fact, in CBO's forecast they rise roughly 1 percentage point above the forecast rate of inflation by the end of 1994 and another one-half of one percentage point above the forecast rate of inflation by the end of 1995.

Inflation Is Not Likely to Pick Up Noticeably in the Near Term

With slack remaining in the economy and little pressure from wages or imported goods, inflation is unlikely to be a problem during 1994 or 1995. The underlying rate of consumer price inflation--a measure of inflation that dampens the influence of volatile components of the consumer price index--eased a bit during 1993, although transitory price shocks caused the reported rate to jump erratically from quarter to quarter. CBO currently estimates that the underlying rate is slightly below 3 percent, and inflation will be close to that rate this year.

The persistence of excess capacity should keep inflation in check. CBO estimates that the GDP gap, a summary measure of the degree of excess capacity, will remain large enough to dampen inflation even with economic growth close to 3 percent (see Figure 1-9). Labor markets are also unlikely to tighten significantly during the forecast period. Although the unemployment rate is expected to decline over the year, the level of unemployment will still be large enough to slow pressures for wage gains. Increases in total compensation are likely to outpace growth in productivity by less than 3 percent a year, thereby keeping the growth of unit labor costs low.

Figure 1-9.
Inflation Indicators and Inflation



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

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 changed in 1983. The inflation series in the figure uses a consistent definition throughout.

The capacity utilization rate for manufacturing is an important indicator of possible increases in inflation. The current rate is at a level often associated with inflationary pressures. Investment in plant and equipment has been strong, however, and should help keep utilization rates from increasing significantly this year.

Inflation has slowed in most developed economies outside the United States over the last two years, which should further moderate U.S. inflation. Between 1991 and the end of last year, consumer price inflation slowed from 5.6 percent to about 2 percent in Canada, from 3.3 percent to about 1.3 percent in Japan, from 5.9 percent to about 1.5 percent in the United Kingdom, and from 3.1 percent to about 2.2 percent in France. In a notable exception to this pattern, inflation in Germany increased over the same period, but a restrictive monetary policy and recession are beginning to bring down the inflation rate.

Low inflation abroad helps restrain U.S. inflation by both keeping prices of imported goods low and restraining domestic price increases for U.S. goods. Growth in prices of imported goods has been extremely slow for two years--the implicit import deflator for goods excluding petroleum and computers has grown by less than 1 percent over the last year.

Table 1-3.
Economic Outlook for Calendar Years 1994 Through 1999

	Estimated	Forecast		Projected			
	1993	1994	1995	1996	1997	1998	1999
Nominal GDP (Billions of dollars)	6,370	6,730	7,099	7,483	7,880	8,287	8,700
Nominal GDP (Percentage change)	5.5	5.6	5.5	5.4	5.3	5.2	5.0
Real GDP (Percentage change)	2.8	2.9	2.7	2.7	2.7	2.6	2.5
Implicit GDP Deflator (Percentage change)	2.6	2.7	2.7	2.6	2.5	2.5	2.5
Fixed-Weighted GDP Price Index (Percentage change)	3.2	2.8	2.7	2.7	2.7	2.7	2.7
CPI-U (Percentage change)[a]	3.0	2.7	3.0	3.1	3.1	3.1	3.1
Unemployment Rate (Percent)[b]	6.8	6.4	6.1	5.9	5.8	5.7	5.7
Three-Month Treasury Bill Rate (Percent)	3.0	3.5	4.3	4.6	4.6	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	5.9	5.8	6.0	6.1	6.2	6.2	6.2
Tax Bases (Percentage of GDP)							
Corporate profits	7.3	7.3	6.9	6.8	6.7	6.6	6.5
Other taxable income	20.5	20.2	20.3	20.3	20.4	20.5	20.6
Wage and salary disbursements	48.4	48.8	49.0	49.0	48.9	48.9	48.8
Total	76.1	76.3	76.2	76.2	76.0	75.9	75.8

SOURCE: Congressional Budget Office.

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

b. Unemployment rate based on 1993 methodology; published rates are likely to be higher (see Box 1-1).

The recent drop in petroleum prices will also dampen inflation, though only for a short time. The price of petroleum has fallen from $18 a barrel in the second quarter of 1993 to about $15 a barrel recently. This drop offsets all of the effect on consumer prices of the federal gasoline tax increase of 4.3 cents a gallon imposed in October 1993, plus the increase of 1 to 2 cents a gallon in the cost of supplying oxygenated fuels to the nation's largest cities. Although the CBO forecast anticipates moderate gains in petroleum prices during 1994, gasoline prices are still likely to be lower on average this year than last.

By the mid-1990s, however, some inflationary pressures may emerge. As the economy continues to grow and gets closer to the level of potential GDP, shortages of goods and labor may put upward pressure on both wages and prices. CBO assumes that by allowing a modest rise in short-term rates, the Federal Reserve will prevent the pressure from building inordinately.

Table 1-4.
Economic Outlook for Fiscal Years 1994 Through 1999

	Estimated	Forecast		Projected			
	1993	1994	1995	1996	1997	1998	1999
Nominal GDP (Billions of dollars)	6,295	6,637	7,006	7,386	7,780	8,185	8,596
Nominal GDP (Percentage change)	6.0	5.4	5.5	5.4	5.3	5.2	5.0
Real GDP (Percentage change)	3.2	2.8	2.7	2.7	2.7	2.6	2.5
Implicit GDP Deflator (Percentage change)	2.7	2.6	2.7	2.6	2.5	2.5	2.5
Fixed-Weighted GDP Price Index (Percentage change)	3.2	2.9	2.7	2.7	2.7	2.7	2.7
CPI-U (Percentage change)[a]	3.0	2.7	2.9	3.0	3.1	3.1	3.1
Unemployment Rate (Percent)[b]	7.0	6.4	6.1	6.0	5.8	5.7	5.7
Three-Month Treasury Bill Rate (Percent)	3.0	3.3	4.2	4.5	4.6	4.7	4.7
Ten-Year Treasury Note Rate (Percent)	6.2	5.7	6.0	6.1	6.2	6.2	6.2
Tax Bases (Percentage of GDP)							
Corporate profits	7.1	7.4	7.0	6.8	6.7	6.6	6.5
Other taxable income	20.5	20.2	20.2	20.3	20.4	20.5	20.5
Wage and salary disbursements	48.7	48.8	49.0	49.0	49.0	48.9	48.8
Total	76.4	76.4	76.2	76.2	76.1	76.0	75.9

SOURCE: Congressional Budget Office.

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

b. Unemployment rate based on 1993 methodology; published rates are likely to be higher (see Box 1-1).

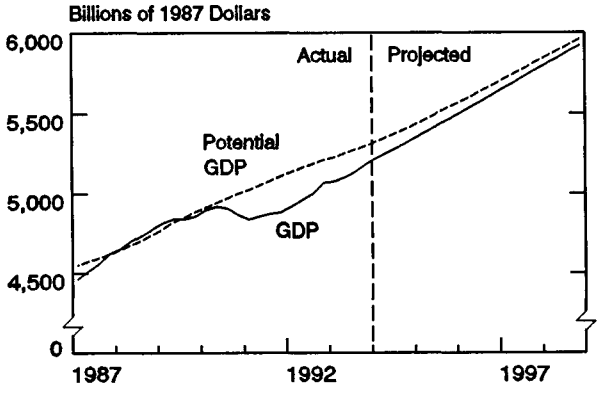
Projections for 1996 Through 1999

Over the medium term, the 1996-1999 period, CBO projects that real GDP will grow at an average annual rate of 2.6 percent (see Tables 1-3 and 1-4). This GDP projection implies an average rate of unemployment of 5.8 percent over that period, measured by the old definition of unemployment. (The discussion in this section refers to calendar years, shown in Table 1-3 on page 15.)

The medium-term projections for growth do not reflect any attempt to estimate cyclical movements of the economy or the effect of fiscal policy on the year-to-year changes in economic activity. Instead, they are based on CBO's analysis of fundamental factors underlying the economy, including the 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 1999 (see Figure 1-10).

Inflation, as measured by the consumer price index, is projected to average about 3.1 percent throughout the medium term. Long-term interest rates should average 6.2 percent, and short-term rates are projected to rise from 4.3 percent in 1995 to 4.7 percent by 1999.

Figure 1-10.
Closing the Gap: GDP Versus Potential GDP



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

The Projection for Growth

The CBO projection for the growth of real GDP is historically low, but growth at the projected rate would be quite respectable given the slow growth in the labor force. The average annual rate of growth of 2.6 percent over the projection period contrasts with an average of 3.1 percent for the period from the 1960s through the 1980s. The projected growth in the labor force is 1.3 percent compared with 2.0 percent for the 1960-1989 period.

CBO's projection for the average growth of the economy between 1996 and 1999 depends primarily on the estimate of potential output for the economy. Potential output is the maximum level of output that can be maintained without igniting inflation. According to CBO's estimates, the economy operated about 2 percent below potential at the end of 1993, and potential output will grow at an average rate of 2.4 percent during the 1996-1999 period.[3] Under such estimates, real GDP could grow at an average annual rate of 2½ percent to 3 percent for several years without raising inflation.

Although all estimates of potential output have a large degree of uncertainty associated with them, recent economic conditions pose three particular problems: estimating the nonaccelerating inflation rate of unemployment (NAIRU), interpreting recent patterns of growth in the labor force, and forecasting the future gains in total factor productivity (TFP).

How Low Is the NAIRU? First, CBO may have underestimated the benchmark that is used to measure the state of the business cycle--the nonaccelerating inflation rate of unemployment (see Box 1-2 for a discussion of the NAIRU). Economists generally agree that the NAIRU increased during the 1960s and 1970s as ever-increasing numbers of younger, less-experienced workers entered the labor market. The same logic dictates that the NAIRU should have declined during the 1980s and early 1990s, which is

3. This rate of growth is approximately 0.3 percentage points faster than the estimate CBO made last summer. The change in the projection came about primarily because of the annual revision of the national income and product accounts by the Bureau of Economic Analysis, which raised the trend rate of growth of total factor productivity and lowered the level of capital consumption and the level of net foreign investment during the last three years.

Box 1-2. The NAIRU

The nonaccelerating inflation rate of unemployment (NAIRU)--an estimate of the rate of unemployment that is consistent with a stable rate of inflation--is an important concept for estimating the potential level of output and for forecasting inflation. Implicit in the use of the NAIRU is an idea about how labor markets function--that the growth of total compensation is stable when the demand for and supply of labor are in rough balance and there are no random shocks. If that is the case, the growth of prices will also be stable. If overall demand for labor were to increase, then the unemployment rate would fall as firms increased employment, but compensation would be "bid up" as firms competed for workers, putting upward pressure on prices. The process would be reversed in the case of lower demand for labor; the unemployment rate would rise and the growth of compensation and prices would slow in the face of eased competition for workers.

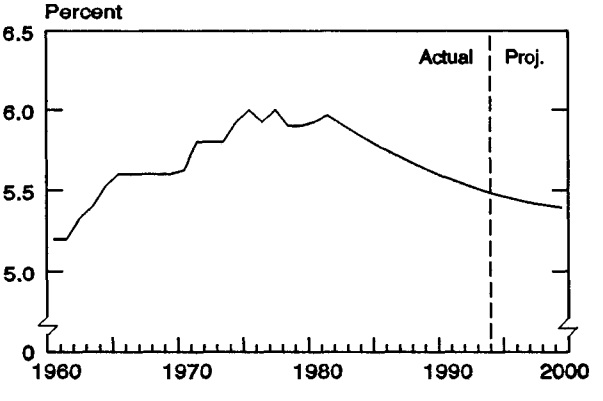
It may seem odd that economists refer to a nonzero rate of unemployment as "full employment." However, some unemployment is unavoidable in even the healthiest market economy. People constantly flow into the labor force at all stages of the business cycle; few will find jobs immediately, even during a strong expansion. Workers can become unemployed at all stages of the business cycle. Quits, terminations, and layoffs all occur to varying degrees during booms as well as busts. In addition, long-term structural changes in the economy ensure that some industries decline as others are born. All of these factors imply that there will always be some unemployed workers no matter how robust the economy.

The level of the NAIRU changes for many reasons, including demographics, technological change, government regulations, and the generosity of unemployment insurance. But the only one whose effects can be readily tracked is the demographic makeup of the population. Since different groups in the labor force have different employment opportunities, a changing demographic profile would be expected to change the level of the NAIRU. For example, teens traditionally have had more limited opportunities for employment--and higher unemployment rates--than older workers. Therefore, if the share of the labor force composed of teens increased (as it did in the 1960s and early 1970s), one would expect the NAIRU to rise as well. It would take a higher unemployment rate than otherwise would be the case to ease pressure on wages and prices.

what CBO assumes (see Figure 1-11). CBO estimates that the NAIRU was 5.5 percent in 1993.

However, some analysts contend that the current level of the NAIRU is higher than CBO's estimate--perhaps close to 6 percent--which would imply that CBO's estimate of the level of potential output is also too high. Indeed, these analysts would argue that the NAIRU did not decline during the 1980s, maintaining that the decline as a result of demographic factors was offset by such influences as regional mismatches between the skills of workers and the skills required by jobs available. Under this alternate view of the NAIRU, CBO's estimate of potential output would be lowered and, given its current forecast, inflationary pressures would be expected to appear during 1995.

Figure 1-11. Nonaccelerating Inflation Rate of Unemployment



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

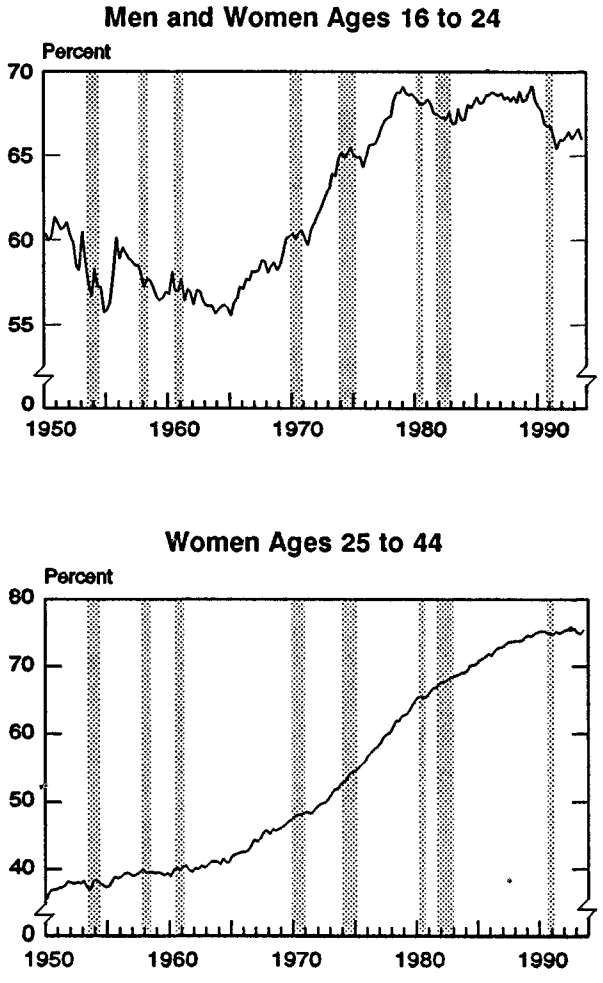
Recent Growth in the Labor Force Has Been Slow. The second source of uncertainty about the forecast stems from recent patterns of growth in the labor force. Growth of the labor force has been unusually slow during the past three years. This slowdown was caused not by a slump in population growth but by a leveling off of the growth in the percentage of the working-age population who desire to work--that is, the rate of participation in the labor force. The key question is whether the recent slowing of growth in labor force participation is an unusual short-run effect of the business cycle (the influence of slower growth in employment opportunities) or whether it reflects a fundamental shift in the long-run trend of labor force participation.

The answer to this question is important because the growth of the labor force during the past three years affects the estimate of potential output during the 1980s and 1990s. If, as CBO currently believes, the recent behavior of labor force participation was caused not by a change in the trend but instead by an unusually large cyclical response to slow growth in employment, then CBO's estimate of potential output is justified. If, however, the growth of the labor force is slower, then the level and growth rate of potential output is lower than CBO estimates and the point at which inflationary pressures would build is closer.

CBO has examined the data and believes that the evidence for a change in the trend is not conclusive, though the possibility cannot be ruled out. When participation rates are examined by age and sex categories, developments in two demographic categories appear to account for most of the slowing in the overall rate. The first is an outright decline in the rates for younger workers, ages 16 to 24, both male and female (see Figure 1-12). These workers may have been hit particularly hard by the recession. Jobs in retail trade--an important job market for younger workers--fell much more sharply in this recession than in previous recessions, and employment did not surpass the prerecession peak until May 1993. Participation rates of younger workers may rebound as demand for the skills of these workers grows.

The second development is more difficult to explain--namely, a flattening since 1990 in the increase in the rates of participation of women ages 25 to 44 (see Figure 1-12). Although some analysts have attributed this phenomenon to increased numbers of women withdrawing from the labor force to raise families, it is still uncertain whether that will cause a change in the trend. It will be impossible to be sure that the recent behavior is caused by cyclical factors until an extended period of rapid growth in employment occurs. The response of the labor force will then provide an answer.

Figure 1-12.
Labor Force Participation Rates



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

Total Factor Productivity Rose at a Healthy Pace in 1992 After Paltry Growth in the 1980s. In contrast to the uncertainties about the NAIRU and trends in the rate of participation in the labor force, the third source of uncertainty about the projections provides a reason to be optimistic. Total factor productivity posted a healthy 2.7 percent gain in 1992, the highest rate since 1984.[4] Indeed, this rate is well above the trend rate of growth of TFP observed during the period since the 1981 business cycle peak--0.6 percent on average. That trend reflects the annual revision of the national income and product accounts (NIPAs) conducted by the Bureau of Economic Analysis and released last August, which raised the estimated trend rate of growth in TFP by 0.2 percentage points. The growth of the past few years is strong enough to suggest that a new, faster trend may have started. Although not enough data are in hand to estimate a new trend reliably, faster growth in productivity raises the prospect of considerably faster growth of potential output.

The Projection for Inflation

CBO assumes that inflation will average 3.1 percent during the projection period. This projection is based on the possibility of both adverse and favorable supply shocks as well as the possibility of periods of both excess and slack demand. Although the projections for real growth and the unemployment rate suggest excess capacity on average over the projection period, the average rate of inflation for the 1996-1999 period is projected to be slightly higher than that in 1994 and 1995. In CBO's judgment, the risk of a large adverse supply or demand shock during those years is slightly greater than the risk of a large favorable one.

The Projection for Interest Rates

CBO projects that the interest rate on three-month Treasury bills will rise during the projection period and that the rate on 10-year Treasury notes will hold steady. The average rate on three-month Treasury bills over the 1996-1999 period is projected to be 4.6 percent. The long-term rate remains at about 6.2 percent throughout the projection period.

CBO's projections of real interest rates are based on consideration of the supply and demand for capital. In the second half of the 1990s, after the current weakness in Japan and Europe is over, 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 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. Consequently, real short-term rates should rise.

Comparisons with Other Forecasts and Projections

Although CBO's near-term forecast for real GDP growth is similar to that of the *Blue Chip* consensus of forecasters, the medium-term projections are similar in some respects but quite different in others.[5]

CBO forecasts real growth through 1995 to be as strong as does the *Blue Chip* consensus survey (see Table 1-5). The forecasts for the unemployment rate are also similar. However, the CBO forecasts for growth of the GDP deflator and for consumer price inflation are below those of the consensus.

The CBO projections for real growth over the 1996-1999 period agree quite closely with the projections of the *Blue Chip* consensus, but CBO's projections of inflation and the unemployment rate are lower than those of the consensus (see Table 16). In contrast, CBO's projection of short-term interest rates is above that of the consensus.

CBO projects that real GDP will grow at an average annual rate of 2.6 percent over the period, as does the consensus. Rates on three-month Treasury

4. These estimates of total factor productivity were calculated by the Congressional Budget Office. The Bureau of Labor Statistics of the Department of Labor publishes a closely related measure, multifactor productivity, but has released data only through 1990.

5. See Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (January 10, 1994).

Table 1-5.
Comparison of Forecasts for 1994 and 1995

	Estimated 1993	Forecast 1994	Forecast 1995
	Fourth Quarter to Fourth Quarter (Percentage change)		
Nominal GDP			
CBO current	4.9	5.7	5.4
Blue Chip	5.0	5.6	5.7
CBO September 1993	5.2	5.2	5.3
Real GDP[a]			
CBO current	2.3	2.8	2.7
Blue Chip	2.4	2.7	2.6
CBO September 1993	2.3	2.7	2.7
Implicit GDP Deflator			
CBO current	2.5	2.8	2.6
Blue Chip	2.5	2.8	3.0
CBO September 1993	2.8	2.5	2.5
Consumer Price Index[b]			
CBO current	2.7	2.9	3.0
Blue Chip	2.7	3.1	3.3
CBO September 1993	3.4	3.1	3.0
	Calendar Year Averages (Percent)		
Civilian Unemployment Rate[c]			
CBO current	6.8	6.4	6.1
Blue Chip	6.8	6.4	6.2
CBO September 1993	6.9	6.6	6.3
Three-Month Treasury Bill Rate			
CBO current	3.0	3.5	4.3
Blue Chip	3.0	3.4	3.8
CBO September 1993	3.1	3.6	4.1
Ten-Year Treasury Note Rate			
CBO current	5.9	5.8	6.0
Blue Chip[d]	5.9	5.9	6.1
CBO September 1993	6.0	6.1	6.1

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (January 10, 1994); Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

NOTE: The *Blue Chip* forecasts through 1995 are based on a survey of 50 private forecasters.

a. Based on constant 1987 dollars.

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

c. Unemployment rate based on 1993 methodology; published rates are likely to be higher (see Box 1-1).

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

bills are projected to be about 4.7 percent on average in CBO's projections but only 4.4 percent on average in the consensus. According to CBO, inflation as measured by the CPI-U remains at 3.1 percent compared with 3.6 percent for the consensus. The unemployment rate falls from 5.9 percent to 5.7 percent in the CBO projections. In the *Blue Chip* projections, it starts at a slightly higher level but drops by the same amount.

Risks to CBO's Economic Forecast

The world is changing, and consequently any forecast must be treated cautiously, with a realistic eye to the likelihood of the unforeseen. This outlook, like most, has been put together under the assumption that business will be as usual. Thus, it recognizes uncertainties but does not pretend to anticipate catastrophes.

In addition to the uncertainties surrounding the estimate of potential GDP already discussed, three types of behavior seem especially difficult to forecast in this outlook: economic growth among the major U.S. trading partners; actions of the Federal Reserve as the economy continues to grow; and whether, and how fast, the rate of personal saving will rise. CBO's forecast sticks to the middle of the road in each of these areas, but the possibility of errors exists on each side.

Table 1-6.
Comparison of Projections for 1996 Through 1999

	1996	1997	1998	1999
	Percentage Change (Year-over-year)			
Real GDP[a]				
CBO current	2.7	2.7	2.6	2.5
Blue Chip	2.6	2.7	2.6	2.6
CBO September 1993	2.7	2.6	2.4	2.1
Consumer Price Index[b]				
CBO current	3.1	3.1	3.1	3.1
Blue Chip	3.6	3.7	3.6	3.6
CBO September 1993	3.0	3.0	3.0	3.0
	Calendar Year Averages (Percent)			
Civilian Unemployment Rate[c]				
CBO current	5.9	5.8	5.7	5.7
Blue Chip	6.2	6.2	6.1	6.0
CBO September 1993	6.0	5.8	5.7	5.7
Three-Month Treasury Rill Rate				
CBO current	4.6	4.6	4.7	4.7
Blue Chip	4.3	4.4	4.4	4.4
CBO September 1993	4.5	4.6	4.6	4.6

SOURCES: Congressional Budget Office; Eggert Economic Enterprises, Inc., *Blue Chip Economic Indicators* (October 10, 1993); Department of Commerce, Bureau of Economic Analysis; Department of Labor, Bureau of Labor Statistics; Federal Reserve Board.

a. Based on constant 1987 dollars.

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

c. Unemployment rate based on 1993 methodology; published rates are likely to be higher (see Box 1-1).

A major uncertainty is the state of the world economy, which affects the market for U.S. exports and is also an important factor underlying interest rates. On the one hand, growth in the newly industrialized countries of Latin America and Asia could turn out to be stronger than anticipated. Those countries have in the past few years largely avoided the recession and could do even better once the developed economies begin to recover. China, in particular, is rapidly growing into an economic giant whose impact on the world economy is not yet clear. Moreover, the final agreement of the Uruguay Round of the General Agreement on Tariffs and Trade (GATT), which was concluded as this forecast was completed, offers a hope of increased world trade in which the United States will be well placed to participate.

On the other hand, the economic situation in Europe and Japan, poor as it seems now, could turn out even worse than currently anticipated. In both Europe and Japan, political factors stand in the way of stimulative policies that are widely advocated. Thus, those governments would find it difficult to respond quickly if the outlook became bleaker, yet not doing so would enlarge the risk of these economies continuing their poor performance.

If the world economy turns out to be substantially stronger than CBO assumes, U.S. exports would benefit; a weaker world economy would weaken U.S. exports. Interest rates would also be affected, since the U.S. capital market is closely linked with world capital markets: broadly speaking, rates would be somewhat higher in the United States if the world economy is strong, and lower if the world economy fails to recover. Thus, forecast errors in projecting the demand for U.S. exports would be partly miti-gated through movements in interest rates.

If the Federal Reserve adopts a policy toward short-term interest rates that differs from that assumed in the CBO forecast, such a policy would pose an additional risk. A stronger anti-inflation stance that raised interest rates rapidly would dampen economic activity in the near term, while a stance that kept rates unchanged might add more stimulus than CBO assumes. Although the CBO forecast presumes the Federal Reserve will be able to assess correctly the degree of economic growth that will be compatible with stable inflation, in reality any such assessment is surrounded by uncertainty and consequently is prone to mistakes. Continued concerns about corporate restructuring or uneven growth in different parts of the country also contribute to diverse perceptions about potential output and inflation.

The amount that Americans save out of personal income could also tip the scale toward faster or slower growth. The personal saving rate appears to be at a very low level now compared with that of recent history, but that level may be understated because revisions to the data on wages and salaries often result in raising the rate. Moreover, various kinds of news regarding economic activity or global political stability can sometimes change the attitude of households toward saving over short periods of time. Any increase in personal saving rates would reduce consumption and thus slow the pace of economic activity in the short run, and any decrease would increase consumption and raise the rate of growth.

There remain the larger uncertainties, which a forecast cannot pretend to encompass. As this report was written, the locus of political power in Russia remained unclear following the Duma elections: how that turns out could determine whether Russia succeeds in reforming its economy. This uncertainty could already be affecting markets in many ways: weakening the deutsche mark, discouraging capital flows to Eastern Europe, and disrupting trade flows. A slowing of the economic changes in Russia, or a rising tide of nationalism, could have a new set of effects, including perhaps greater pressure on budgets in the United States and Europe to counter possible geopolitical instability. How these developments turn out could well be of greater import for the United States than most of the short-run economic factors discussed in this chapter.

Chapter Two

The Budget Outlook

In 1993, the federal deficit was $255 billion--down sharply from the record of $290 billion set just a year earlier. The Congressional Budget Office projects that if current taxing and spending policies remain unchanged, the deficit will keep falling for several years, dipping to $166 billion in 1996 before climbing again. In relation to the size of the economy (as measured by gross domestic product), the deficit hovers just under 2½ percent in 1995 through 1999.

Last August, an ambitious deficit reduction package--the Omnibus Budget Reconciliation Act of 1993 (OBRA-93)--cleared the Congress and was signed by the President. Enacted with barely a month left in the fiscal year, the package was not responsible for the deficit's decline between 1992 and 1993. Instead, the main reason that the 1993 deficit lay below 1992's tally was a swing in spending for deposit insurance, down $31 billion from the previous year's figure largely because of a hiatus in funding that delayed the cleanup of troubled savings and loan institutions. But OBRA-93 contributes enormously to holding down the deficit in 1994 and beyond. When OBRA-93 was passed, CBO credited its backers with having achieved $433 billion in savings in 1994 through 1998--and, of course, most of the savings persist even after that period.[1]

The last time that the Congress and the Administration hammered out a major deficit reduction package, namely the budget summit agreement of late 1990, the ink was barely dry before a spate of bad news hit. The 1990 summit slashed almost $500 billion from the deficit over the 1991-1995 period, and CBO and others initially thought that it would succeed in virtually balancing the budget by the mid-1990s. That was not to be. Although policymakers did not backpedal on the savings achieved in 1990, slow economic growth, sagging revenues, and an unexpected explosion in spending for health care and other benefit programs swelled the deficit and created the need for additional rounds of budgetary surgery.

So far, however, this situation does not appear to be repeating itself. The budget outlook now is no worse, and in fact is slightly better, than CBO reported last September. The modest improvement stems from undramatic but favorable news on several fronts: strong revenues, subdued spending on net interest, lower outlays for deposit insurance, and a mild deceleration in the growth of benefit programs. Of course, these small revisions leave the underlying message broadcast by CBO last September intact: policymakers have cut the deficit but have by no means erased it.

This chapter summarizes CBO's new baseline projections. The baseline shows the outlook for federal revenues, outlays, and the deficit 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 for weighing proposed changes. Crucially, the projections assume continued compliance with the Balanced Budget and Emergency Deficit Control Act of 1985, which bars lawmakers from increasing the deficit, on balance, through

1. Congressional Budget Office, *The Economic and Budget Outlook: An Update* (September 1993).

revenue or entitlement legislation and sets stringent limits through 1998 on total appropriations for programs that are funded annually. The chapter wraps up with a special look at trends in the progressivity of the tax system, which have been influenced over the years by many pieces of legislation including last year's reconciliation act.

The Deficit Outlook

The simplest and most widely used measure of the deficit is the difference between federal revenues and outlays. Nevertheless, there are several alternative measures, some more useful than others.

The Total Deficit and Its Variants

If today's policies remain unchanged, CBO expects the total deficit to drop through 1996 before rising again (see Table 2-1). This figure--the comprehensive measure of the gap between federal spending and revenues--peaked at $290 billion in 1992 and fell to $255 billion in 1993. It sinks again to $223 billion in 1994, drifts down to $166 billion in 1996, and then heads back up; its ascent picks up steam in

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

	Actual 1993	1994	1995	1996	1997	1998	1999
	In Billions of Dollars						
Total Deficit Assuming Discretionary Caps	255	223	171	166	182	180	204
Deficit Excluding Deposit Insurance	283	228	182	180	189	184	208
Standardized-Employment Deficit[a]	215	179	144	149	164	164	191
On-Budget Deficit (Excluding Social Security and Postal Service)	301	284	242	245	267	272	304
Memorandum:							
Deposit Insurance	-28	-5	-11	-14	-6	-4	-4
Off-Budget Surplus							
Social Security	47	62	70	76	84	92	100
Postal Service	-1	-2	1	2	1	b	b
Total, Off-Budget Surplus	46	61	71	79	85	92	100
	As a Percentage of GDP						
Total Deficit Assuming Discretionary Caps	4.0	3.4	2.4	2.2	2.3	2.2	2.4
Deficit Excluding Deposit Insurance	4.5	3.4	2.6	2.4	2.4	2.2	2.4
Standardized-Employment Deficit[a,c]	3.3	2.7	2.0	2.0	2.1	2.0	2.2

SOURCE: Congressional Budget Office.

a. Excludes cyclical deficit and deposit insurance.

b. Less than $500 million.

c. Expressed as a percentage of potential GDP.

1999, after expiration of the strict dollar caps on discretionary spending set in the Balanced Budget Act.

Temporary and cyclical factors, though, can obscure underlying trends in the budget. When these factors are stripped away, the improvement in the deficit that occurs over the 1992-1995 period looks slightly less impressive.

Deposit Insurance. One measure that eliminates such transitory factors is the deficit excluding deposit insurance. CBO has long stressed 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 real waste--the squandering of resources that deposit insurance outlays symbolize--largely occurred in the past, 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 barely registered in the budget totals before 1988 but then soared to $66 billion in 1991. The government then chalked up outlays of just $3 billion in 1992 and negative outlays (that is, net receipts) of $28 billion in 1993, chiefly because policymakers allowed the spending authority of the Resolution Trust Corporation to lapse for more than a year and a half.

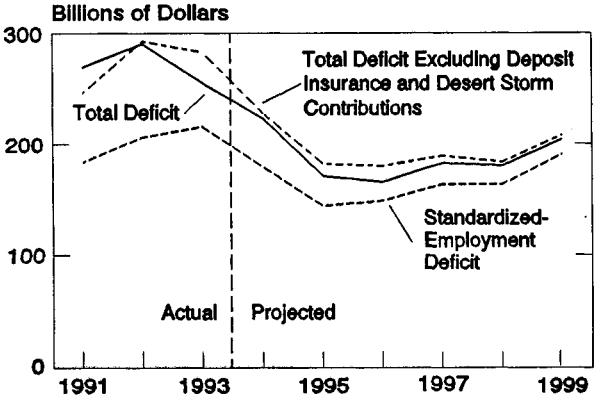
Future deposit insurance outlays are not terribly volatile in CBO's new projections. Small negative outlays in all years signal that the massive losses associated with closing failed institutions have subsided and that the ongoing sales of assets dominate the totals. But this is a notoriously uncertain category of spending and should be isolated when sketching the deficit's trend.

Cyclical Factors. A deficit measure widely used by economists goes one step further by removing the effects of the business cycle on the budget. Poor economic performance automatically worsens the deficit--principally because of lower revenues, less dramatically because of extra benefits for unemployment compensation and other programs. These cyclical effects were very pronounced in the early 1990s but are now fading.

Changes in the standardized-employment deficit are used as a measure of the stimulus or drag exerted by fiscal policy (see Chapter 1). This practice throws light on the part of the deficit that policymakers fundamentally influence, in contrast to the part that simply reflects the cyclical fluctuations of the economy. The standardized-employment deficit indicates that the very big deficits posted in the early 1990s were partly bloated by temporary factors, and the subsequent improvement is therefore somewhat less dramatic than it may first appear (see Figure 2-1).

By whatever measure, the 1990s got off to a bad start, from a fiscal policy standpoint, before things got better. CBO's baseline projections end in 1999, when the deficit appears to be back on an upswing. Thus, they raise the question: what next? A broad-brush picture of the budget outlook for a full 10-year period suggests that the deficit would worsen again under current policies, for reasons that are explained in Box 2-1.

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



SOURCE: Congressional Budget Office.

Box 2-1.
The Ten-Year Budget Outlook

If current policies stay unchanged, the federal deficit will climb steadily after the late 1990s, according to the Congressional Budget Office's latest look at the 10-year picture. CBO projects that the federal deficit (excluding deposit insurance) will be essentially flat in 1995 through 1998. But it climbs every year after that, ultimately topping $360 billion in 2004 (see table). Of greater concern is the deficit's trend as a share of gross domestic product: from 2.2 percent in 1998, it inches up in every year, approaching 3½ percent of GDP in 2004.

What accounts for the escalating deficits after 1999? The answer lies basically in the outlook for one fast-growing and one slow-growing area of spending: health care and discretionary spending.

Outlays for the two big health care programs, Medicare and Medicaid, climb steadily by 10 percent or more every year over the 10-year period. Thus, they also climb as a percentage of GDP: from 3.7 percent in 1994 to 6.3 percent in 2004. Discretionary spending, in contrast, sinks as a share of GDP throughout the entire period. Constrained by caps through 1998, it barely grows at all in dollar terms through then and falls from 8.2 percent to 6.7 percent of GDP--more than offsetting the climb in health care spending. But the caps expire after 1998, and appropriations are assumed to rise again in step with inflation (in keeping with standard baseline methodology). Thus, although discretionary programs continue to sink as a share of GDP in 1999 through 2004, their decline (to 6 percent in 2004) is less precipitous than in the earlier period and is not sufficient to overcome the unrelenting rise of health care spending.

Most other areas of the budget change little in relation to GDP over the 1999-2004 period. Revenues slip from 19 percent to 18.8 percent of GDP. Mandatory spending other than Medicare and Medicaid is expected to stay roughly constant as a share of GDP. The biggest such program, Social Security, remains at 4.8 percent of GDP; even by 2004, the first members of the post-World War II baby boom are still four years from eligibility for retirement. Net interest outlays hover around 3 percent of GDP, and the ratio of debt to GDP--which is basically flat in 1994 through 1999--creeps up by about 3 percentage points (from 52 percent to 55 percent) in the five years thereafter.

A year ago, CBO projected that the deficit would top $650 billion in 2003; by last September, CBO had chopped its projection to $359 billion. The enormous improvement during that six-month period was almost wholly attributable to the enactment of an ambitious deficit reduction package. The newest projection for 2003, a deficit of $324 billion, is only a minor revision in comparison. Of the $35 billion revision, two-thirds stems from higher revenues as CBO has upped its estimate of potential growth, and one-third from lower interest costs as CBO has trimmed its estimate of federal debt.

Of course, these extrapolations are not as detailed as CBO's usual five-year estimates. Rather than produce a meticulous 10-year projection for every program in the budget, CBO attempts simply to judge the likely trends in broad clusters of spending and revenues. And great uncertainties surround such long-range extrapolations. The economy's performance is a big question mark; these projections are predicated on continued growth in real GDP of 2.3 percent annually in 2000 through 2004, on inflation of 3.1 percent, and on short-term and long-term interest rates (specifically, rates on three-month Treasury bills and 10-year Treasury notes) of 4.7 percent and 6.2 percent, respectively. The economy is bound to deviate from these assumptions in ways that cannot be anticipated. And other major uncertainties abound, most notably about future trends in health care spending and about other open-ended commitments, such as the pledges for deposit insurance that proved so costly in the recent past.

The Budget Outlook Through 2004 (By fiscal year)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
					In Billions of Dollars						
Revenues	1,251	1,338	1,411	1,479	1,556	1,630	1,706	1,783	1,868	1,958	2,054
Outlays											
Discretionary	543	541	547	547	547	564	582	600	619	638	658
Mandatory											
Social Security	318	335	352	370	388	408	429	450	473	497	523
Medicare	160	177	195	215	238	264	290	320	354	392	435
Medicaid	86	96	108	121	135	151	168	186	206	227	250
Civil Service and Military Retirement	62	65	67	70	73	78	81	85	89	92	96
Other	177	171	168	184	191	199	205	211	218	225	232
Subtotal	803	844	890	960	1,026	1,099	1,173	1,253	1,339	1,433	1,536
Deposit insurance	-5	-11	-14	-6	-4	-4	-3	-3	-2	-2	-2
Net interest	201	212	228	239	249	261	270	283	298	315	334
Offsetting receipts	-69	-77	-74	-78	-83	-86	-90	-94	-98	-102	-106
Total	1,474	1,509	1,577	1,661	1,736	1,834	1,931	2,039	2,156	2,282	2,419
Deficit	223	171	166	182	180	204	226	256	288	324	365
Deficit Excluding Deposit Insurance	228	182	180	189	184	208	229	258	290	326	367
Debt Held by the Public	3,462	3,642	3,822	4,021	4,218	4,441	4,686	4,961	5,268	5,611	5,995
					As a Percentage of GDP						
Revenues	18.8	19.1	19.1	19.0	19.0	19.0	18.9	18.9	18.8	18.8	18.8
Outlays											
Discretionary	8.2	7.7	7.4	7.0	6.7	6.6	6.5	6.3	6.2	6.1	6.0
Mandatory											
Social Security	4.8	4.8	4.8	4.8	4.7	4.7	4.8	4.8	4.8	4.8	4.8
Medicare	2.4	2.5	2.6	2.8	2.9	3.1	3.2	3.4	3.6	3.8	4.0
Medicaid	1.3	1.4	1.5	1.6	1.7	1.8	1.9	2.0	2.1	2.2	2.3
Civil Service and Military Retirement	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9
Other	2.7	2.4	2.3	2.4	2.3	2.3	2.3	2.2	2.2	2.2	2.1
Subtotal	12.1	12.0	12.1	12.3	12.5	12.8	13.0	13.3	13.5	13.8	14.1
Deposit insurance	-0.1	-0.2	-0.2	-0.1	a	a	a	a	a	a	a
Net interest	3.0	3.0	3.1	3.1	3.0	3.0	3.0	3.0	3.0	3.0	3.1
Offsetting receipts	-1.0	-1.1	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0	-1.0
Total	22.2	21.5	21.3	21.4	21.2	21.3	21.4	21.6	21.7	21.9	22.1
Deficit	3.4	2.4	2.2	2.3	2.2	2.4	2.5	2.7	2.9	3.1	3.3
Deficit Excluding Deposit Insurance	3.4	2.6	2.4	2.4	2.2	2.4	2.5	2.7	2.9	3.1	3.4
Debt Held by the Public	52.2	52.0	51.7	51.7	51.5	51.7	52.0	52.5	53.1	53.9	54.9

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent of GDP.

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 macroeconomic analysis; rather, it is rooted 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--were granted off-budget status in the Balanced Budget 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.

Both 1990's Budget Enforcement Act and 1993's Omnibus Budget Reconciliation Act, which amended the Balanced Budget Act, downplayed fixed deficit targets. Dollar targets exist on paper through 1995, but they move up and down, either automatically or at the President's option, with the economic and technical factors that buffet the budgetary outlook. The existing targets apply to the on-budget deficit--that is, they exclude Social Security and the much smaller net outlays of the Postal Service, which is also legally 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 from the on-budget totals makes the remaining deficit bigger. 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 sometime early in fiscal year 1996, just two years from now. About one-half of Social Security's total surplus stems not from its excess of taxes over benefits, but from interest on its holdings of Treasury securities.

Social Security benefits alone account for over one-fifth of federal spending and its payroll taxes for over one-fourth of government revenues. When analyzing the budget to gauge the government's role in the economy and its drain on the credit markets, excluding such a big program wholesale is clearly unhelpful.

Many economists and policymakers worry about the future demands that will be placed on the budget by demographic pressures, especially as the baby-boom generation born after World War II joins the Social Security and Medicare rolls. CBO and others have pointed out that the best way to prepare for such pressures is to save and invest more now, thereby enlarging the future economic pie and diminishing the relative sacrifices that will be demanded of future workers. The most obvious way to save and invest more is to reduce the federal deficit, which siphons private saving. But CBO has also pointed out that what really matters is that this saving gets done somehow, not whether it is recorded in the Social Security or non-Social Security part of the budget.[2]

Federal Trust Funds. The two Social Security funds share the trust fund label with many other federal programs. In total, there are more than 150 federal trust funds, though fewer than a dozen account for the vast share of trust fund dollars.

Viewed by themselves, trust funds run surpluses because their earmarked income (chiefly from social insurance taxes and from transfers within the budget, as explained below) exceeds spending for benefits, administration, and other costs. The total trust fund surplus is expected to climb from about $113 billion in 1994 to $145 billion in 1999 (see Table 2-2). Although a fund's annual surplus is of interest to policy analysts who monitor that program, its usefulness is necessarily limited. It cannot possibly reveal, for example, who is paying the taxes, who is receiv-

2. Congressional Budget Office, *The Economic and Budget Outlook: Fiscal Years 1990-1994* (January 1989), Chapter 3.

ing the benefits, and whether the program is in good enough shape to meet its long-run commitments.

The federal funds deficit is the deficit excluding all trust funds. In 1994, for example, the total deficit of $223 billion could be characterized as a federal funds deficit of $336 billion offset by a trust fund surplus of $113 billion. The line between federal funds and trust funds is frequently crossed, however, because trust funds receive a large portion of their income from transfers within the budget. Such transfers shift money from the general fund (thereby boosting the federal funds deficit) to trust funds (swelling the trust fund surplus). These intragovernmental transfers total more than $200 billion a year (see Table 2-2). Prominent among them are interest paid to trust funds (about $88 billion in 1994), government contributions to retirement funds on behalf of its employees ($68 billion), and the general fund contribution to Supplementary Medical Insur-

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

	1994	1995	1996	1997	1998	1999
Social Security[a]	62	70	76	84	92	100
Medicare						
Hospital Insurance	5	7	5	1	-5	-13
Supplementary Medical Insurance	3	-6	-4	b	2	2
Subtotal, Medicare	8	1	1	1	-3	-11
Military Retirement	9	9	10	10	10	10
Civilian Retirement[c]	29	30	32	33	35	36
Unemployment	3	6	7	7	7	6
Highway and Airport	-1	-2	1	1	1	1
Other[d]	3	3	3	3	3	3
Total Trust Fund Surplus[e]	113	118	130	139	146	145
Federal Funds Deficit[e]	-336	-289	-296	-321	-326	-349
Total Deficit	-223	-171	-166	-182	-180	-204
Memorandum:						
Net Transfers from Federal Funds to Trust Funds	212	214	233	254	275	297

SOURCE: Congressional Budget Office.

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

b. Less than $500 million.

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

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

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

ance ($46 billion), which covers about three-quarters of that program's costs and typically allows its trust fund to post a small "surplus." Clearly, most of these transfers were instituted for a purpose--for example, to require agencies to consider the cost of funding future retirement benefits as part of their current budgets. But it is equally clear that transferring money from one part of the government to another does not change the total deficit or borrowing needs by one penny.

How Has the Budget Outlook Changed Since September?

The budget outlook has improved marginally since CBO published its projections in September. Projected deficits are down in every year, by $30 billion in 1994 and smaller amounts thereafter (see Table 2-3). But when all the sources of revision--legislative, economic, and technical--are taken together, CBO has trimmed its projections of deficits in the 1994-1998 period by just a bit over 10 percent since last fall, hardly a dramatic change.

Recent Legislation

Little budgetary legislation has passed since last September. The legislation to implement the North American Free Trade Agreement was the only new law with significant effects on revenues; it diminished customs duties but largely recouped this loss by accelerating the timetables for depositing certain taxes electronically with the government (a speedup that has an unusually big effect in 1998).

On the spending side of the budget, the biggest change reflects the sixth extension of unemployment insurance to recipients in danger of exhausting their benefits, boosting outlays by slightly more than $1 billion in 1994. The first such extension came in the fall of 1991, and this latest expires in February 1994. The enactment of emergency appropriations and the use of the special outlay allowance increased the discretionary spending limits, accounting for another $1 billion in outlays in 1994.

Economic Changes

Revisions that stem from changes in the economic outlook are modestly favorable; revenues are up, and outlays are down. On the revenue front, extra collections are expected to total $4 billion in 1994 and $6 billion to $10 billion a year thereafter. Upward revisions to the forecast of wages and other sources of personal income bolster the expected take from individual income taxes and social insurance taxes; however, changes in the outlook for corporate profits dampen receipts in every year except 1994.

On the outlay front, the costs of benefit programs are now expected to be lower by $2 billion to $3 billion in most years, largely because the cost-of-living adjustment for Social Security recipients and other retirees in early 1994 will be smaller than CBO had assumed. And with a slightly more favorable outlook for interest rates and federal deficits, CBO has shaved its projected outlays for net interest by $2 billion to $3 billion a year (see Table 2-3).

Technical Reestimates

Technical revisions are any changes that are not ascribed to legislation or a new economic forecast. In 1994, this category is dominated by CBO's revision to its estimates of spending on deposit insurance. With passage of its long-delayed funding bill, the Resolution Trust Corporation can finally wrap up its phase of the cleanup of the savings and loan industry before turning over responsibilities to its successor, the Savings Association Insurance Fund. This last big push will probably be cheaper than CBO thought, and the resulting downward revision is $16 billion in 1994--split roughly equally between smaller losses and lower requirements for working capital. The Bank Insurance Fund also shares in the sunnier outlook. A special section later in this chapter describes the outlook for deposit insurance spending.

Technical reestimates apart from those to deposit insurance are scattered, but nevertheless join to trim projected deficits by as much as $12 billion a year. Revisions to revenues are small. Along with private spending for health care, the government's big health care programs--Medicaid and Medicare--are experi-

Table 2–3.
Changes in CBO Deficit Projections Since September (By fiscal year, in billions of dollars)

	1994	1995	1996	1997	1998
September 1993 Estimate	253	196	190	198	200
Legislative Changes					
Revenues	a	a	a	a	-1
Outlays	2	a	a	a	a
Deficit	2	a	a	a	-1
Economic Changes					
Revenues	-4	-6	-8	-8	-10
Outlays					
Benefit programs	-2	-3	-3	-2	-1
Net interest	-2	-2	-2	-3	-3
Discretionary spending	0	a	a	a	1
Deficit	-9	-12	-13	-13	-13
Technical Changes					
Revenues	-3	a	a	a	2
Outlays					
Savings-and-loan-related[b,c]	-16	a	-3	-2	1
Bank Insurance Fund	-2	-2	-1	3	-1
Medicaid and Medicare	-2	-5	-5	-6	-8
Income security and Social Security	-3	-2	a	a	a
Federal Communications Commission auction receipts	1	-3	1	1	1
Net interest[c]	a	-2	-1	-1	-1
Other	1	-1	-1	1	1
Deficit	-24	-14	-11	-3	-5
Total Changes	-30	-25	-24	-16	-20
Current Estimate	223	171	166	182	180

SOURCE: Congressional Budget Office.

NOTE: Revenue increases are shown with a negative sign because they decrease the deficit.

a. Less than $500 million.

b. Includes the Resolution Trust Corporation, the Savings Association Insurance Fund, and the FSLIC Resolution Fund.

c. Net of interest payments by deposit insurance agencies to the Federal Financing Bank; those payments are intrabudgetary and do not affect the total deficit.

encing a slowdown in their growth, and the expected result is lower outlays (of about $2 billion in 1994 and $8 billion in 1998). A few other benefit programs--notably unemployment insurance, the earned income tax credit, and Civil Service Retirement--are expected to spend somewhat less than previously projected. And fuller information about the Federal Communications Commission's plans for auctioning the unassigned portion of the electromagnetic spectrum, as mandated by OBRA-93, has led CBO to expect significantly bigger receipts in 1995 but somewhat smaller collections in other years.

The Spending Outlook

CBO expects that federal spending will approach $1.5 trillion in 1994 and top that figure in 1995 (see Table 2-4). For more than a decade, policymakers and budget analysts have broken down the huge federal budget into several distinct clusters. These categories were formalized in 1990's Budget Enforcement Act.

Discretionary spending encompasses programs controlled by annual appropriation bills. For these programs--whether defense, international, or domestic--policymakers decide afresh each year how many dollars will be devoted to continuing existing activities and funding new ones. The baseline projections depict discretionary spending's path assuming compliance with the caps dictated by the Balanced Budget Act through 1998. There are no caps in 1999, and the estimates for that year simply equal the previous year's amounts adjusted for inflation.

All other spending is controlled by existing laws, and the baseline presents CBO's best guess of spending if laws and policies remain unchanged. Any spending that is not discretionary is labeled direct spending, but this broad category is usually further divided into four clusters. *Entitlements and other mandatory spending* consist overwhelmingly of benefit programs, such as Social Security, Medicare, and Medicaid. Spending for these programs is generally controlled by setting rules for eligibility, benefit formulas, and so forth rather than by voting annually for dollar amounts. *Offsetting receipts*--fees and similar charges that are recorded as negative outlays--likewise are changed only when the Congress revisits the underlying laws. *Deposit insurance spending* reflects commitments that the government made to protect depositors in insolvent institutions, promises that now must be honored. And growth in *net interest spending* is wholly driven by the government's deficits and by market interest rates.

Federal spending now represents about 22 percent of gross domestic product and is expected to drift down to about 21 percent over the next five years. In the 1960s, federal spending averaged 19.1 percent of GDP; for the 1970s and 1980s, the figures were 20.6 percent and 23.1 percent, respectively. But although federal spending now represents a bigger share of the economy than in the 1960s and 1970s and only a slightly smaller share than in the 1980s, a pronounced change has taken place in its composition. In a nutshell, the government today spends more on entitlement (chiefly benefit) programs and on net interest, and less on other activities, than in the past (see Figure 2-2). Fuller historical data are contained in Appendix E, which lists annual spending for each of these broad categories of spending and for federal revenues.

Discretionary Spending: Defense, International, and Domestic

Each year, the Congress revisits discretionary programs in the appropriation process. Discretionary programs cover virtually the entire defense and international affairs budgets, but only about one-fifth of domestic spending. In 1994, discretionary spending is expected to total $543 billion, roughly half of it for defense (see Table 2-4).

Relative to the economy, discretionary spending is well down from typical levels of the 1960s and 1970s. The fortunes of defense and domestic programs have waxed and waned several times over the past few decades. Comparisons with GDP merely express how much a society devotes to public spending in relation to its resources; they tell nothing about the adequacy of such spending, especially as the needs and threats faced shift markedly.

Defense Discretionary Spending. The share of GDP that is devoted to defense has gradually shrunk

Table 2-4.
CBO Projections of Outlays by Category, Assuming Compliance with Discretionary Spending Caps (By fiscal year)

Spending Category	Actual 1993	1994	1995	1996	1997	1998	1999
			In Billions of Dollars				
Discretionary[a]							
Defense	292	278	274	279	285	293	301
International	22	21	21	21	21	22	22
Domestic	230	244	257	266	275	284	292
Unspecified reductions	0	0	-11	-19	-35	-51	-50
Subtotal	543	543	541	547	547	547	564
Mandatory Spending, Excluding Deposit Insurance	761	803	844	890	960	1,026	1,099
Deposit Insurance	-28	-5	-11	-14	-6	-4	-4
Offsetting Receipts	-67	-69	-77	-74	-78	-83	-86
Net Interest	199	201	212	228	239	249	261
Total	1,408	1,474	1,509	1,577	1,661	1,736	1,834
On-budget	1,142	1,194	1,219	1,276	1,347	1,408	1,494
Off-budget[b]	266	280	290	301	314	328	340
			As a Percentage of GDP				
Discretionary[a]							
Defense	4.6	4.2	3.9	3.8	3.7	3.6	3.5
International	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Domestic	3.6	3.7	3.7	3.6	3.5	3.5	3.4
Unspecified reductions	0	0	-0.2	-0.3	-0.4	-0.6	-0.6
Subtotal	8.6	8.2	7.7	7.4	7.0	6.7	6.6
Mandatory Spending, Excluding Deposit Insurance	12.1	12.1	12.0	12.1	12.3	12.5	12.8
Deposit Insurance	-0.4	-0.1	-0.2	-0.2	-0.1	c	c
Offsetting Receipts	-1.1	-1.0	-1.1	-1.0	-1.0	-1.0	-1.0
Net Interest	3.2	3.0	3.0	3.1	3.1	3.0	3.0
Total	22.4	22.2	21.5	21.3	21.4	21.2	21.3
On-budget	18.1	18.0	17.4	17.3	17.3	17.2	17.4
Off-budget[b]	4.2	4.2	4.1	4.1	4.0	4.0	4.0

SOURCE: Congressional Budget Office.

a. Discretionary spending caps are set in the aggregate for 1994 through 1998. Projections for individual categories (defense, international, and domestic) show amounts that would be spent if 1994 funding levels were increased by the rate of inflation. Unspecified reductions show the cuts that would then be needed to satisfy the caps. Projections for 1999 represent 1998 spending adjusted for inflation.

b. Social Security and the Postal Service.

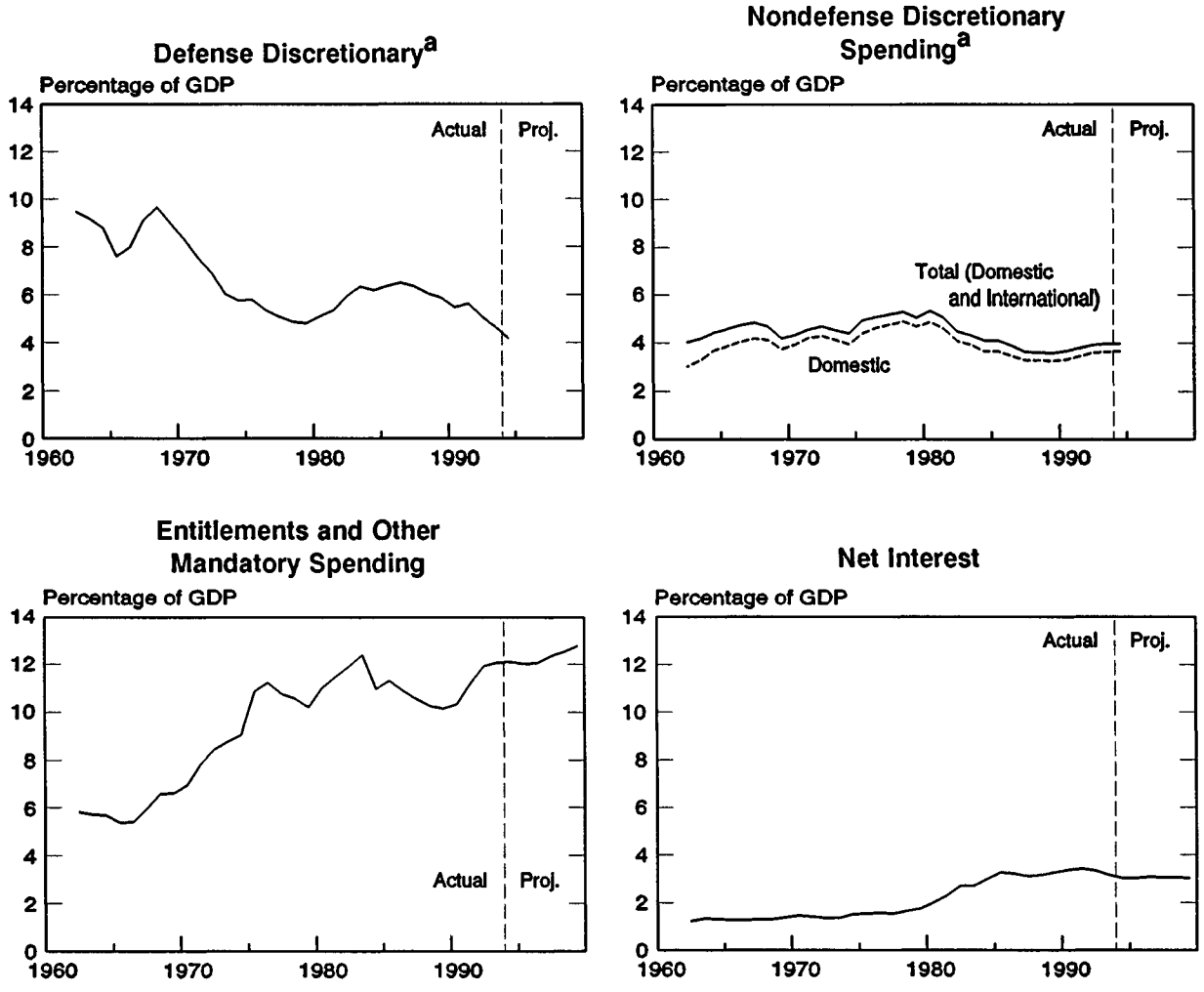
c. Less than 0.05 percent of GDP.

in the past three decades, with just two major interruptions: the Vietnam War of the late 1960s and the Reagan-era defense buildup of the early 1980s. Even the costs of Operation Desert Storm appeared as barely a blip against this downward trend. Today, defense outlays are just over 4 percent of GDP.

Domestic Discretionary Spending. Even as defense spending generally drifted down (in relation to GDP) in the 1960s and 1970s, discretionary spending for domestic programs climbed slowly. It peaked at 4.9 percent of GDP in 1980 before its rise was abruptly reversed. Today, it totals less than 4 percent of GDP, about three-fourths of its peak level in the mid-1970s.

This category encompasses a wide variety of federal government activities. Of the $244 billion in expected outlays for 1994, leading claimants are education, training, and social services ($38 billion);

Figure 2-2.
Outlays by Category as a Share of GDP



SOURCE: Congressional Budget Office.

a. Assumes compliance with discretionary spending caps in the Balanced Budget Act.

transportation ($37 billion); income security, primarily housing subsidies and the administrative costs of running benefit programs ($35 billion); the administration of justice and general government activities such as running the Internal Revenue Service (together, $27 billion); natural resources and the environment ($22 billion); health research and public health ($21 billion); veterans' benefits, chiefly medical care, other than direct cash payments ($18 billion); and space and science ($18 billion). In its 1994 appropriations, the Congress chose not just to maintain but to slightly increase real funding for domestic discretionary programs. Overall, the budget authority for these programs grew by about 2 percent more than the rate of inflation, with extra money plowed into training and social services, the Public Health Service, and income security.

International Discretionary Spending. The smallest of the three major categories of discretionary outlays is international discretionary spending, at about $21 billion, or 0.3 percent of GDP, in 1994. This category chiefly includes aid to other countries for humanitarian or security purposes, contributions to international organizations such as the United Nations, and the conduct of foreign affairs. Its share of GDP has slipped steadily for the past three decades (see Figure 2-2).

Discretionary Spending and the Caps. Since 1991, stringent dollar caps set in the Balanced Budget Act (as amended by the Budget Enforcement Act of 1990 and the Omnibus Budget Reconciliation Act of 1993) have crimped spending for discretionary programs. In 1991 through 1993, three separate caps applied to defense, international, and domestic appropriations. In 1994 through 1998, a single lid applies to all three categories, sharpening the competition for resources.

As explained below, the caps will barely allow programs to grow in dollar terms over the 1995-1998 period. Because inflation, though subdued, continues at about 3 percent a year, discretionary programs will shrink by almost 10 percent in real terms from today's levels.

Separate caps apply to budget authority and outlays. *Budget authority* is the basic currency of the appropriation process; it represents the permission to commit funds. This commitment always precedes actual *outlays* or disbursements--with a short lag for fast-spending activities such as meeting payrolls or providing services directly, and a longer lag for slow-spending activities such as the procurement of weapons or other complicated items. The caps limit both budget authority and outlays in every year through 1998, and the more stringent cap prevails. During the 1995 appropriation cycle, which is just getting under way, the outlay cap is by far the tougher.

No one can predict how particular clusters of spending will fare in the upcoming appropriation debate. Literally thousands of outcomes are possible because so many programs are funded out of this single pot. But it is useful to compare the caps with two hypothetical paths for discretionary spending.

Both paths take as their point of departure the actual levels of funding in 1994, which came to slightly more than $500 billion in total discretionary budget authority. The first path, a traditional *inflation-adjusted baseline*, preserves real resources at 1994's levels by assuming that future appropriations for each program grow in step with inflation (about 3 percent a year). The second path, an *across-the-board freeze*, restricts each program to the same dollars it received in 1994--implicitly forcing it to trim its activities by about 3 percent a year in real terms. In both paths, projected levels of budget authority for domestic programs appear slightly erratic from year to year because of fluctuations in the volume of contracts for subsidized housing units that come up for renewal. The Balanced Budget Act directs CBO to incorporate such renewals into its baseline projections; other domestic programs, in these illustrations, are simply adjusted by inflation (in the first path) or by nothing at all (in the second).

Overall, complying with the outlay caps is roughly equivalent to freezing appropriations in 1995 at 1994's levels. Doing so for all programs across the board would bring total discretionary budget authority to about $504 billion and outlays to $541 billion--within a half-billion dollars of the outlay cap (see Table 2-5). Ironically, this approach would seemingly leave the appropriators with $13 billion in budget authority to spare; but little, if any, of this

Table 2-5.
How Tight Are the Discretionary Caps? (By fiscal year, in billions of dollars)

	1995	1996	1997	1998
	Budget Authority			
Discretionary Caps[a]	518	517	527	531
Amount Needed to Preserve 1994 Real Resources				
Defense	271	280	289	298
International	20	21	22	22
Domestic	230	245	253	267
Total	521	546	563	587
Amount over or under (-) caps	4	29	36	56
Amount Needed to Freeze 1994 Dollar Resources				
Defense	262	262	262	262
International	20	20	20	20
Domestic	222	230	231	238
Total	504	512	513	520
Amount over or under (-) caps	-13	-5	-14	-11
	Outlays			
Discretionary Caps[a]	541	547	547	547
Amount Needed to Preserve 1994 Real Resources				
Defense	274	279	285	293
International	21	21	21	22
Domestic	257	266	275	284
Total	552	566	581	598
Amount over or under (-) caps	11	19	35	51
Amount Needed to Freeze 1994 Dollar Resources				
Defense	268	265	263	262
International	21	20	20	20
Domestic	252	254	256	257
Total	541	540	539	539
Amount over or under (-) caps	b	-7	-7	-8

SOURCE: Congressional Budget Office.

NOTE: Amounts needed to preserve 1994 real resources include adjustments for inflation of about 3 percent a year. Amounts needed to freeze 1994 dollar resources include no adjustment for inflation. Both paths include the budget authority necessary to renew expiring contracts for subsidized housing.

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 1994* (December 10, 1993), as modified by CBO (see Appendix A).

b. Less than $500 million.

authority could be used without breaching the outlay caps. In fact, 1995 is shaping up as a reprise of 1994's appropriation experience, in which lawmakers used nearly every penny of allowable outlays but left more than $12 billion in budget authority unused.

What about 1996 and beyond? It is fair to say that the freeze on appropriations would essentially continue in 1996 through 1998. Policymakers could afford to devote only about $7 billion to $8 billion a year in outlays (and commensurate amounts of budget authority) beyond the levels implied by a strict freeze, as suggested in the bottom panel of Table 2-5. Even this slight thaw would leave discretionary spending in 1998 at $51 billion below what is needed to preserve today's funding in real terms.

Because defense, international, and domestic programs must jostle for funding, their individual fates are uncertain. Appropriators faced a single cap for the first time in 1994; they met it by maintaining and even slightly increasing real appropriations for domestic programs while cutting defense, with the President's approval. Will this same strategy be possible in 1995?

The Clinton Administration will not submit its proposed budget for 1995, including its requested funding for defense, until February. But without this information, some clues can be gleaned from documents submitted by the Administration last year. A year ago, the President planned to request $263 billion in defense budget authority in 1995, and CBO estimated the accompanying outlays at $273 billion (clearly, many of them stemming from obligations incurred in earlier years when appropriations were higher). And for 1996, the President planned to request $254 billion in defense budget authority and (according to CBO) $265 billion in outlays.[3] A little arithmetic shows that following this blueprint for defense would expose domestic programs to real reductions--again, chiefly because of the outlay, not the budget authority, caps. Specifically, domestic and international outlays together would have to be held to roughly $268 billion in 1995 (the $541 in total outlays allowable, minus about $273 billion for defense) and to about $281 billion in 1996--about $10 billion and $6 billion, respectively, below the amounts needed to preserve today's real resources in those years.

Last year's defense request preceded the Congress's decision to grant locality-based pay raises to federal civilian employees and across-the-board raises to members of the armed services in 1994 (neither of which was requested by the Clinton Administration); it also preceded new worries about developments in the former Soviet Union, North Korea, and other spots. Furthermore, there were already widespread concerns about whether the Administration's request was sufficient to maintain and equip its envisioned force of 1.4 million and its planned weapons acquisitions. In short, it will not be easy to tap the defense budget for the dollars to preserve domestic activities even though they now compete in a single arena.

Nearly all federal employees are paid from the discretionary portion of the budget. Awareness of the discretionary caps' tightness--and a general interest in doing more with less--have recently sparked interest in paring federal employment levels (see Box 2-2).

Entitlements and Mandatory Programs

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

The Balanced Budget Act lumps these programs together with receipts and subjects them to pay-as-you-go discipline; that is, liberalizations in mandatory programs are supposed to be funded by cutbacks in other mandatory spending or by increases in taxes or fees. (Similarly, tax cuts must be offset by other tax increases or by savings in mandatory spending.) The CBO baseline depicts the likely path of entitlement and mandatory spending under current law.

3. Congressional Budget Office, "An Analysis of the President's February Budgetary Proposals," CBO Paper (March 1993).

Box 2-2.
Federal Civilian Employment

Last September, the federal government counted about 2.16 million civilian employees in the executive branch (excluding the Postal Service), about 70,000 fewer than a year earlier. Another 66,000 civilians work in the judicial and legislative branches.

When it comes to measuring executive branch employment, however, the Office of Management and Budget (OMB) favors a measure known as "full-time equivalent" (FTE) rather than a simple head count. A head count merely reveals the number of people employed on a snapshot date. The FTE instead reveals employment over a span of time--a pay period, a month, or a full fiscal year. The FTE adjusts for the presence of part-time employees (for example, by counting two half-time workers as one FTE) and, when measured over a full year, automatically adjusts for seasonal fluctuations in employment as well. OMB estimates that FTEs in the nonpostal executive branch in 1993 numbered about 2.130 million--about two-fifths of them in the Department of Defense and the rest in civilian agencies. OMB also estimates that agencies will use about 2.104 million FTEs in 1994.

The vast majority of civilian employees are paid from discretionary salary and expense (or, in the case of the Defense Department, operation and maintenance) accounts. Agency costs for pay and the associated contributions to retirement funds in 1994 will equal about $105 billion, or nearly one-fifth of all discretionary spending. Benefits unrelated to retirement (mostly contributions for health insurance) add several billion dollars more.

CBO is often asked what level of employment it assumes in its projections, but there is no satisfactory answer. Appropriation bills simply set the total dollars for salaries and expenses. Within reason, agencies can alter the mix of personnel and other expenses (such as travel or contractual services) and still comply with their appropriation. They could also replace a $60,000 employee (one FTE) with two $30,000 employees (two FTEs). All such actions are perfectly compatible with a given dollar total. The Budget Enforcement Act, in fact, simply directs CBO to project the baseline for discretionary accounts by adjusting the current appropriation by a blended average of overall changes in prices (as measured by the GDP inflator) and expected increases in the employment cost index (ECI), not by trying to anticipate agencies' plans.

Under current law, most federal employees are to receive two distinct types of pay raises. Across-the-board raises are linked to growth in the ECI, which tracks growth in private-sector wages, with a timing lag of slightly more than a year and with one-half of one percentage point subtracted. And most civil servants will also receive locality raises, which are meant to narrow over a nine-year period the measured gap between federal and nonfederal salaries in different geographic areas; that gap was estimated on the basis of Bureau of Labor Statistics surveys to average about 26 percent. The Congress suspended the first raise for 1994 but preserved the second.

In 1995 through 1998, CBO projects that cumulative pay raises for General Schedule employees--the bulk of the federal civilian work force--will total 23 percent under current law, or an average of more than 5 percent each year. The average annual across-the-board raise is 2.9 percent, and the average annual locality raise is 2.3 percent. If such raises went into effect, and if civilian employment stayed at the 2.1 million level that OMB estimates for 1994, total pay and retirement contributions would mount from $100 billion in 1994 to $129 billion in 1998. In a regime in which total discretionary spending must be held almost flat, such growth would clearly squeeze agency budgets.

Of course, compensating savings can and will be found. The Defense Department is already taking steps to cut the active-duty military from 1.7 million to 1.4 million, although some of the resulting savings will be eaten up by pay raises for those remaining in the service, and is trimming its civilian work force as well. Last winter, the Clinton Administration directed executive branch agencies to cut civilian employment by about 100,000 FTEs over the 1993-1995 period; the National Performance Review (often dubbed the "Reinventing Government" or Gore report) advocated cutting federal civilian employment by a total of 12 percent, or about 250,000 FTEs, through 1999. These themes were quickly picked up, with variations, by several legislators, though no employment ceilings have actually been enacted into law. Clearly, however, civilian payroll costs are likely to grow unless there is a fairly significant combination of personnel reductions and cuts in scheduled pay raises.

Only about one-fourth of this huge category of spending is means-tested--that is, paid to people who must document their need based on income or assets (and often other criteria, such as family status). Among the means-tested programs are the two fastest-growing entitlements, Medicaid and the earned income tax credit (EITC). But the remainder, led by the government's big retirement-related programs, are not means-tested and account for most of the growth in dollar terms.

Means-Tested Programs. Medicaid, the joint federal and state program providing medical care to some of the poor, makes up about half of means-tested entitlements. CBO projects that federal outlays for Medicaid will reach $151 billion by 1999, double the figure for 1993 (see Table 2-6). In that year, the states' share is expected to be another $114 billion.

The annual growth in Medicaid spending zoomed to between 20 percent and 30 percent in 1990 through 1992 but decelerated to 12 percent in 1993. The extraordinarily fast growth was fueled by population and cost pressures, liberalizations in Medicaid eligibility contained in legislation (especially coverage of poor children), the recession, and the fiscal pressures facing state and local governments that drove them to maximize funds from the federal government. In particular, the federal share of direct payments to hospitals that serve many charity cases (the so-called disproportionate share hospitals) soared from practically nothing in 1989 to almost $10 billion in 1992 before dipping to an estimated $9 billion in 1993.

Although Medicaid is the biggest and fastest-growing of the means-tested programs, several others in this cluster are also experiencing rapid growth. Prominent among them are food stamps, which are available to virtually all who qualify on the basis of low income and assets regardless of age or family status (and which now are paid to one-quarter more people than in mid-1990); Supplemental Security Income for the aged, blind, and disabled, which has seen its caseload of disabled participants climb steeply; and the refundable portion of the earned income tax credit. Traditionally a supplement to the earnings of low-income families with children, the EITC was made more generous in last year's reconciliation act and broadened to cover some childless people. Although the EITC is a provision of the tax code, direct EITC payments to recipients who otherwise owe no taxes are treated as outlays since they are tantamount to benefit payments.

Non-Means-Tested Programs. Social Security, Medicare, and other retirement and disability programs dominate non-means-tested entitlements. In fact, a milestone of sorts was passed in 1993; Social Security overtook the defense budget as the government's single biggest spending program. Most Social Security beneficiaries, who now number 42 million, also participate in Medicare. The Medicare population is somewhat smaller than Social Security's, however, for several reasons: retirees can collect Social Security beginning at age 62 but must wait until age 65 for Medicare; younger beneficiaries who are awarded disability benefits face a two-year wait before qualifying for Medicare; and many spouses and most children of Social Security beneficiaries qualify for cash benefits but not medical benefits.

Although Social Security is the larger program, Medicare has grown much faster despite repeated efforts to rein in its costs. Over the past decade, Medicare grew by an average of 10 percent a year versus Social Security's 6 percent, and similar growth rates are projected for the next five years. Only a fraction of the two programs' growth is explained by their caseloads; beneficiary populations generally grow between 1 percent and 2 percent a year. The remainder is accounted for by greater benefits per enrollee, fueled--in the case of Medicare--by high medical care inflation, advances in expensive technology, and greater use of covered services.

Other retirement and disability programs together are less than one-fourth the size of Social Security. They are dominated by benefits for the federal government's civilian and military retirees and Railroad Retirement.

Unemployment compensation is one of the few entitlement programs expected to shrink under current law in the next few years. The unemployment rate gradually declines, and the temporary

Table 2-6.
CBO Baseline Projections for Mandatory Spending, Excluding Deposit Insurance (By fiscal year, in billions of dollars)

	Actual 1993	1994	1995	1996	1997	1998	1999
Means-Tested Programs							
Medicaid	76	86	96	108	121	135	151
Food Stamps[a]	25	25	26	26	28	29	30
Supplemental Security Income	21	25	24	24	29	32	35
Family Support	16	17	18	18	19	19	20
Veterans' Pensions	4	3	3	3	3	3	3
Child Nutrition	7	7	7	8	8	9	9
Earned Income Tax Credit	9	11	15	18	20	21	22
Student Loans	2	2	2	2	1	1	2
Other	3	3	3	4	4	4	5
Total, Means-Tested Programs	162	179	195	211	233	254	276
Non-Means-Tested Programs							
Social Security	302	318	335	352	370	388	408
Medicare	143	160	177	195	215	238	264
Subtotal	445	478	512	547	585	626	672
Other Retirement and Disability							
Federal civilian[b]	39	40	42	43	46	48	51
Military	26	26	27	29	30	32	35
Other	4	5	5	5	5	5	5
Subtotal	69	71	74	77	81	85	90
Unemployment Compensation	35	27	24	25	25	26	26
Other Programs							
Veterans' benefits[c]	17	18	17	16	18	18	19
Farm price supports	16	11	7	8	8	8	9
Social services	5	6	6	6	6	6	5
Credit reform liquidating accounts	2	2	-1	-8	-4	-5	-6
Other	10	12	9	8	8	9	8
Subtotal	49	48	38	30	36	36	35
Total, Non-Means-Tested Programs	599	624	649	679	727	773	823
Total							
All Mandatory Spending, Excluding Deposit Insurance	761	803	844	890	960	1,026	1,099

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 domestic discretionary spending; Medicare premium collections are classified as offsetting receipts.

a. Includes nutrition assistance to Puerto Rico.

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

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

extensions of benefits that helped to push total spending above $35 billion in both 1992 and 1993 are slated to expire.

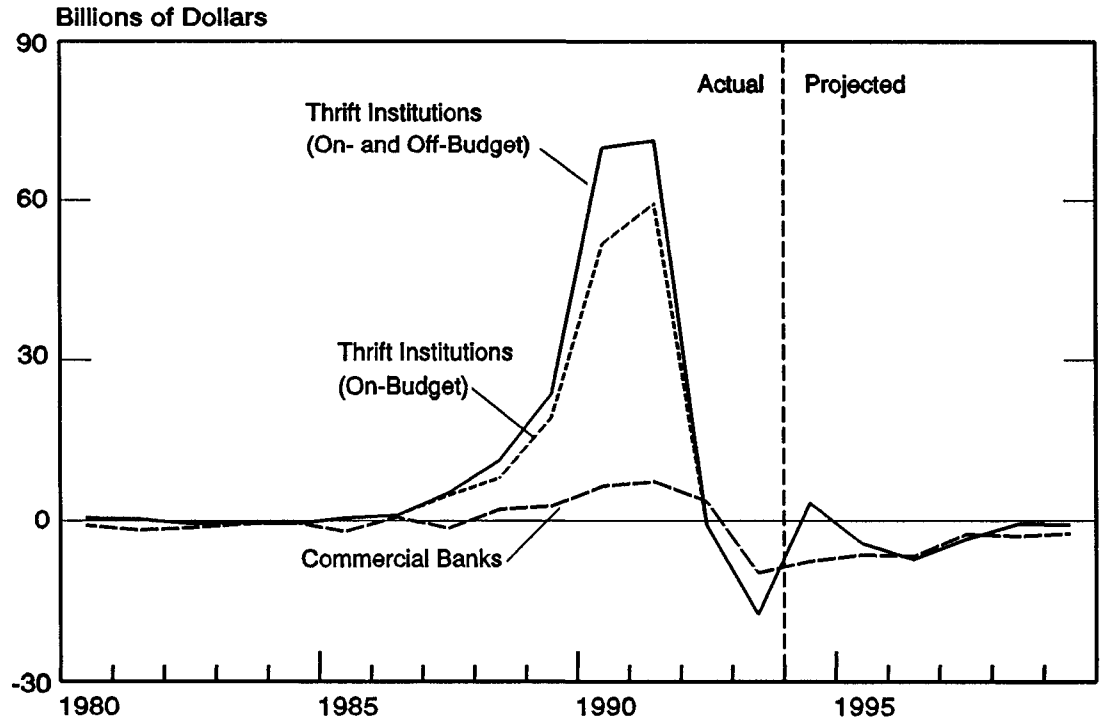
Other non-means-tested entitlements encompass a diverse set of programs, mainly veterans' benefits, farm price supports, and certain social service grants to the states. In aggregate, this category totals $48 billion in 1994. It shrinks by a third by 1999, mirroring the decline of two of its components--farm price supports and the liquidating accounts set up to reflect cash flows from loans obligated before 1992 when credit reform took effect.

Deposit Insurance

Deposit insurance contributed little to the spending totals before the late 1980s, as premiums paid by financial institutions and other income to the deposit insurance funds (such as interest and proceeds from liquidations of assets) roughly equaled the costs of covering failed institutions. This pattern held fairly true even in the early 1980s, when savings and loan institutions--then hamstrung by restrictions on their investments and on the interest they could pay to depositors--faced big losses.

But choices made in the wake of that first crisis to relax regulation and to postpone shutdowns of troubled institutions proved to be costly. Deposit insurance outlays shot up to a record $66 billion in 1991 (see Figure 2-3). They skidded to $3 billion in 1992, and the agencies actually recorded negative outlays (that is, net receipts) of $28 billion in 1993, indicating that their income from liquidations and other sources far exceeded their disbursements. Not surprisingly, this extraordinarily volatile category of

Figure 2-3.
Deposit Insurance Spending (By fiscal year)



SOURCE: Congressional Budget Office.

NOTE: Off-budget outlays for thrift institutions refer to the net borrowing of the Financing Corporation and the Resolution Funding Corporation, government-sponsored enterprises set up exclusively to borrow funds to pay for resolutions of failed savings and loan institutions.

spending has been one of the biggest sources of uncertainty in Congressional budget projections over the past few years (see Appendix B). CBO expects that this category will continue to record net negative outlays, as documented in Table 2-7.

Savings and Loan Institutions. The savings and loan cleanup is forging ahead after a prolonged interruption in its funding. From April 1992 until December 1993, the Resolution Trust Corporation (RTC) had only very limited authority to incur losses. It was largely confined to selling off its portfolio of assets and to resolving the occasional institution that could be closed or merged at little or no loss to the government; hence, the RTC recorded negative outlays in both 1992 and 1993.

The Congress brought this drought to an end in late 1993 with the Resolution Trust Corporation Completion Act. The act empowered the RTC to incur up to $18.3 billion in further losses simply by lifting a deadline of April 1, 1992, on the RTC's ability to commit funds that had been approved in December 1991. Sometime between January and June 1995, the RTC will hand over the responsibility for covering future failures to the Savings Association Insurance Fund (SAIF).

As sanctioned by the Budget Enforcement Act, CBO did not treat this final batch of RTC money as an entry on the pay-as-you-go scorecard. The BEA explicitly provides that any funding that enables the government to carry out its existing deposit insurance commitments, but does not broaden that commitment, does not demand a tax increase or an offsetting cut in another program. Echoing most economists and participants in financial markets, the BEA's drafters presumably reasoned that the true loss to taxpayers occurred sometime in the past, when high-flying institutions racked up the losses that the government now is obliged to cover. Belatedly recognizing these losses, and providing the dollars needed to cover them, amounts to a transfer of existing assets and liabilities; it does not make depositors richer or spur the economy, as other deficit-raising actions would. The national income and product accounts, which provide macroeconomists with another framework for describing the government's role in the economy, have always excluded the bulk of deposit insurance spending and similar transactions that lack current economic effects (see Appendix D).

There is good news on the RTC front: the agency will not fulfill the gloomy predictions that were common even a year or two ago. CBO now estimates the total value of losses covered by the RTC since its inception in 1989 at about $90 billion (expressed, by convention, in 1990 dollars). Such calculations exclude disbursements for working capital--funds that the government needs temporarily when it acquires troubled institutions but ultimately recoups when assets are sold. Together with about $60 billion in losses covered by the Federal Savings and Loan Insurance Corporation and its successor, the FSLIC Resolution Fund--the fund charged with resolving institutions already in government hands before the RTC's creation--the total cost of the cleanup comes to $150 billion.

Three and a half years ago, CBO feared that the RTC's costs alone could be as high as $185 billion. (The Bush Administration, in its initial proposal to establish the RTC, said that $50 billion would be sufficient.) The extraordinarily favorable environment for interest rates in the past few years deserves part of the credit for the turnaround. Legislation passed after the RTC's creation further tightened regulatory procedures and required financial institutions to bolster their levels of capital. And the industry's shrinkage has eased conditions for survivors. There are now about 1,700 institutions with $0.8 trillion in gross assets, down from 3,000 institutions with $1.3 trillion in assets in 1988, with most of the worst money-losers and hence most recklessly managed institutions purged. About 10 percent of the current industry, as measured by assets, remains troubled and could end up in RTC or SAIF hands, though it is unlikely to saddle the government with huge costs.

Is SAIF sound? In passing the last installment of RTC funding, policymakers provided no assured funding for SAIF. Rather, they authorized $8 billion, subject to future appropriation, and stipulated that the Federal Deposit Insurance Corporation would first need to certify that conditions in the industry required using taxpayer funds. SAIF held reserves of just over $1 billion at the end of 1993, and under CBO's projections, its reserves will not meet their

Table 2-7.
CBO Baseline Projections for Deposit Insurance (By fiscal year, in billions of dollars)

	1994	1995	1996	1997	1998	1999
Savings-and-Loan-Related						
Resolution Trust Corporation and Savings Association Insurance Fund						
Insurance losses[a]	12	3	1	1	1	1
Working capital						
Disbursements	8	4	1	1	1	1
Receipts	-17	-12	-9	-5	-2	-2
Interest costs	1	1	1	b	b	b
Insurance premiums	-1	-1	-1	-1	-1	-1
Total	2	-5	-7	-3	-1	-1
FSLIC Resolution Fund	1	1	0	0	0	0
Bank-Related and Other						
Bank Insurance Fund						
Losses	1	2	2	2	2	2
Working capital disbursements	3	4	4	4	4	4
Liquidations	-7	-6	-5	-5	-5	-5
Net interest	b	-1	-1	-1	-1	-1
Other outlays (net)	-5	-6	-6	-1	-2	-2
Total	-8	-6	-7	-3	-3	-3
Other[c]	b	b	b	b	b	b
Total						
Total Deposit Insurance	-5	-11	-14	-6	-4	-4

SOURCE: Congressional Budget Office.

NOTE: The Resolution Trust Corporation is currently scheduled to stop accepting new cases sometime in early 1995 and turn over responsibility for future resolutions to the Savings Association Insurance Fund.

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

b. Less than $500 million.

c. Primarily activities of the National Credit Union Administration.

statutory target anytime during the five-year projection period. Indeed, although SAIF's resources appear sufficient to handle the volume of failures that CBO now projects, they are too thin to withstand many nasty surprises, such as unexpectedly large failures combined with a greater-than-expected erosion in thrift institutions' deposit base. This deterioration, which would cause premium income to the fund to wither, could accelerate if--as CBO expects--thrift insitutions are made to pay higher premium rates for deposit insurance than are commercial banks.

Commercial Banks. Recent anxiety about the condition of commercial banks has abated. The government's fund for insuring commercial banks incurred positive outlays in 1988 though 1992 but is now back in the black. The Bank Insurance Fund (BIF) is actually expected to take in $8 billion more than it spends in 1994, with a smaller excess in later years (see Table 2-7). As a result, BIF's reserves are expected to be robust enough in 1997 that CBO estimates that the fund's premium rates will then drop by two-thirds, as permitted by law.

Offsetting Receipts

Offsetting receipts are income that the government records as negative spending. All are either intragovernmental (reflecting payments from one part of the federal government to another) or proprietary (reflecting voluntary payments from the public). Because they do not stem from the government's taxing power, they are traditionally recorded as negative spending rather than on the revenue side of the books.

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

About one-half of offsetting receipts are intrabudgetary transfers that represent agencies' contributions for their employees' retirement (see Table 2-8). Failing to charge agencies for these costs would clearly let them understate their personnel costs, as future retirement benefits are an important part of compensation for current federal workers. To avoid such a perverse result, the budget treats the payments as part of agency budgets, and the deposits in retirement funds (principally Social Security, Military Retirement, and Civil Service Retirement) as offsetting receipts. These two transactions thus wash out in the budgetary totals, leaving only actual payments to the public--for benefits and administrative costs--reflected in total outlays.

Voluntary Medicare premiums collected from the elderly and disabled grow from an estimated $17 billion in 1994 to $27 billion in 1999, as the monthly premium climbs from $41.10 now to an estimated $56.30 in 1999. Last year's reconciliation act reimposed the requirement that premiums cover one-quarter of the costs of Supplementary Medical Insurance (Part B of Medicare, the portion that covers physician and outpatient charges). That requirement, however, expires after 1998, and premiums will revert to growing only in tandem with the cost-of-living increase in Social Security. Other offsetting receipts come mostly from charges for energy, minerals, and timber and various fees levied on users of government property or services.[4]

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

Net Interest

Net interest costs are expected to be about $200 billion in 1994 for the fourth year in a row. This stability is astonishing in light of the fact that the government will have added about $1 trillion in debt over the four-year period. The government has saved handsomely by refinancing its maturing debt at lower interest rates. This gain is not evanescent; interest rates today remain near record-low levels and

4. For a discussion of trends in federal user charges and similar collections, see Congressional Budget Office, *The Growth of Federal User Charges* (August 1993).

Table 2-8.
CBO Baseline Projections for Offsetting Receipts (By fiscal year, in billions of dollars)

Category	Actual 1993	1994	1995	1996	1997	1998	1999
Employer Share of Employee Retirement							
Social Security	-6	-6	-7	-7	-8	-8	-9
Military Retirement	-13	-13	-12	-12	-12	-12	-12
Other[a]	-15	-16	-17	-17	-18	-20	-21
Subtotal	-35	-35	-36	-37	-38	-40	-42
Medicare Premiums	-15	-17	-20	-20	-22	-26	-27
Energy-Related Receipts[b]	-5	-4	-5	-4	-4	-4	-4
Natural-Resource-Related Receipts[c]	-3	-3	-3	-3	-3	-3	-3
Electromagnetic Spectrum Auctions	0	-1	-5	-1	d	d	d
Other	-10	-9	-9	-9	-9	-9	-9
Total	-67	-69	-77	-74	-78	-83	-86

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. Less than $500 million.

are not expected to shoot up over the 1995-1999 period.

Despite today's low interest rates, net interest costs are about 3 percent of GDP--two to three times the typical levels of the 1960s and 1970s. Their growth is clearly traceable to the vastly bigger federal debt.

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

The importance of interest rates is illustrated in Appendix C. If interest rates are 1 percentage point higher in 1994 through 1999 than CBO assumes, net interest costs will be greater--by about $5 billion in 1994 and $42 billion in 1999. A recent shift by the Treasury Department to borrow more short-term and less long-term debt is expected to save money but will slightly increase the govern-ment's vulnerability to fluctuations in interest rates. This effect is only marginal, however; with or without the shift, the government faced large amounts of financing and refinancing that had to be handled at prevailing market rates.[5]

5. Congressional Budget Office, *Federal Debt and Interest Costs* (May 1993).

CBO projects that net interest costs will climb gradually to $261 billion in 1999 (see Table 2-9). The growth in debt is the main fuel; debt held by the public (bills, notes, bonds, and other securities sold to raise cash) is expected to mount from $3.2 trillion at the end of 1993 to $4.4 trillion in 1999. And rising interest rates, chiefly on short-term instruments such as Treasury bills, push up spending modestly.

Net or Gross? Some budget-watchers like to use gross interest (and its counterpart, the gross federal debt) instead of net interest (and its counterpart, debt held by the public). But this choice exaggerates the government's debt-service burden because it overlooks billions of dollars in interest income received by the government.

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 both pays and collects the interest thereon; it also receives interest income from loans and cash balances. Broadly speaking, *gross interest* encompasses all interest paid by the government (even to itself) and ignores all interest income. *Net interest*, in contrast, is the net flow to recipients outside government.

In 1994, net interest is only two-thirds as big as gross interest. CBO estimates that the government will pay $298 billion in gross interest costs. Of that amount, however, $88 billion is simply credited to trust funds and does not leave the government or add to the deficit. And the government collects $10 billion in other interest income. Net interest costs therefore total $201 billion. The burden of interest costs, which represent money siphoned from current needs to pay past bills, is amply documented by using net interest.

Debt Subject to Limit. The Congress sets a limit on the issuance of public, or Treasury, debt. This limit applies to securities issued to federal trust funds as well as those sold to the public. Hence, it is practically identical to the gross federal debt--and probably explains why this figure, though less useful than debt held by the public, is more familiar. (The minor differences between gross debt and debt subject to limit are chiefly attributable to securities issued by agencies other than the Treasury, such as the Tennessee Valley Authority, which are exempt from the limit.)

As part of last summer's deficit reduction package, the Congress raised the limit on public debt to $4.9 trillion. CBO expects debt subject to limit to reach $4,958 billion by the end of fiscal year 1995, suggesting that the limit will have to be raised sometime in the preceding spring or summer (see Table 2-9).

The Revenue Outlook

Federal revenues are expected to be $1.25 trillion in 1994, or 18.8 percent of GDP. They are projected to grow only a little faster than the economy in the next five years, reaching 19 percent of GDP in 1999. As a share of GDP, revenues will be slightly higher than typical levels of the past three decades. In 1960 through 1993, revenues averaged 18.6 percent of GDP. In only a few years did they reach or top 19 percent: in 1969 and 1970 (when taxes were hiked to help finance the Vietnam War); in 1979 through 1982 (years of high inflation, which preceded the Reagan Administration's tax cut and the accompanying indexing of income tax brackets to inflation); in 1987 (when taxpayers rushed to realize capital gains before tax reform, which repealed preferential rates on such income, took effect); and in 1989 (when final payments from the first full year of tax reform flowed in and the economy was still chugging along strongly).

But in an echo of the outlay story, underneath this overall stability of the revenue-to-GDP ratio are some substantial shifts in composition (see Figure 2-4). The most striking shift is the government's increasing reliance on social insurance contributions (now about 7 percent of GDP) and its diminishing reliance on corporate income taxes and excise taxes (now about 2 percent and 1 percent of GDP, respectively). Individual income taxes, the biggest contributor to government coffers, have mostly fluctuated in the range of 8 percent to 9 percent of GDP.

Table 2-9.
CBO Baseline Projections for Interest Costs and Federal Debt (By fiscal year)

	Actual 1993	1994	1995	1996	1997	1998	1999
Net Interest Outlays (Billions of dollars)							
Interest on Public Debt (Gross interest)[a]	293	298	311	330	346	363	382
Interest Received by Trust Funds							
Social Security	-27	-30	-34	-37	-42	-47	-52
Other trust funds[b]	-55	-57	-56	-57	-58	-60	-61
Total	-82	-88	-89	-94	-100	-106	-114
Other Interest[c]	-11	-10	-10	- 9	-8	-8	-8
Total, Net Interest Outlays	199	201	212	228	239	249	261
Federal Debt, End of Year (Billions of dollars)							
Gross Federal Debt	4,352	4,690	4,995	5,314	5,656	6,003	6,375
Debt Held by Government Accounts							
Social Security	366	428	498	574	658	750	850
Other government accounts[b]	739	800	855	918	977	1,035	1,085
Total	1,105	1,228	1,353	1,492	1,635	1,785	1,934
Debt Held by the Public	3,247	3,462	3,642	3,822	4,021	4,218	4,441
Debt Subject to Limit[d]	4,316	4,653	4,958	5,275	5,616	5,963	6,334
Federal Debt as a Percentage of GDP							
Debt Held by the Public	51.6	52.2	52.0	51.7	51.7	51.5	51.7

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 the Tennessee Valley Authority).

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.

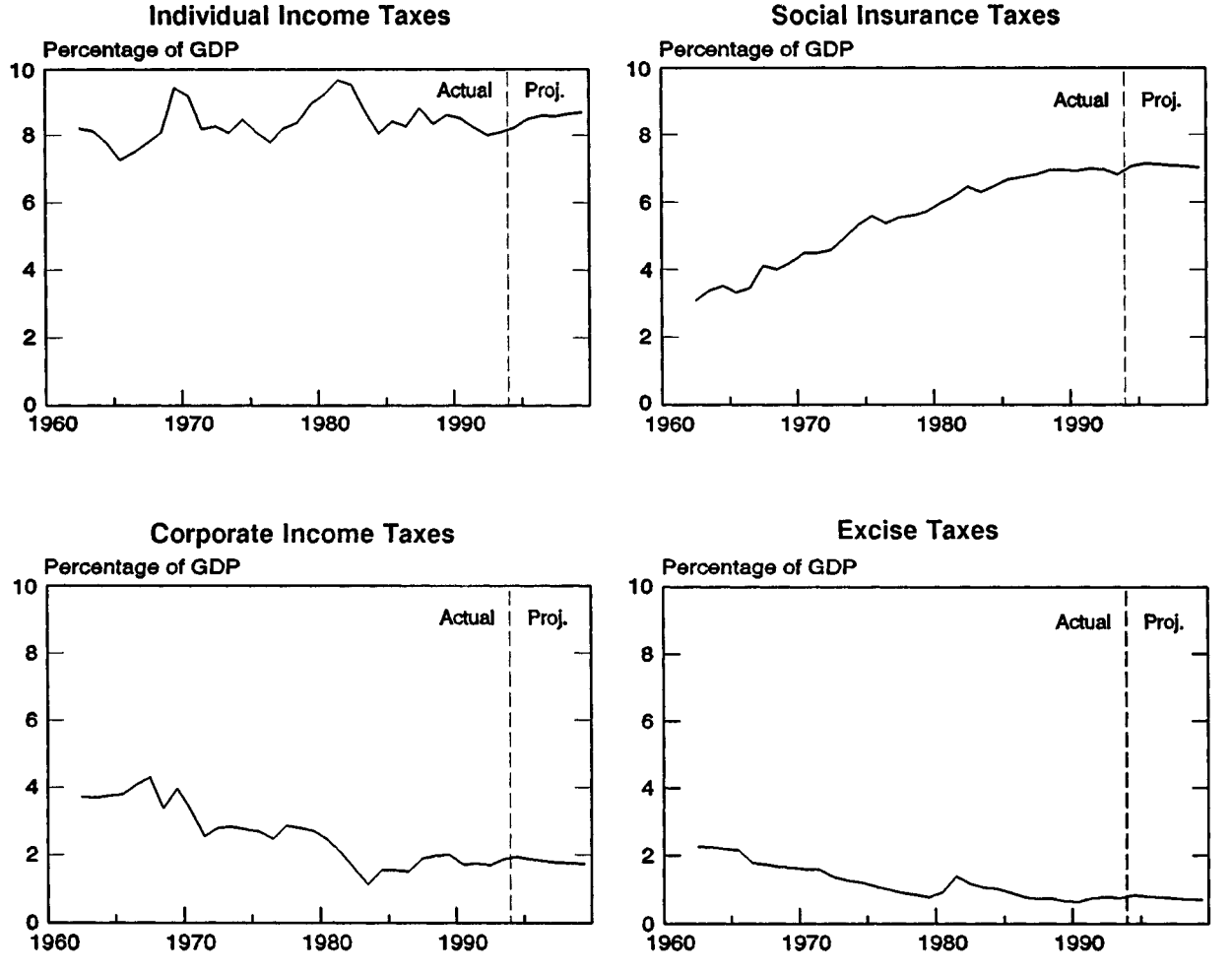
d. Differs from the gross federal debt primarily because most debt issued by agencies other than the Treasury is excluded from the debt limit.

Baseline Projections

In the baseline, individual income taxes are the only revenue source that is expected to grow even modestly as a share of GDP, from 8.2 percent in 1994 to 8.7 percent in 1999 (see Table 2-10). Over half of the revenue increases contained in last summer's reconciliation act will appear in this category--chiefly the increase in tax rates for high-income individuals and the increase in the portion of Social Security benefits subject to income tax.

Social insurance taxes hang on to their share of GDP in the projections. Such taxes are expected to total 7.1 percent of GDP in 1994 through 1998 and 7 percent in 1999--up from 6.8 percent in 1993. OBRA-93 boosted social insurance collections by an average of $7 billion a year, mainly by repealing the cap on earnings subject to the Medicare tax. But federal unemployment taxes are nevertheless expected to slip as a share of GDP under current law as the economy recovers and the unemployment trust fund is replenished, permitting states to reduce their tax rates.

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



SOURCE: Congressional Budget Office.

Even though the reconciliation act increased taxes on corporations, the corporate income tax is nevertheless expected to drift down from 1.9 percent of GDP in 1994 to 1.7 percent in 1999, mirroring a decline in corporate profits as a share of GDP. Similarly, excise taxes--which were bolstered by increases in taxes on transportation fuels and by other provisions of OBRA-93--slip marginally as a share of GDP, mainly because most excise taxes are fixed in dollar rather than in percentage terms.

Expiring Provisions

CBO's baseline projections for revenues assume that current tax law remains unchanged. The projections take into account that some provisions are scheduled to change or expire during the 1994-1999 period. The baseline assumes that these changes and expirations occur on schedule. One category of taxes--excise taxes dedicated to trust funds--constitutes the sole exception to this rule. CBO assumes that these

Table 2-10.
CBO Baseline Projections for Revenues, by Source (By fiscal year)

Source	Actual 1993	1994	1995	1996	1997	1998	1999
				In Billions of Dollars			
Individual Income	510	547	596	635	668	708	748
Corporate Income	118	128	130	133	138	144	148
Social Insurance	428	468	499	526	551	578	604
Excise	48	55	56	57	58	59	60
Estate and Gift	13	13	14	15	15	16	17
Customs Duties	19	19	21	22	24	25	26
Miscellaneous	18	20	22	24	25	27	28
Total	1,153	1,251	1,338	1,411	1,479	1,556	1,630
On-budget	841	910	978	1,031	1,080	1,136	1,190
Off-budget[a]	312	341	360	380	399	420	440
				As a Percentage of GDP			
Individual Income	8.1	8.2	8.5	8.6	8.6	8.6	8.7
Corporate Income	1.9	1.9	1.9	1.8	1.8	1.8	1.7
Social Insurance	6.8	7.1	7.1	7.1	7.1	7.1	7.0
Excise	0.8	0.8	0.8	0.8	0.7	0.7	0.7
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	0.3	0.3	0.3	0.3	0.3	0.3	0.3
Total	18.3	18.8	19.1	19.1	19.0	19.0	19.0
On-budget	13.4	13.7	14.0	14.0	13.9	13.9	13.8
Off-budget[a]	5.0	5.1	5.1	5.1	5.1	5.1	5.1

SOURCE: Congressional Budget Office.

a. Social Security.

taxes will be extended even if they are scheduled to expire (an assumption that is specified by the Balanced Budget Act). The current baseline thus assumes that three taxes will be extended: aviation taxes, Superfund taxes, and taxes levied to finance the cleanup of leaking underground storage tanks.

Four tax preferences that were extended by OBRA-93 will expire during 1994, and a fifth (the health insurance deduction for the self-employed) expired at the end of 1993. If the Congress extended all five preferences permanently, revenue in 1999 would be smaller by about $2.5 billion.

Eight other tax provisions are scheduled to expire between 1995 and 1998 (see Table 2-11). Extending the five that lose revenue would cost nearly $4 billion in 1999. Extending the other three would raise $1.6 billion in 1999.

Recent Trends in Tax Progressivity

On August 10, 1993, the President signed into law the Omnibus Budget Reconciliation Act of 1993. That act was the latest in a series of major changes in the federal tax laws. Since 1977, the Congress has enacted no fewer than eight major tax bills: the Revenue Act of 1978, the Economic Recovery Tax Act of 1981 (ERTA), the Tax Equity and Fiscal Responsibility Act of 1982 (TEFRA), the Deficit Reduction Act of 1984 (DEFRA), the Tax Reform Act of 1986 (TRA), the Omnibus Budget Reconciliation Act of 1989 (OBRA-89), the Omnibus Budget Reconciliation Act of 1990 (OBRA-90), and, most recently, OBRA-93. The Congress also passed the Social Security Amendments of 1977, which scheduled a series of increases in payroll tax rates that took place over the following decade, and the Social Security Amendments of 1983, which accelerated the effective dates of those increases and, for the first time, made a portion of Social Security benefits subject to the individual income tax.

These changes in the law have resulted in a very different tax structure today than before 1980. The income tax rate schedule is lower and flatter, and many tax preferences under the individual income tax have been tightened or eliminated. The top corporate tax rate is lower, but the investment tax credit has been repealed, and other business investment incentives, which were expanded in ERTA, were scaled back or eliminated by subsequent legislation. The base for payroll taxes is wider, and rates are higher. Some excise tax rates are higher today than they were a decade ago, partly offsetting the tendency of revenues from excise taxes to decline in real terms with inflation.

Despite these major changes, the distribution of federal taxes among income groups was nearly the same by the end of the 1980s as it was in 1977. When the latest changes from OBRA-90 and OBRA-93 are fully in place, however, the distribution of federal taxes will be more progressive than it was in 1977. This overall pattern is explained by two developments that tug in opposite directions. The individual income tax will be significantly more progressive, but the government has also come to rely more on social insurance taxes, a relatively regressive source.[6]

Greater Progressivity in Total Effective Tax Rates

One way to gauge tax progressivity is to compare the ratio of taxes paid to before-tax income for different family groups. This ratio is called the effective tax rate. A tax is progressive if the effective tax rate for groups with higher income is greater than the effective rate for groups with lower income.

To analyze the progressivity of the tax structure, CBO divides families into five groups by family income, with equal numbers of people in each group. In 1994, the effective tax rate--the combination of income, payroll, and excise taxes--is projected to range from 5.1 percent for the 20 percent of the population with the lowest income (the bottom quintile) to 27.7 percent for the 20 percent of families with the highest income (the top quintile).

6. A more detailed discussion of these topics will appear in a forthcoming CBO study.

Table 2-11.
Effect of Extending Tax Provisions That Have Recently Expired or Will Expire in 1994 Through 1999 (By fiscal year, in billions of dollars)

Tax Provision	Expiration Date	1994	1995	1996	1997	1998	1999
Expired Provision							
Health Insurance Deduction for Self-Employed	12/31/93	-0.2	-0.5	-0.5	-0.6	-0.6	-0.7
Provisions Expiring in 1994							
Generalized System of Preferences	9/30/94	n.a.	-0.5	-0.6	-0.6	-0.6	-0.7
Deduction for Contributions to Private Foundations	12/31/94	n.a.	a	a	a	a	a
Targeted Jobs Tax Credit	12/31/94	n.a.	-0.1	-0.2	-0.4	-0.4	-0.5
Exclusion for Employer-Provided Education Assistance	12/31/94	n.a.	-0.2	-0.5	-0.6	-0.6	-0.7
Orphan Drug Tax Credit	12/31/94	n.a.	a	a	a	a	a
Provisions Expiring in 1995							
Denial of Deduction for Certain Noncomplying Health Plans	5/12/95	n.a.	-0.1	-0.1	-0.2	-0.2	-0.2
Research and Experimentation Credit	6/30/95	n.a.	-0.3	-1.0	-1.7	-2.1	-2.6
Allocation Rules for Research and Experimentation Credit	7/31/95	n.a.	-0.3	-0.6	-0.6	-0.6	-0.7
Fees for IRS Letter Rulings	9/30/95	n.a.	n.a.	b	b	b	b
Commercial Aviation Exemption from Transportation Fuels Tax	9/30/95	n.a.	n.a.	-0.4	-0.4	-0.4	-0.5
Corporate Tax Dedicated to Superfund	12/31/95	n.a.	n.a.	0.4	0.7	0.7	0.7
Provision Expiring in 1996							
Nonconventional Fuels Credit for Fuel from Biomass and Coal	12/31/96	n.a.	n.a.	n.a.	a	a	a
Provision Expiring in 1998							
FUTA Surtax of 0.2 Percentage Points	12/31/98	n.a.	n.a.	n.a.	n.a.	n.a.	0.9

SOURCE: Joint Committee on Taxation.

NOTES: No provisions are scheduled to expire in 1997, and the provisions expiring in 1999 do not expire until the end of the fiscal year. The list does not include expiring excise taxes that are assumed to be extended.

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.

The sweeping revisions in tax laws that were enacted between 1977 and 1993 actually resulted in little change in either the overall levels or the distribution of effective tax rates by income groups between the beginning and the end of that 16-year span (see Figure 2-5). The major exception is the lowest income group. Once the changes enacted in OBRA-90 and OBRA-93 are fully in place, the effective tax rate for families in the lowest income quintile will be lower than in any year from 1977 to the present.

The level and distribution of effective tax rates did, however, shift in one direction and then back again during the intervening years. Federal taxes became less progressive between 1977 and 1985, as effective rates fell for high-income families and rose for low-income families. They then became more progressive, reversing the trend of the previous eight years.

For the most part, the pendulum had already swung back by 1990; in that year, effective tax rates for most family income groups were nearly the same as they had been for comparable families in 1977, except for families in the highest income group. Those families faced a total tax rate of 25.5 percent in 1990 versus 27.2 percent in 1977, with most of the decline concentrated in the top 1 percent of the income distribution. Several factors contributed to the fall in effective tax rates for these highest-income families. The top individual income marginal tax rate dropped from 70 percent in 1977 to 28 percent in 1990; the drop in the top marginal rate applicable to earned income and to capital gains, which had not been subject to the full 70 percent rate, was somewhat less. Effective corporate income tax rates (measured in relation to these families' total income) declined as taxable corporate profits grew more slowly than personal income.

But between 1990 and 1993, families at the top of the income scale were subjected to several tax increases. OBRA-90 set the top marginal income tax rate at 31 percent and limited the benefits from itemized deductions and personal exemptions for those families. Among other changes, OBRA-93 added new individual income tax rates of 36 percent and 39.6 percent and made all earnings subject to Medicare's Hospital Insurance (HI) payroll tax. (In 1993, earnings over $135,000 were shielded from that tax.) These changes will push the total effective tax rate for the highest-income families back near the rate for comparable families in 1977.

Greater Progressivity in Individual Income Tax Rates

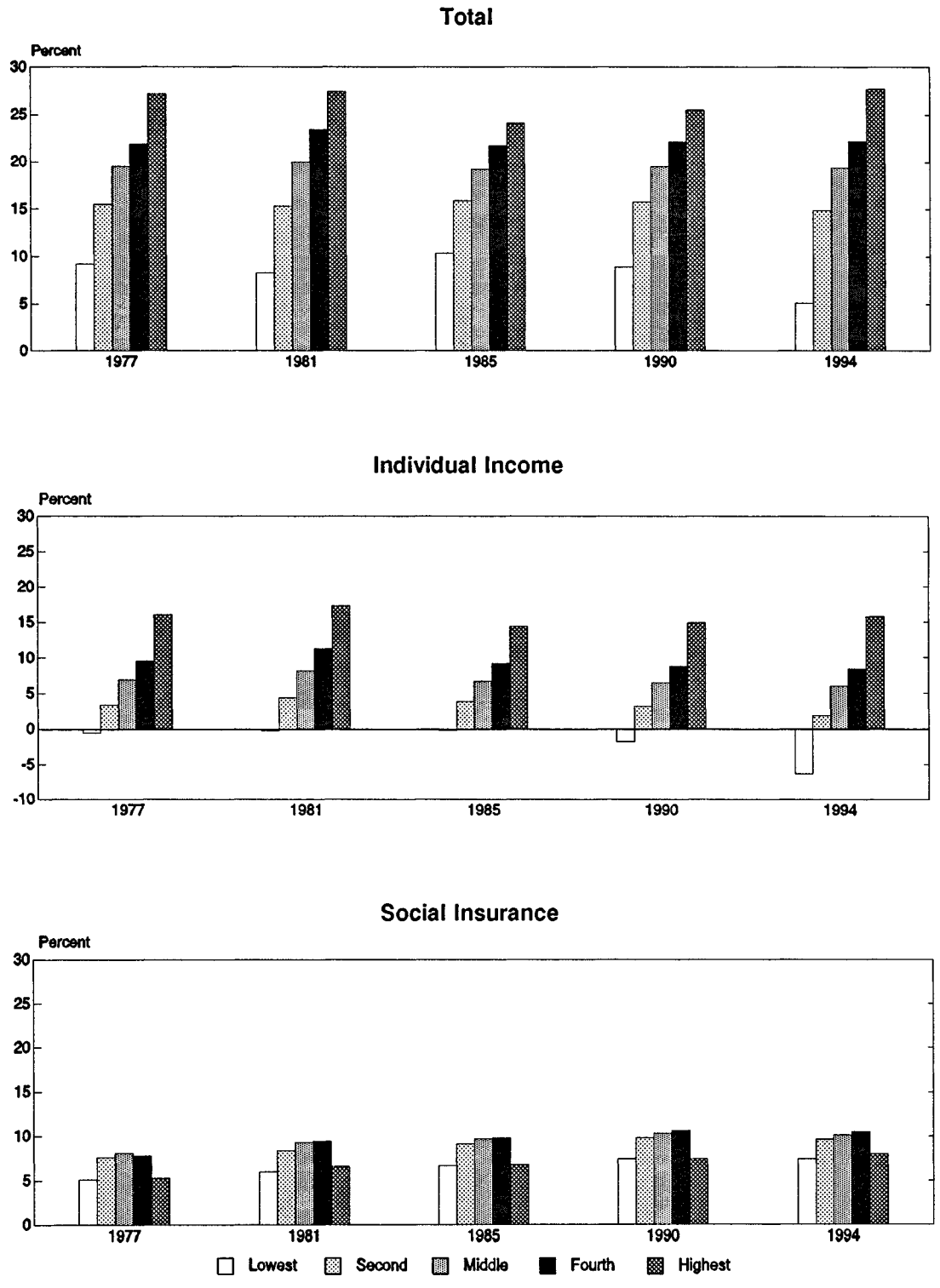
Total federal taxes became more progressive because of the trends in their leading component, individual income taxes. Nearly half of all federal revenues come from individual income taxes. Social insurance payroll taxes now account for more than one-third, corporate income taxes for about 10 percent, and excise taxes for less than 5 percent of revenues. The remaining revenues come from estate and gift taxes, customs duties, and other miscellaneous receipts.

Viewed in isolation, individual income taxes will be more progressive than they were in 1977 once the changes enacted in OBRA-90 and OBRA-93 are fully implemented, largely because of an expanded earned income tax credit. The EITC is a refundable credit available to low-income working families. Although the refundable portion of the credit is counted as an outlay in the federal budget, it nevertheless stems from provisions of the tax code and is thus treated in distributional analyses as a feature of the individual income tax system. OBRA-90 greatly increased the amount of the credit, as did OBRA-93; and the 1993 expansion for the first time made low-income workers without children eligible for a small credit.

Average effective individual income tax rates were lower for families in all income quintiles in 1990 than for comparable families in 1977. In fact, effective individual income tax rates became significantly less than zero for families in the lowest income quintile for the first time in 1990 because of the liberalizations in the EITC; that is, the average family in the lowest quintile received payments from the government under the individual income tax.

Once all of the changes from OBRA-90 and OBRA-93 are in place, effective individual income tax rates will still be lower for families in the four lower income quintiles than in 1977 but will have returned to 1977 levels for the top quintile. And the

Figure 2-5.
Effective Federal Tax Rates in Selected Years, 1977-1994, by Income Group



SOURCE: Congressional Budget Office.

NOTE: Families are ranked by adjusted family income, with an equal number of people per quintile. Rates for 1994 are projected using the fully implemented rates for the earned income tax credit set in the Omnibus Budget Reconciliation Act of 1993.

effective subsidy received by families in the lowest income quintile will be about 10 times as big as the subsidy received by comparable families in 1977.

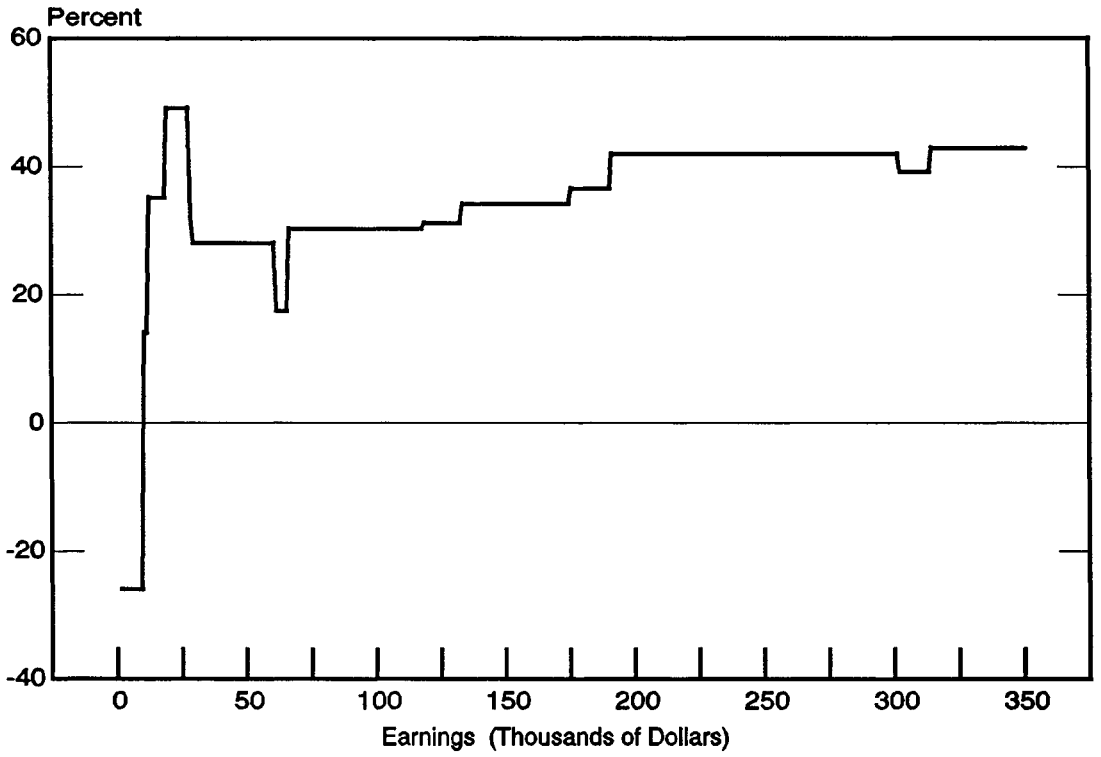
Greater Reliance on Payroll Taxes

Total federal taxes might have become even more progressive if payroll taxes for social insurance had not grown in importance as a source of federal revenues. They will account for an estimated 37 percent of federal revenue in 1994, up from 30 percent in 1977. Payroll taxes are less progressive than federal income taxes; effective federal payroll tax rates are progressive only at the lowest end of the income distribution, virtually flat across the three middle income quintiles, and regressive at the top (see the bottom panel of Figure 2-5). Although payroll taxes did become more progressive between 1977 and 1994--mainly because the ceiling on wages subject to the Social Security and Medicare taxes was steadily lifted (and ultimately, in the case of Medicare, repealed)--payroll taxes remain much less progressive than income taxes. Hence, their increasing weight in the revenue totals has dampened the overall move toward greater progressivity.

Marginal Tax Rates After OBRA-93

With the enactment of OBRA-93, marginal tax rates on earnings--the fraction of the last dollar of earnings

Figure 2-6.
Marginal Tax Rate on Earnings in 1994, Including Payroll and Income Taxes, for a One-Earner Couple with Two Children



SOURCE: Congressional Budget Office.

NOTE: All calculations use 1994 tax law except for the earned income tax credit, which is at 1996 levels. The estimates assume that all income is from self-employment and that the taxpayer has deductions equal to the greater of the standard deduction or 20 percent of earnings.

paid in taxes--will range from a subsidy of 26 percent to a tax of 49 percent when both individual income taxes and payroll taxes are taken into account (see Figure 2-6).

Taxpayers with the highest income will face marginal tax rates of nearly 43 percent. This rate is lower than the 50 percent top rate on earnings in 1977. As recently as 1990, however, the highest income tax bracket was 28 percent, and high-income taxpayers were not subject to further payroll taxes as their income rose. OBRA-93 added a 39.6 percent bracket to the individual income tax. When the limitation on itemized deductions, which was made permanent by OBRA-93, is taken into account, the top income tax rate reaches 40.8 percent. Furthermore, all earnings are now subject to Medicare's HI payroll tax of 1.45 percent paid by both employers and employees. Because the employer share of the payroll tax is deductible, the extension of the HI tax to high-income workers adds another 2.1 percentage points to the top tax rate.

The workers facing the highest marginal tax rates are those whose earnings are in the range in which the EITC disappears--essentially, in the low $20,000 range for a couple with two children. Such families lose about 21 cents of EITC payments for every dollar of additional earnings. Added to the 15 percent individual income tax and the Social Security payroll tax of 7.65 percent on both employees and employers, the total marginal tax rate on these families is just over 49 percent when interactions between the taxes are taken into account.

Very low income workers with children are subsidized by the federal government. These workers are exempt from the regular income tax; and for workers with at least two children, the EITC is increased by 40 cents for each additional dollar of earnings up to $8,425. This subsidy more than offsets the additional payroll taxes they owe, and their marginal tax rate is negative.

Appendixes

Appendix A

Sequestration Preview Report for Fiscal Year 1995

The Balanced Budget and Emergency Deficit Control Act of 1985 (the Balanced Budget Act), as amended, requires the Congressional Budget Office (CBO) to issue various sequestration reports each year: a preview report five days before the President's budget submission in January or February, an update report on August 15, and a final report 10 days after the end of a session of the Congress. The sequestration preview report must contain estimates of the following items:

- the limits on discretionary spending and any adjustments to them;
- the amount by which direct spending or receipt legislation enacted since the Budget Enforcement Act of 1990 has increased or decreased the deficit; and
- the maximum deficit amount.

This report to the Congress and the Office of Management and Budget (OMB) provides the required information (summarized in Table A-1).

CBO ordinarily issues its annual *Economic and Budget Outlook* on the date specified for submission of its sequestration preview report--five days before the President's budget is submitted--and includes the sequestration report in that volume, where it will be readily available to interested readers. Although this year's *Economic and Budget Outlook* is scheduled for release 11 days before the submission date for the President's budget, the sequestration report is included. In the event that anything affecting the sequestration report occurs during the additional six days before the President's budget is submitted, CBO will notify the Congress and OMB of the appropriate modification to the sequestration report.

Discretionary Sequestration Report

The Omnibus Budget Reconciliation Act of 1993 (OBRA-93) amended the Balanced Budget Act and established new limits on total discretionary budget authority and outlays for fiscal years 1996 through 1998. But it left in place the existing discretionary spending limits for fiscal years 1993 through 1995 and the discretionary sequestration procedures --including the requirements to adjust the discretionary limits--established by the Budget Enforcement Act (BEA). CBO's estimates of the limits on discretionary spending for fiscal years 1994 through 1998 are shown in Table A-2.

The estimated spending limits in this report differ from those in CBO's December 1993 final sequestration report for two reasons. First, the estimates have been revised to reflect differences between the spending limits in CBO's final report and those specified in OMB's December 1993 final sequestration report. Second, the limits have been changed by

adjustments that the Balanced Budget Act specifies must be made in a preview report. The limits do not include any prospective adjustments--changes that cannot legally be made until future sequestration reports. (The CBO baseline for discretionary spending detailed in Chapter 2 is based on spending limits that do include CBO's estimate of such prospective adjustments--namely, for the special budget authority allowance in the final sequestration report for fiscal year 1995 and for differences between anticipated and actual inflation in future preview reports. As a result, the estimated caps described in Chapter 2 are slightly higher than the caps depicted here. The baseline caps do not include adjustments in this preview report that were recognized after the baseline had been completed.)

Technical Differences from OMB's December 1993 Final Report

The Balanced Budget Act requires both CBO and OMB to calculate the changes in the discretionary spending limits specified in the act. OMB's estimates of the limits are controlling in determining whether enacted appropriations fall within the limits or whether a sequestration is required to eliminate a breach of the limits. CBO's estimates are advisory. Acknowledging OMB's statutory role, CBO adjusts its previous estimates to conform to the spending limits in the most recent OMB sequestration report before making the additional adjustments required for the current report.

The 1994 limit on domestic discretionary budget authority in CBO's December 1993 final report exceeded that in the subsequent OMB final report by $755 million. This discrepancy results from a conceptual difference in estimating contingent emergency appropriations. The Balanced Budget Act requires that OMB and CBO adjust the spending limits to reflect enactment of appropriations that are designated as emergency expenditures both by the legislation providing the appropriations and by the President. Contingent emergency appropriations are appropriations that have been designated as emergency funding in the appropriation act but are available for obligation only if the President also designates them as emergency funding. Because no further Congressional action is necessary to make these funds available for obligation, CBO includes the full amount of these contingent appropriations in its estimates and adjusts the spending limits accordingly. OMB includes in its estimates and cap adjustments only the contingent appropriations that the President has designated as emergency funding and made available for obligation. The adjustment that

Table A-1.
CBO Estimates of Discretionary Spending Limits, Changes in the Deficit, and the Maximum Deficit Amount for Fiscal Years 1994 Through 1998 (In millions of dollars)

	1994	1995	1996	1997	1998
Discretionary Spending Limits					
Budget authority	513,268	515,010	516,734	525,608	528,102
Outlays	542,672	539,539	546,127	545,544	545,653
Changes in the Deficit Since the Budget Enforcement Act	-34	-972	-470	-409	-1,013
Maximum Deficit Amount	n.a.	244,000	n.a.	n.a.	n.a.

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

Table A-2.
CBO Estimates of Discretionary Spending Limits for Fiscal Years 1994 Through 1998 (In million of dollars)

	1994		1995		1996		1997		1998	
	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays	Budget Authority	Outlays
Limits in CBO's December 1993 Final Report	513,932	542,798	517,398	540,653	519,142	547,771	528,079	547,513	530,639	547,875
Adjustments										
Technical differences from OMB's December 1993 final report	-755	-192	0	-155	0	-38	0	-11	0	0
Contingent emergency appropriations designated since OMB's December 1993 final report	91	66	0	16	0	5	0	2	0	2
Concepts and definitions										
OPIC budget authority	0	0	-157	0	-158	0	-158	0	-160	0
Category changes										
Bankruptcy judges' salaries	0	0	-48	-48	-50	-50	-52	-51	-54	-53
Wetland reserve	0	0	0	53	0	0	0	0	0	0
Funds for strengthening markets	0	0	-30	-27	0	-3	0	0	0	0
Cooperative work trust fund	0	0	0	-21	0	0	0	0	0	0
Rehabilitation services	0	0	0	0	0	-2	0	0	0	0
Emergency preparedness grants	0	0	-13	-1	0	-6	0	0	0	0
General Services Administration	0	0	-12	-12	-12	-12	-12	-12	-12	-12
Black Lung benefits	0	0	22	22	20	20	19	19	18	18
National service initiative reappropriation	0	0	0	8	0	0	0	0	0	0
Subtotal	0	0	-238	-26	-200	-53	-203	-44	-208	-47
Change in 1993 inflation	0	0	-2,033	-834	-2,088	-1,466	-2,144	-1,810	-2,202	-2,063
Credit subsidy reestimates	0	0	-117	-115	-120	-92	-124	-106	-127	-114
Total	-664	-126	-2,388	-1,114	-2,408	-1,644	-2,471	-1,969	-2,537	-2,222
Limits as of January 27, 1994[a]	513,268	542,672	515,010	539,539	516,734	546,127	525,608	545,544	528,102	545,653

SOURCE: Congressional Budget Office.

NOTE: OMB = Office of Management and Budget; OPIC = Overseas Private Investment Corporation.

a. The limits assumed in CBO's January 1994 baseline discussed elsewhere in this volume are lower than those shown here, primarily because the baseline caps include estimated adjustments that will be made in later sequestration reports.

CBO's final report made to the limit on domestic budget authority included $755 million for contingent emergency appropriations that had not been designated by the President at the time of OMB's report.

Similarly, the limit on domestic discretionary outlays in CBO's December report exceeded that in OMB's final report by $192 million in 1994, $155 million in 1995, $38 million in 1996, and $11 million in 1997, largely because of the scoring of the contingent emergencies the President did not designate. The difference was partially offset in 1994 because OMB made a larger adjustment for the special outlay allowance in its final report than did CBO. That allowance is available if the estimated budget authority that is enacted equals or falls below the spending limit but outlays exceed their limit. OMB estimated that 1994 domestic outlays overshot their limit by $822 million before the special outlay allowance was applied, and made a corresponding adjustment to the limit. CBO estimated that outlays exceeded the limit by $462 million and adjusted the limit by that smaller amount.

Contingent Emergency Appropriations Designated Since OMB's December 1993 Final Report

No emergency appropriations have been enacted since OMB's December 1993 final sequestration report. However, several contingent emergency appropriations that had not been designated before OMB's report was issued--and were therefore not included in the adjustments in its report--have subsequently been designated. The adjustments to the limit on 1994 budget authority and to the limits on outlays in 1994 through 1998 reflect the effects of the budget authority newly available as a result of these emergency designations.

Concepts and Definitions

The Balanced Budget and Emergency Deficit Control Act provides for adjustments that reflect changes in budgetary concepts and definitions. One such adjustment made in this report reflects a revised method of counting budget authority for the Overseas Private Investment Corporation's noncredit programs account. The account is funded by offsetting collections, and CBO and OMB have assumed that the negative budget authority representing the collections was completely offset by the authority to spend those collections. However, not all of the collections are available for obligation in the year they are received. Under the definition of budget authority adopted as part of the BEA, only the amount available for obligation should be counted as positive budget authority. The account should therefore reflect negative budget authority equal to the amount of collections not available for obligation. CBO will begin scoring appropriation bills accordingly, and the limits on budget authority have been reduced to account for this change.

Adjustments for changes in budgetary categories are also made under the concepts and definitions authority. One such adjustment involves a true change in classification of spending from discretionary to mandatory. The lists of mandatory and discretionary appropriation accounts that accompanied the BEA specified that the account providing funding for "Courts of Appeals, District Courts, etc." was split--annual appropriations for salaries of judges would be counted as mandatory, and all other funding in the account would be counted as discretionary. Both CBO and OMB have counted only the salaries of judges specifically authorized under Article III of the Constitution as mandatory. CBO and OMB (after consultation with the budget committees) have agreed, however, that the salaries of bankruptcy judges are mandatory by statute--though not required by the Constitution--and both agencies will begin counting appropriations for salaries of bankruptcy judges as mandatory. The discretionary spending limits are reduced here to account for this change.

The other category changes made in this report result from the practice of assigning certain legislated changes in mandatory spending to the discretionary spending side of the Balanced Budget Act ledger and certain legislated changes in discretionary programs to the pay-as-you-go (PAYGO) side, which is generally supposed to deal with mandatory spending and tax legislation. OMB and the budget committees have determined that any costs or savings that result

from provisions in an appropriation act should be reflected in enforcement of the discretionary spending limits, even if the costs or savings are in a mandatory spending program. Similarly, any appropriation for a discretionary program provided in authorizing legislation is included in the PAYGO scorecard.

Changes in current year or budget year mandatory spending made in appropriation acts are included in the estimate of discretionary spending for that year, but appropriations for that year provided in authorizing legislation are not. Because estimates of discretionary spending attributed to future appropriation acts will include all such spending provided in previous years--whether in appropriation or authorization acts--and exclude mandatory spending provided in previous appropriation acts, the discretionary spending limits for future years are adjusted to ensure that the appropriations committees are held responsible for the future effects of changes in mandatory programs included in their legislation, but are not affected by appropriations for discretionary programs provided by other committees. Without compromising Balanced Budget Act enforcement, adjustments of this sort provide a simple alternative to permanently tracking all of the effects of appropriation actions on mandatory spending and all discretionary spending provided by authorizing legislation.

For example, the fiscal year 1994 appropriation act for the Department of the Interior and related agencies (Public Law 103-138) contained a provision that reduced mandatory spending from the Forest Service Cooperative Work Trust Fund by $21 million in 1994, but increased spending by $21 million in 1995. The 1994 savings were included in the estimate of the 1994 appropriation act, but rather than attribute the 1995 cost to next year's appropriation act, the 1995 discretionary outlay limit has been reduced by $21 million. Similarly, a reappropriation included in the National Service Trust Act (Public Law 103-82), an authorizing act, increased outlays from a discretionary account by $12 million in 1994 and $8 million in 1995 and was reflected in the PAYGO scorecard. Because the $8 million outlay will be attributed to an appropriation act as a prior-year discretionary outlay in 1995, the discretionary outlay limit for 1995 has been increased by $8 million. This ensures that the appropriations committees are not adversely affected by an action of the authorizing committee that has already been counted for purposes of the Balanced Budget Act.

Change in 1993 Inflation

The Balanced Budget Act requires that the discretionary spending limits for 1995 through 1998 be adjusted for the difference between the actual inflation rate in 1993 and the rate for that year anticipated when the BEA was enacted in 1990. Because actual inflation (measured by the implicit gross domestic product deflator) was lower in 1993 than had been expected in 1990, the adjustment reduces the spending limits--for budget authority, by around $2 billion each year, and for outlays, by about $800 million in 1995 to $2 billion in 1998.

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. Although CBO believes there is no justification for OMB's interpretation of the inflation adjustment provision in the Balanced Budget Act, OMB's cap adjustments are controlling, and CBO follows its lead in order to avoid confusion.

Credit Subsidy Reestimate

The Balanced Budget Act required that the discretionary spending limits be adjusted in the fiscal year 1993 and 1994 sequestration preview reports to reflect changes in the estimated subsidy rate for 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 were reduced. Policymakers 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 at that time. The Balanced Budget Act also provides that a credit reestimate adjustment be made in the 1995 preview report if the President chooses to adjust the maximum deficit amounts to account for revised economic and technical assumptions, as he has

indicated will occur in OMB's forthcoming preview report. The reductions shown in Table A-2 reflect CBO subsidy rates that are lower than the rates OMB used for fiscal year 1994. 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 guarantees of the Federal Housing Administration; and direct loans of the Rural Housing Insurance Fund.

Pay-As-You-Go Sequestration Report

If changes in direct (mandatory) spending programs or governmental receipts enacted since the BEA increase the combined current year and budget year deficits, a pay-as-you-go sequestration is triggered at the end of the Congressional session, and nonexempt mandatory programs are cut enough to eliminate the overage. The pay-as-you-go provisions of the Balanced Budget Act had applied through fiscal year 1995, but OBRA-93 extended them through 1998.

As is the case with the discretionary spending limits, the Budget Enforcement Act requires both CBO and OMB to estimate the net increase in the deficit resulting from direct spending or receipt legislation. OMB's estimates are controlling, however, in determining whether a sequestration is required. CBO therefore adopts the estimate of the change in the deficit specified in OMB's most recent sequestration report as the starting point for its estimate. Table A-3 shows CBO's estimate of the

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

	1994	1995	1996	1997	1998
Total from OMB's December 1993 Final Report[a]	-26	-971	-473	-410	-521
Legislation Enacted Since OMB's Final Report					
North American Free Trade Agreement Implementation Act (P.L. 103-182)	-1	0	-1	0	-493
Jefferson Commemorative Coin Act of 1993 (P.L. 103-186)	-7	-6	1	1	1
Government Securities Act Amendments of 1993 (P.L. 103-202)[b]	1	1	1	1	1
Coast Guard Authorization Act of 1993 (P.L. 103-206)	-1	-1	-1	-1	-1
Higher Education Technical Amendments of 1993 (P.L. 103-208)	c	5	3	c	c
Total	-8	-1	3	1	-492
Total Change in the Deficit Since the Budget Enforcement Act	-34	-972	-470	-409	-1,013

SOURCE: Congressional Budget Office.

NOTES: The following bills affected direct spending or receipts but did not increase or decrease the deficit by as much as $500,000 in any year through 1998: Fresh Cut Flowers and Greens Promotion and Information Act (P.L. 103-190); Copyright Royalty Tribunal Reform Act (P.L. 103-198); Friendship Act (P.L. 103-199); Domestic Chemical Diversion Control Act of 1993 (P.L. 103-200); Resolution Trust Corporation Completion Act (P.L. 103-204); an act to Suspend Implementation of Certain Requirements of the Food Stamp Program until March 15, 1994 (P.L. 103-205); and an act to Provide Additional Authority for the Secretary of Veterans Affairs to Provide Health Care for Veterans of the Persian Gulf War (P.L. 103-210).

OMB = Office of Management and Budget; P.L. = Public Law.

a. Section 254 of the Balanced Budget and Emergency Deficit Control Act of 1985, as amended, calls for a list of all bills enacted since the Budget Enforcement Act that are included in the pay-as-you-go calculation. Because the data in this table assume OMB's estimate of the overall changes in the deficit resulting from bills enacted through December 3, 1993, readers are referred to the lists of those bills included in Table 7 of the *OMB Final Sequestration Report to the President and Congress for Fiscal Year 1994* (December 10, 1993) and in previous sequestration reports issued by OMB.

b. Reductions in receipts are shown with a positive sign because they increase the deficit.

c. Less than $500,000.

changes in the deficits for 1994 through 1998 that result from direct spending and receipt legislation enacted since the BEA (assuming OMB's estimates of changes in the deficit resulting from legislation enacted through December 3, 1993). Before the pay-as-you-go provisions were extended through 1998, PAYGO estimates did not include the effects of enacted legislation on deficits for 1996 through 1998. Therefore, the effects on deficits that are shown in Table A-3 for those years reflect only the effects of legislation enacted since OBRA-93.

CBO's estimate of changes in direct spending and revenues provided by legislation signed by the President since December 3, 1993--added to the total 1994 and 1995 deficit reduction of $997 million that OMB estimated in its December 1993 final report--yields a net decrease in the combined 1994 and 1995 deficits of $1,006 million. According to these calculations, no pay-as-you-go sequestration would be required for fiscal year 1995.

Deficit Sequestration Report

The BEA established procedures to enforce annual deficit targets through 1995. Those procedures were crafted in such a way that they have imposed no additional budgetary discipline beyond the constraints of the discretionary spending limits and the PAYGO requirement. OBRA-93 did not extend the provisions for enforcing deficit targets beyond their scheduled expiration at the end of 1995.

The 1995 maximum deficit target has no effect for two reasons. First, when the President submits the budget for fiscal year 1995, he will exercise the option provided by the Balanced Budget Act to adjust the deficit targets for revised economic and technical assumptions, in addition to making the required adjustments to account for changes in the discretionary caps and pay-as-you-go balances. Second, the assumptions used in preparing the President's budget must be used by OMB for all subsequent Balanced Budget Act calculations that year. Therefore, even if the budgetary outlook deteriorates after the President's budget is submitted, as long as the discretionary spending limits and pay-as-you-go requirements are met, the deficit targets will be said to have been satisfied.

The BEA provides that the estimated maximum deficit amounts shall equal the projected on-budget baseline deficit (which excludes net spending by the Postal Service and Social Security receipts and benefit payments)--assuming that discretionary spending is held to the adjusted limits--minus any net deficit increases or decreases that appear on the PAYGO scorecard. CBO's current estimate of the maximum deficit amount for 1995, based on the economic and technical estimating assumptions described elsewhere in this volume, is shown in Table A-4. This figure excludes changes in the deficit resulting from enacted pay-as-you-go legislation, as well as assumed prospective adjustments to the 1995 discretionary spending limits for the special budget authority allowances. The figure includes Social Security administrative costs that are legally off-budget but that are covered by the discretionary spending limits as a result of OMB's interpretation of the Balanced Budget Act. As a result, it differs slightly from the on-budget deficit for fiscal year 1995 shown in the rest of this volume.

Since the December 1993 final sequestration report, CBO's estimate of the 1995 maximum deficit amount has decreased by $20 billion. This decrease results primarily from changes in economic and technical assumptions.

Table A-4.
CBO Estimate of the Maximum Deficit Amount for Fiscal Year 1995 (In billions of dollars)

	1995
Estimate in CBO's December 1993 Final Report	264
Adjustments	
Economic and technical reestimates	-19
Changes in discretionary spending limits	-1
Total	-20
Estimate as of January 27, 1994	244

SOURCE: Congressional Budget Office.

Appendix B

An Analysis of Congressional Budget Estimates

In May 1992, the Congress adopted a budget resolution for fiscal year 1993 that anticipated a deficit of $327 billion. When fiscal year 1993 ended 17 months later, the Treasury Department tallied the deficit at $255 billion--$72 billion smaller than anticipated. This was the first time in 14 years that the actual deficit was less than in the budget resolution. That good news, however, is tempered; a single unpredictable category of spending, deposit insurance, more than accounts for the huge difference. Other factors, on balance, were a bit worse than envisioned.

Sources of Differences

The Congressional Budget Office 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. Examples are the Tax Reform Act of 1996, which was not explicitly included in the 1987 budget resolution but brought in a first-year surge of extra revenues, and emergency appropriations, such as those for Operation Desert Storm, which are by definition difficult to anticipate. Policy differences can also reflect the failure to enact legislation that was assumed in the resolution.

Economic differences can be blamed on the failure to anticipate the actual performance of the economy. Every budget resolution contains assumptions about several key economic variables--chiefly gross domestic product (GDP), unemployment, inflation, and interest rates--that are needed to develop estimates of revenues and spending for benefit programs and net interest. Typically (as for the 1993 budget resolution) the economic assumptions are drawn from a CBO forecast, although in nearly one-half of the cases the drafters have chosen a non-CBO forecast, generally one from the Administration.

Soon after the end of the fiscal year in question, CBO judges how much of the difference between the budget resolution and the actual revenue and outlay totals should be ascribed to economic factors, using data available at that time; this allocation is not subsequently changed even though revisions to data about GDP and taxable incomes con-tinue to trickle in thereafter. Only the differences that can be linked rigorously to these major variables are labeled economic. Other differences that could be tied to economic performance (for example, higher support payments to farmers in response to weak agricultural exports) are not included in 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 14 years are noted at the end of this appendix. Large technical differences often prompt both the Congressional Budget Office and the Administration to review their methods of projection, but some such differences are inevitable given the size and complexity of the budget.

By convention, nearly all the differences in deposit insurance outlays--a major source of the deficit's volatility in recent years--are classified as technical, a convention that merits explanation. In August 1989, the Congress passed the Financial Institutions Reform, Recovery, and Enforcement Act to reform deposit insurance, beef up regulation, and fund savings and loan resolutions. It soon became clear that the cleanup was woefully underfunded, and the Resolution Trust Corporation (RTC) had to make three return trips to the Congress for more money. Because deposit insurance is a legal obligation of the government, CBO and the Administration began to show estimates of future outlays on the assumption that necessary funds would be provided. Sanctioning this practice, the Budget Enforcement Act of 1990 (BEA) stated that funding that merely honors the government's existing commitment would not be recorded as an entry on the official pay-as-you-go scorecard, signifying that it does not require offsetting tax increases or spending cuts. Even so, there were three interruptions in the RTC's funding, including one that lasted from April 1992 until December 1993.

In theory, it might be possible to separate the huge differences in deposit insurance outlays into those stemming from legislative inaction (presumably a policy difference) and those from CBO's estimating errors (a technical difference). In practice, this is not only tricky but misleading; showing big "savings" from underfunding the savings and loan cleanup would imply that policymakers deserve praise for cutting the deficit. In fact, as CBO consistently emphasized, delays in funding did nothing to shrink the cleanup's total cost but probably increased it. Thus, by convention, the differences in deposit insurance estimates, whether positive or negative, are simply listed on the technical side of the tally sheet.

The Budget Resolution for Fiscal Year 1993

The budget process for fiscal year 1993 began in early 1992. For the second year in a row, policymakers essentially followed a blueprint set out by the Budget Enforcement Act. The act held them to strict limits on appropriations and required that entitlement and revenue legislation, on balance, could not add to the deficit--the "pay-as-you-go" rule. (Of course, deficit reductions were always permissible.) Emergencies constituted the only allowable exceptions to these rules.

Fiscal year 1993 was the last year for which the BEA set separate limits on the three types of discretionary spending--defense, international, and domestic. By contrast, in fiscal years 1994 through 1998, a single lid applies to all three. The House Committee on the Budget, in its recommendations on the budget resolution, urged that the Congress consider reallocating the limits--that is, permit some of the allowable defense dollars to be used for domestic purposes--in light of the crumbling of the Warsaw Pact and the general lessening of international tensions. This effort came to naught, however, and the three caps stood intact.

Table B-1.
Comparison of 1993 Budget Resolution with Actual Outcomes (In billions of dollars)

	Budget Resolution[a]	Actual	Difference
Revenues	1,173	1,153	-20
Outlays	1,500	1,408	-92
Deficit	327	255	-72

SOURCE: Congressional Budget Office using data from the Concurrent Resolution on the Budget--Fiscal Year 1993 (May 1992); and Department of the Treasury, *Final Monthly Treasury Statement for Fiscal Year 1993* (October 1993).

a. Consolidated totals.

The conference resolution on the budget contained few policy departures. Specifically, it called for domestic and international approprations to be at or near their respective caps, but for defense appropriations to fall well below their BEA limits. It also called for $2 billion in unspecified savings in mandatory spending, though without directing any committee to achieve this savings through reconciliation.

The resolution called for revenues of $1,173 billion, outlays of $1,500 billion, and a deficit of $327 billion (see Table B-1). Revenues, outlays, and the deficit all ended up lower than projected, for reasons that are discussed below.

Changes in Policies

Policy actions boosted the deficit by about $12 billion above the figure in the resolution, but these additions were mostly for emergencies (see Table B-2). The last installment of Desert Storm funds for defense, aid to victims of several natural disasters, and an extension of unemployment benefits in March 1993--the only such extension that was labeled an emergency--added $10 billion. The remaining $2 billion was mainly attributable to slightly higher defense spending than envisioned in the resolution and to the failure to achieve the unspecified mandatory savings. Several other legislative initiatives, chiefly two earlier extensions of unemployment insurance, were accompanied by revenue increases and cuts in other programs and thus complied with the pay-as-you-go rules.

Economic Factors

The divergence between the economy as it appeared at the end of fiscal year 1993 and what was assumed

Table B-2.
Sources of Differences Between Actual Budget Totals and Budget Resolution Totals for Fiscal Year 1993 (In billions of dollars)

	Policy				
	Emergencies	Other	Economic	Technical	Total
Outlays					
Defense discretionary	3	1	0	-1	3
International discretionary	0	a	0	1	1
Domestic discretionary	4	0	0	a	4
Entitlements and other mandatory spending	3	5	a	4	12
Deposit insurance[b]	0	0	0	-92	-92
Offsetting receipts	0	a	0	a	a
Net interest[b]	0	a	-19	-1	-20
Total	10	6	-19	-90	-92
Revenues	0	4	-28	3	-20
Deficit	10	2	9	-93	-72

SOURCE: Congressional Budget Office.

NOTE: Differences are actual outcomes less budget resolution assumptions.

a. Less than $500 million.

b. Adjusted for differences in interest paid by deposit insurance agencies to the Federal Financing Bank. These payments are intrabudgetary and do not affect the deficit.

Table B-3.
Sources of Differences Between Actual Budget Totals and First Budget Resolution Estimates for Fiscal Years 1980-1993 (In billions of dollars)

	Policy	Economic	Technical	Total
		Revenues		
1980	6	8	-4	11
1981	-4	5	-13	-11
1982	13	-52	-1	-40
1983	-5	-58	-3	-65
1984	-14	4	-4	-13
1985	a	-20	3	-17
1986	-1	-23	-2	-27
1987	22	-27	7	2
1988	-11	4	-17	-24
1989	1	34	-8	26
1990	-7	-36	9	-34
1991[b]	-1	-31	-24	-56
1992	3	-46	-34	-78
1993	4	-28	3	-20
Average	a	-19	-6	-25
Absolute Average	7	27	9	30
		Outlays		
1980	20	12	16	48
1981	25	6	16	47
1982	1	24	8	33
1983	18	a	8	26
1984	1	7	-18	-9
1985	23	-5	-13	5
1986	14	-12	20	22
1987	7	-12	13	8
1988	-2	12	12	22
1989	17	14	12	43
1990	13	13	59	85
1991[b]	-19	1	-22	-40
1992	15	-21	-60	-66
1993	16	-19	-90	-92
Average	11	1	-3	9
Absolute Average	14	11	26	39
		Deficit		
1980	13	4	19	37
1981	28	1	29	58
1982	-12	76	9	73
1983	22	59	11	91
1984	15	3	-14	4
1985	23	15	-16	22
1986	16	11	22	49
1987	-15	15	6	6
1988	9	8	29	46
1989	17	-20	20	17
1990	20	49	50	119
1991[b]	-19	32	2	15
1992	12	25	-26	11
1993	12	9	-93	-72
Average	10	21	3	34
Absolute Average	17	23	25	44

SOURCE: Congressional Budget Office.

NOTE: Differences are actual outcomes less budget resolution asumptions.
The allocation of revenue differences between economic and technical factors is done soon after the fiscal year in question and is not subsequently changed to incorporate revisions in economic data.

a. Less than $500 million.

in the resolution accounts for $9 billion of higher deficit. Lower-than-expected taxable incomes dampened revenues by an estimated $28 billion, but that was largely offset by savings of $19 billion in interest costs as interest rates plummeted to their lowest levels in three decades.

Technical Factors

Deposit insurance spending came in $92 billion below expectations, dwarfing all other technical differences. About three-fourths of the deposit insurance shortfall was attributable to spending on the cleanup of the savings and loan industry (chiefly by the Resolution Trust Corporation and stemmed from the Congress's failure to provide any funding for the RTC for a 20-month period. The rest was attributable to smaller-than-expected outlays by the Bank Insurance Fund, as dire projections for the banking industry proved to be overly pessimistic. Other technical errors were small and scattered among many programs, driving the total technical error to $93 billion.

Budget Resolutions in 1980 Through 1993

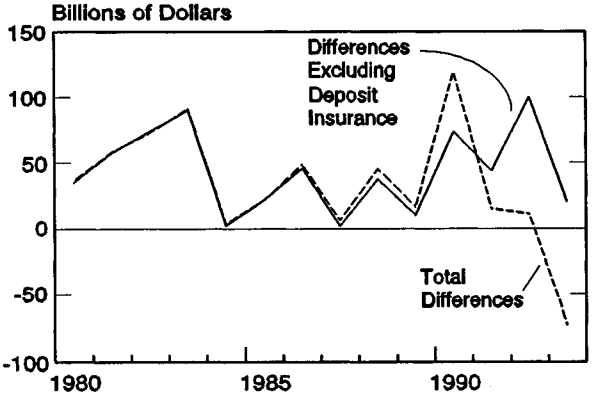
The 1993 budget resolution broke a pattern: for the first time in 14 years, the deficit was smaller than assumed in the first budget resolution. The overruns in 1980 through 1992, by contrast, ranged from as little as $4 billion to as much as $119 billion (see Table B-3).

Policy action or inaction (the failure to achieve savings called for in budget resolutions) has generally added to deficits, by an average of $10 billion a year. 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. Since 1991, the Congress has hewed quite faithfully to the strictures of the Budget Enforcement Act, and nearly all additions to the deficit have been for emergencies.

Because the budget process for a fiscal year begins about nine months before the year starts, economic performance is a major source of uncertainty. Revisions to economic data, which continue long after the fiscal year in question, often make it hard to disentangle economic and technical errors; nevertheless, with just one exception (in 1989), budget resolutions over this 14-year span 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 occur chiefly in revenues and, on the spending side of the budget, in net interest. On average, they contributed $21 billion in extra deficits.

The causes of large technical errors have varied over the years. On the revenue side, such errors were generally not very great through 1990 but ballooned in 1991 and 1992, when tax collections proved to be even weaker than economic data would seem to justify. On the outlay side, farm price supports, receipts from oil sales, defense, and benefit programs dominated the errors through the mid-1980s. Such errors briefly became less significant at decade's end. Underestimates of benefit outlays,

Figure B-1.
Differences Between Actual Deficit and Deficit in First Budget Resolution (By fiscal year)



SOURCE: Congressional Budget Office.

especially for health care, loomed large once again in 1991 and 1992. All of these errors, however, pale next to deposit insurance, the volatility of which has played havoc with budget estimates from the late 1980s to the present.

Although the lower-than-expected deficit in 1993 was overwhelmingly attributable to deposit insurance, that year's other errors were fairly small by recent historical standards (see Figure B-1). Excluding deposit insurance, the deficit in 1993 was $20 billion higher than projected. That overestimate was markedly smaller than errors in 1990 though 1992 and compares favorably even with earlier budget resolutions.

Appendix C

How the Economy Affects the Budget

The federal budget is highly responsive to changes in economic conditions. Most revenues rise or fall with gross domestic product (GDP), or more precisely, with taxable incomes. Many benefit programs are tied to the rate of inflation, either directly (like Social Security) or indirectly (like Medicare). Programs like unemployment compensation are sensitive to changes in the unemployment rate, and outlays for interest on the federal debt are largely at the mercy of market interest rates.

Faulty economic assumptions have been a chronic source of error in past budget estimates. As Congressional budget resolutions over the 1980-1993 period indicate, policymakers have usually chosen economic assumptions that proved to be too optimistic. On average, erroneous economic assumptions over the past 14 years have caused each succeeding year's deficit to be underestimated by more than $20 billion (see Appendix B).

The Congressional Budget Office has developed rules of thumb to illustrate the relationship between budget projections and four key economic variables: real growth, unemployment, inflation, and interest rates (see Table C-1). Each rule depicts the effect on budget totals of a 1-percentage-point change in CBO's baseline assumptions for these variables, starting in January 1994. As noted below, the rules of thumb are highly simplified and should be used with caution.

Real Growth

Strong economic growth narrows the deficit; weak economic growth widens it. CBO's baseline assumes that real growth in GDP will be fairly steady over the forecast period, averaging about 2.7 percent. The first rule of thumb was developed to show the budgetary effect of a sharp reduction in economic growth. Subtracting 1 percentage point from real growth implies anemic growth of less than 2 percent a year throughout the forecast period. By 1999--the fifth year--total GDP lies more than 5 percent below CBO's baseline assumption.

This scenario assumes that weak demand is the principal cause of slow economic growth, as opposed to, say, dramatically lower gains in labor productivity. Thus, sluggish growth affects labor markets as well, because businesses employ fewer workers; the unemployment rate inches up to 7.8 percent in 1999, more than 2 percentage points above the baseline.

The economic slowdown impedes the growth in taxable incomes, leading to revenue losses estimated at $8 billion in 1994 and $118 billion by 1999 (see Table C-1). In 1999, the revenue loss is about 7 percent of baseline revenues, even greater than the loss in GDP. Outlays for benefit programs--chiefly unemployment insurance--grow by a modest $800 million in 1994, but by larger amounts thereafter, generating $11 billion in additional spending by

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

	1994	1995	1996	1997	1998	1999
Real Growth: Effect of 1-Percentage-Point Lower Annual Rate Beginning January 1994						
Change in Revenues	-8	-25	-46	-69	-93	-118
Change in Outlays						
Net interest (Debt service)	a	1	4	7	13	20
Other	1	2	4	6	9	11
Total	1	4	8	14	22	31
Change in Deficit	9	29	54	82	115	149
Unemployment: Effect of 1-Percentage-Point Higher Annual Rate Beginning January 1994						
Change in Revenues	-33	-49	-50	-52	-54	-57
Change in Outlays						
Net interest (Debt service)	1	3	7	10	14	18
Other	3	5	5	5	5	6
Total	4	8	12	15	20	24
Change in Deficit	37	57	62	67	74	81
Inflation: Effect of 1-Percentage-Point Higher Annual Rate Beginning January 1994						
Change in Revenues	7	20	35	51	68	87
Change in Outlays						
Net interest						
Higher rates	5	15	20	24	29	33
Debt service	a	a	a	a	a	a
Other	1	5	14	25	38	55
Total	5	20	34	49	66	88
Change in Deficit	-1	-1	-2	-2	-1	1
Interest Rates: Effect of 1-Percentage-Point Higher Annual Rates Beginning January 1994						
Change in Revenues	0	0	0	0	0	0
Change in Outlays						
Net interest						
Higher rates	5	15	20	24	29	33
Debt service	a	1	2	4	6	8
Other	a	1	1	1	1	a
Total	5	16	23	29	35	42
Change in Deficit	5	16	23	29	35	42

SOURCE: Congressional Budget Office.

a. Less than $500 million.

1999. Over time, however, net interest is the bigger culprit behind the extra federal spending. As revenues fall off, the government borrows more and incurs greater debt-service costs. In total, the deficit in 1999 would be an estimated $149 billion greater--almost three-quarters more than in CBO's baseline projections--if real growth were 1 percentage point lower each year than projected.

Unemployment

Calculations using the second rule of thumb measure the impact on the budget of a 1-percentage-point increase in the unemployment rate. In the short run, economic growth and unemployment are clearly related. Okun's law, named after economist Arthur Okun, quantifies this relationship, positing that an extra percentage point of unemployment is accompanied by a 2½ percent loss in GDP.

CBO assumes that the unemployment rate will be 6.4 percent in 1994, falling off to 5.7 percent by 1999. Using this second rule of thumb, unemployment would instead jump to 7.4 percent in 1994 and average 6.7 percent in 1999. The path of interest rates and inflation is unchanged. Heeding Okun's law, GDP is 2½ percent lower than baseline levels in all six years of the forecast period. Not surprisingly, revenues drop, outlays for benefits rise, and interest costs grow in relation to the baseline. Combined, these forces drive up the deficit by $37 billion in 1994 and by $81 billion in 1999.

It is illuminating to compare this example with the projections derived using the first rule of thumb, which depicted the effects of an extended period of lethargic growth. Under Okun's law, it takes about two and one-half years of dampened growth, as described under the first rule, to generate an extra percentage point of unemployment. Thus, GDP and taxable incomes in the first scenario lie above their counterparts in calculations using the second rule of thumb through mid-1996 but fall farther and farther below them thereafter. The budgetary effects closely follow this pattern.

Inflation

Inflation affects the federal budget in mixed ways. On the one hand, higher inflation swells taxable incomes and hence revenues, assuming that all other economic variables, mainly economic growth, are unaffected. On the other hand, higher inflation boosts spending, particularly for benefit programs. Discretionary spending, too, would feel the higher inflation, although with a lag, unless policymakers were content to see real resources evaporate. And interest rates would almost surely rise with inflation, fueling higher costs for borrowing.

These effects nearly offset one another, and according to CBO, higher inflation leaves the deficit basically unchanged. In other words, higher inflation pushes up revenues and spending by essentially the same amounts, so the effect on the deficit is trivial.

The effect of inflation on the budget is subtle, however, and different conclusions are possible if one or two key assumptions are changed. The assumption that higher inflation is accompanied by higher interest rates is critical; $5 billion of the extra spending in 1994 and $33 billion in 1999 hinge on it (see Table C-1). The treatment of discretionary programs is also pivotal. CBO explicitly assumes that policymakers would attempt to preserve real resources for discretionary programs at the current level of funding by appropriating more dollars in response to a jump in inflation. The Balanced Budget Act discretionary spending caps limit appropriations through 1998, but the caps are partially adjusted to reflect increases (or decreases) in inflation. The rule of thumb assumes that discretionary spending will change by the amount of the cap adjustment through 1998 and by a full inflation adjustment in 1999, when the caps have expired. In 1996 and 1999, incorporating this assumption in the rule of thumb entails extra discretionary spending of $600 million and $11 billion, respectively. Easing this assumption would imply that higher inflation subdues the deficit, but with a hidden cost--an even greater erosion in the real resources of discretionary programs than the caps already impose.

Interest Rates

The last rule of thumb was designed to illustrate the sensitivity of the budget to changes in interest rates. The Treasury finances the government's substantial debt at market interest rates. Assuming that interest rates are 1 percentage point higher than assumed in the baseline for all maturities in each year would push interest spending up by $5 billion in 1994. The initial boost in interest costs is in large part fueled by the increased costs of refinancing the government's short-term Treasury bills, which make up roughly one-fourth of its marketable debt. More than $650 billion worth of Treasury bills are now outstanding, and none of them have a maturity of more than a year.

The bulk of the government's marketable debt is not held in short-term bills but in medium- to long-term securities, mainly those with initial maturities of 2 to 10 years. Many of them will come due for refinancing over the next few years. And to finance the deficit, the Treasury continues to incur new debt. Thus, the budgetary effects mount as more and more debt is hit with higher interest rates. By 1999, almost all of the debt is affected. Of the marketable debt outstanding in that year, CBO estimates that 27 percent would have been originally borrowed during the 1994-1999 period and would therefore be affected by the higher rates; about 55 percent was already outstanding in early 1994 but was refinanced during the 1994-1999 period; and only 18 percent was unaffected. The 1999 deficit climbs by $42 billion as a result of the interest rate hike. This rule of thumb includes small changes in other spending programs that are sensitive to interest rates, mainly student loans. It does not, however, incorporate any changes in revenues or in deposit insurance, since the impact of higher interest rates on these areas is less clear.

Conclusions

The rules of thumb highlight the sensitivity of the budget to economic assumptions. The rules are roughly symmetrical; that is, higher real growth, lower interest rates, and so on, would change budget projections by roughly the same amount as depicted in Table C-1, but in the opposite direction.

CBO presents rules of thumb each year in its annual report. They always change somewhat from year to year because of the intervening growth in the economy (principally affecting revenues), changes in interest rates, adjustments to the discretionary caps, and new projections of growth in benefit programs, among other reasons. When this year's rules of thumb are compared with those that appeared in CBO's January 1993 report, several differences stand out. The revenue effects of the rules dealing with real growth, unemployment, and inflation are larger, chiefly as a result of higher tax rates set in the Omnibus Budget Reconciliation Act of 1993 (OBRA-93) and interim growth in the economy. This year's calculations also indicate a small reduction in the budget's sensitivity to changes in interest rates. This reduction can also be explained largely by OBRA-93, which slowed the rate at which the government is accumulating debt.

Although rules of thumb offer a simple way to express the relationship between economic assumptions 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 faulty assumptions is likely to match these examples. Some variables, notably interest rates, are significantly more difficult to predict than others; a sustained error of 1 percentage point in interest rates is more likely than a similar error in the forecast of real growth. In addition, economic variables are related to each other, so that changes do not occur in isolation. Finally, budget projections are constantly revised, not only because of changes in economic assumptions, but for technical reasons as well. There is no similarly easy way of capsulizing the variety of budget outcomes that could result from technical uncertainty.

Appendix D

The Federal Sector of the National Income and Product Accounts

In addition to the usual budget presentation, the economic influence of the federal government can be measured through the national income and product accounts (NIPAs). The NIPAs provide a picture of government activity in terms of its production, distribution, and use of output. This approach recasts the government's transactions into categories that affect gross domestic product, income, and other macroeconomic totals, 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. Such shifts are referred to as netting and grossing adjustments. In the main, they affect certain receipts that the budget records as negative outlays because they are voluntary or intrabudgetary in nature and are not seen as resulting 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). The shift does not affect the deficit.

Foremost among netting and grossing adjustments are intrabudgetary receipts for retirement contributions on behalf of federal workers ($56 billion in 1994) and voluntary premiums for Medicare coverage ($17 billion in 1994). Another relatively large item is deposit insurance premiums. Deposit insurance outlays are financed in part by premiums levied on banks and thrift institutions; these premiums correspondingly boost the netting and grossing adjustment by $6 billion to $7 billion until 1997, when CBO anticipates a reduction in the premiums levied on commercial banks.

By contrast, 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 geographic differences, such as the exclusion of Puerto Rico and the Virgin Islands from the national economic statistics.

Sometimes the gap between the budget totals and their NIPA counterparts is wider than can be readily explained. The preliminary NIPA data for fiscal year 1993, calculated as the sum of quarterly data from October 1992 through September 1993, are a glaring example. Even after the familiar adjustments--

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)

	Actual 1993[a]	1994	1995	1996	1997	1998	1999
			Receipts				
Revenues (Budget basis)[b]	1,153	1,251	1,338	1,411	1,479	1,556	1,630
Differences							
Netting and grossing							
Government contributions for employee retirement	55	56	59	62	65	69	74
Medicare premiums	15	17	20	20	22	26	27
Deposit insurance premiums	6	6	7	7	2	3	3
Other	3	2	6	1	1	1	c
Geographic exclusions	-2	-2	-3	-3	-3	-3	-3
Other	17	3	c	4	3	c	1
Total	93	82	88	91	91	95	101
Receipts (NIPA basis)	1,246	1,333	1,426	1,502	1,569	1,651	1,731
			Expenditures				
Outlays (Budget basis)[b]	1,408	1,474	1,509	1,577	1,661	1,736	1,834
Differences							
Netting and grossing							
Government contributions for employee retirement	55	56	59	62	65	69	74
Medicare premiums	15	17	20	20	22	26	27
Deposit insurance premiums	6	6	7	7	2	3	3
Other	3	2	6	1	1	1	c
Lending and financial tranactions							
Deposit insurance	23	-1	5	7	3	c	c
Other	-6	-3	1	8	4	5	5
Defense timing adjustment	4	1	1	1	1	1	1
Geographic exclusions	-8	-9	-9	-10	-10	-11	-11
Other	-13	-8	-4	-1	-5	-5	-5
Total	78	62	84	95	84	88	93
Expenditures (NIPA basis)	1,487	1,536	1,593	1,671	1,745	1,824	1,927
			Deficit				
Deficit (Budget basis)[b]	255	223	171	166	182	180	204
Differences							
Lending and financial transactions	17	-3	5	15	7	5	4
Defense timing adjustment	4	1	1	1	1	1	1
Geographic exclusions	-6	-6	-7	-7	-7	-8	-8
Other	-29	-11	-4	-5	-7	-5	-5
Total	-14	-20	-4	4	-7	-7	-8
Deficit (NIPA basis)	241	203	167	170	176	173	196

SOURCE: Congressional Budget Office.

a. Differences estimated by CBO. Actual receipts, expenditures, and deficit for 1993 are subject to revision by the Department of Commerce, Bureau of Economic Analysis.

b. Includes Social Security and the Postal Service.

c. Less than $500 million.

chiefly for netting and grossing and geographic exclusions--are made, NIPA receipts appear surprisingly high in 1993 and NIPA expenditures are puzzlingly low (as evidenced by the $17 billion in "other" revenue differences and the negative $13 billion in "other" outlay differences in Table D-1, items that are normally quite small). Together, these two anomalies drive the NIPA deficit for fiscal year 1993 as much as $30 billion below what its normal relationship to the budget would imply. Such a large gap suggests that the NIPA figures are ripe for revision. Thus, the data for the federal sector of the NIPAs that the Bureau of Economic Analysis will release this spring or summer will almost surely differ from those shown in this appendix. In its 1994-1999 projections, CBO assumes that this large, unexplained difference will not 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 (see Table D-2).

The leading source of receipts for the federal government in the 1994-1999 period is taxes and fees paid by individuals. Following this category closely are contributions (including premiums) for social insurance such as Social Security, Medicare, unemployment insurance, and federal employees' retirement. Both sources are expected to raise about $550 billion in 1994. 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 more complicated. 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--and 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 NIPA figure is smaller. A variety of differences cause the two measures to diverge, the greatest of which is the contrasting treatment of interest received on late payments of personal and business taxes. In the NIPAs, this interest is counted as an offset to federal interest payments, thereby lowering net interest payments by $10 billion to $14 billion each year through 1999. Also, 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 1994 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 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 1994, the current surplus of government enterprises will be less than $0.5 billion. *Government enterprises* should not be confused with *government-sponsored enterprises* (GSEs). The latter are private entities established and chartered by the federal government to perform specific financial functions, usually under the super-

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

	Estimated[a] 1993	1994	1995	1996	1997	1998	1999
			Receipts				
Personal Tax and Nontax Receipts	515	556	606	646	679	720	760
Corporate Profits Tax Accruals	135	141	142	147	152	158	165
Indirect Business Tax and Nontax Accruals	84	90	97	96	93	96	98
Contributions for Social Insurance	511	547	581	613	645	677	708
Total	1,246	1,333	1,426	1,502	1,569	1,651	1,731
			Expenditures				
Purchases of Goods and Services							
Defense	307	293	291	297	305	314	325
Nondefense	139	146	153	158	164	170	176
Subtotal	447	439	444	455	469	484	500
Transfer Payments							
Domestic	629	663	703	748	795	845	901
Foreign	16	15	15	15	15	15	16
Subtotal	646	677	718	763	810	860	917
Grants-in-Aid to State and Local Governments	181	200	216	232	248	266	286
Net Interest	181	186	196	209	219	229	239
Subsidies Less Current Surplus of Government Enterprises	32	33	29	31	33	35	35
Required Reductions in Discretionary Spending	n.a.	n.a.	-11	-19	-35	-51	-50
Total	1,487	1,536	1,593	1,671	1,745	1,824	1,927
			Deficit				
Deficit	241	203	167	170	176	173	196

SOURCE: Congressional Budget Office.

NOTE: n.a. = not applicable.

a. Subject to revision by the Department of Commerce, Bureau of Economic Analysis.

vision of a government agency. Examples 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.

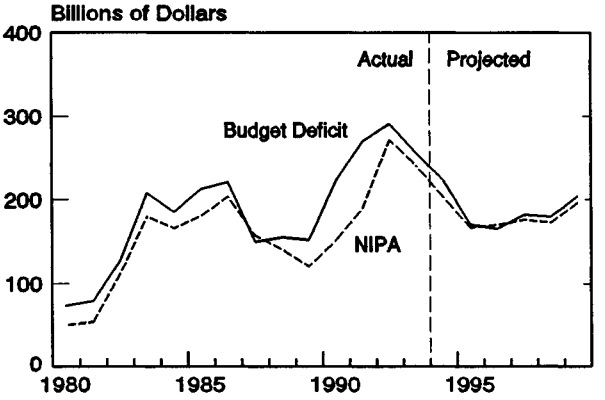
As explained in Chapter 2, policymakers must comply with discretionary spending caps in future years but may do so in many ways. Unspecified savings of $11 billion in 1995 and larger amounts thereafter will thus be required (see Table D-2). The savings cannot be assigned to particular NIPA categories but are most likely to come from defense and nondefense purchases and 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, the size of the wedge between the two has fluctuated widely because of large swings in lending and financial exclusions. For example, sizable deposit insurance outlays during the period from 1988 through 1991 significantly widened the gap between the NIPA and unified budget deficit. In 1992 and 1993, when deposit insurance spending plummeted, the gap between the NIPA and unified measures narrowed and then reversed.

As discussed in Chapter 2, the biggest gyrations in deposit insurance spending now appear to be over. Largely because of that, the budget and NIPA deficits move virtually in tandem in CBO's new projections, with the NIPA deficit $20 billion below its budget counterpart in 1994 and within $10 billion of it in 1995 through 1999.

Figure D-1.
A Comparison of NIPA and Budget Deficits, Fiscal Years 1980-1999



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

NOTE: NIPA = national income and product accounts.

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 1993 are reported in Table E-1, along with estimates of potential gross domestic product, actual GDP, and the nonaccelerating inflation rate of unemployment (NAIRU). The standardized-employment deficit and its components are also shown as a percentage of potential GDP. Data consistent with the budget projections in Chapter 2 are available for fiscal years 1962 through 1993 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--which is often called the structural deficit--excludes the effects on revenue and outlays of cyclical fluctuations in output and unemployment. More specifically, standardized-employment revenues are the federal revenues that would be collected if the economy was operating at its potential level of GDP. These revenues are greater than actual revenues when GDP is below its potential level, because the tax bases are then cyclically depressed. Standardized-employment outlays are the federal outlays that would be recorded if the economy was 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 rate of unemployment is higher than the NAIRU, because transfer payments for unemployment insurance and other programs are then cyclically swollen.

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 windfall profits tax on domestic oil producers, enacted in 1980 and classified as an excise tax, was repealed in 1988. Miscellaneous receipts consist of deposits of earnings by the Federal Reserve System and numerous fees and charges.

Total on- and off-budget outlays for major spending categories are shown in Tables E-6 and E-7. In order to compare historical outlays with the projections discussed in Chapter 2, the historical data have been divided into the same categories of spending as the projections. Spending controlled by the

appropriation process is classified as discretionary. Tables 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. In 1991 and 1992, this category ballooned as a result of contributions from allied nations to help pay the costs of Operation Desert Storm.

Table E-1.
Standardized-Employment Deficit and Related Series, Fiscal Years 1956-1993

	Standardized-Employment[a]						Gross Domestic Product (Billions of Dollars)		NAIRU[b] (Percent)
	In Billions of Dollars			As a Percentage of Potential GDP					
	Revenues	Outlays	Deficit (-)	Revenues	Outlays	Deficit (-)	Potential	Actual	
1956	73	71	2	18.1	17.6	0.5	406	416	5.1
1957	80	77	2	18.5	18.0	0.5	431	439	5.1
1958	84	82	2	18.3	18.0	0.4	458	448	5.0
1959	83	91	-9	17.0	18.9	-1.8	485	478	5.1
1960	95	92	3	18.7	18.1	0.6	511	506	5.2
1961	100	97	3	18.8	18.2	0.6	533	517	5.2
1962	103	106	-3	18.4	18.9	-0.6	562	554	5.3
1963	110	111	-2	18.6	18.9	-0.3	591	585	5.4
1964	113	119	-6	18.2	19.2	-1.0	620	627	5.5
1965	115	119	-4	17.5	18.2	-0.7	657	671	5.6
1966	124	137	-12	17.6	19.4	-1.7	705	739	5.6
1967	143	160	-17	18.8	21.1	-2.2	760	791	5.6
1968	147	181	-34	18.0	22.1	-4.2	819	850	5.6
1969	179	188	-8	20.2	21.1	-0.9	891	926	5.6
1970	192	199	-7	19.7	20.5	-0.7	973	986	5.6
1971	192	211	-19	18.1	19.9	-1.8	1,060	1,052	5.7
1972	211	231	-20	18.3	20.1	-1.8	1,151	1,146	5.8
1973	224	248	-23	18.1	19.9	-1.9	1,243	1,278	5.8
1974	260	272	-12	18.8	19.7	-0.9	1,384	1,404	5.9
1975	296	328	-31	18.8	20.8	-2.0	1,577	1,511	6.0
1976	317	364	-47	18.1	20.8	-2.7	1,749	1,685	6.0
1977	367	406	-39	18.8	20.8	-2.0	1,953	1,920	6.0
1978	402	458	-56	18.6	21.2	-2.6	2,156	2,156	5.9
1979	462	505	-43	19.1	20.9	-1.8	2,423	2,432	5.9
1980	537	587	-50	19.7	21.6	-1.8	2,721	2,645	5.9
1981	627	671	-43	20.5	21.9	-1.4	3,057	2,965	6.0
1982	677	730	-54	20.2	21.8	-1.6	3,348	3,125	5.9
1983	672	783	-111	18.8	21.9	-3.1	3,578	3,317	5.9
1984	701	838	-137	18.4	22.0	-3.6	3,811	3,697	5.9
1985	758	938	-180	18.7	23.1	-4.4	4,053	3,971	5.8
1986	793	979	-186	18.4	22.8	-4.3	4,303	4,220	5.8
1987	877	995	-118	19.4	22.0	-2.6	4,529	4,453	5.7
1988	906	1,054	-148	18.9	22.0	-3.1	4,795	4,810	5.7
1989	986	1,124	-139	19.1	21.8	-2.7	5,157	5,176	5.6
1990	1,041	1,197	-155	18.9	21.7	-2.8	5,520	5,483	5.6
1991	1,109	1,292	-184	18.8	22.0	-3.1	5,882	5,671	5.6
1992	1,158	1,364	-206	18.7	22.0	-3.3	6,192	5,941	5.5
1993	1,202	1,418	-215	18.6	21.9	-3.3	6,472	6,295	5.5

SOURCE: Congressional Budget Office.

a. Excludes deposit insurance and contributions from allied nations for Operation Desert Storm (which were received in 1991 and 1992).

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

Table E-2.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1993 (In billions of dollars)

			Deficit (-) or Surplus				Debt Held by the Public[a]
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	
1962	99.7	106.8	-5.9	-1.3	0	-7.1	248.0
1963	106.6	111.3	-4.0	-0.8	0	-4.8	254.0
1964	112.6	118.5	-6.5	0.6	0	-5.9	256.8
1965	116.8	118.2	-1.6	0.2	0	-1.4	260.8
1966	130.8	134.5	-3.1	-0.6	0	-3.7	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	1,090.5	1,380.9	-340.5	50.7	-0.7	-290.4	2,998.6
1993	1,153.2	1,408.1	-300.8	46.8	-0.9	-254.9	3,247.3

SOURCE: Congressional Budget Office.

a. End of year.

Table E-3.
Revenues, Outlays, Deficits, and Debt Held by the Public, Fiscal Years 1962-1993 (As a percentage of GDP)

			Deficit (-) or Surplus				
	Revenues	Outlays	On-Budget	Social Security	Postal Service	Total	Debt Held by the Public[a]
1962	18.0	19.3	-1.1	-0.2	0	-1.3	44.7
1963	18.2	19.0	-0.7	-0.1	0	-0.8	43.4
1964	18.0	18.9	-1.0	0.1	0	-0.9	41.0
1965	17.4	17.6	-0.2	b	0	-0.2	38.8
1966	17.7	18.2	-0.4	-0.1	0	-0.5	35.7
1967	18.8	19.9	-1.6	0.5	0	-1.1	33.7
1968	18.0	21.0	-3.3	0.3	0	-3.0	34.1
1969	20.2	19.8	-0.1	0.4	0	0.4	30.0
1970	19.6	19.8	-0.9	0.6	0	-0.3	28.7
1971	17.8	20.0	-2.5	0.3	0	-2.2	28.8
1972	18.1	20.1	-2.3	0.3	0	-2.0	28.1
1973	18.1	19.2	-1.2	b	0	-1.2	26.7
1974	18.8	19.2	-0.6	0.1	0	-0.4	24.5
1975	18.5	22.0	-3.7	0.1	0	-3.5	26.1
1976	17.7	22.1	-4.2	-0.2	0	-4.4	28.3
1977	18.5	21.3	-2.6	-0.2	0	-2.8	28.6
1978	18.5	21.3	-2.5	-0.2	0	-2.7	28.2
1979	19.1	20.7	-1.6	-0.1	0	-1.7	26.3
1980	19.6	22.3	-2.7	b	0	-2.8	26.8
1981	20.2	22.9	-2.5	-0.2	0	-2.7	26.5
1982	19.8	23.9	-3.8	-0.3	0	-4.1	29.4
1983	18.1	24.4	-6.3	b	0	-6.3	34.1
1984	18.0	23.0	-5.0	b	0	-5.0	35.2
1985	18.5	23.8	-5.6	0.2	0	-5.3	37.8
1986	18.2	23.5	-5.6	0.4	0	-5.2	41.1
1987	19.2	22.5	-3.8	0.4	0	-3.4	42.4
1988	18.9	22.1	-4.0	0.8	0	-3.2	42.6
1989	19.1	22.1	-4.0	1.0	b	-2.9	42.3
1990	18.8	22.8	-5.1	1.1	b	-4.0	44.0
1991	18.6	23.3	-5.7	0.9	b	-4.8	47.4
1992	18.4	23.2	-5.7	0.9	b	-4.9	50.5
1993	18.3	22.4	-4.8	0.7	b	-4.0	51.6

SOURCE: Congressional Budget Office.

a. End of year.

b. Less than 0.05 percent.

Table E-4.
Revenues by Major Source, Fiscal Years 1962-1993 (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	25.5	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	94.5	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	476.0	100.3	413.7	45.6	11.1	17.4	26.5	1,090.5
1993	509.7	117.5	428.3	48.1	12.6	18.8	18.2	1,153.2

SOURCE: Congressional Budget Office.

Table E-5.
Revenues by Major Source, Fiscal Years 1962-1993 (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	19.1
1990	8.5	1.7	7.0	0.6	0.2	0.3	0.5	18.8
1991	8.2	1.7	7.0	0.7	0.2	0.3	0.4	18.6
1992	8.0	1.7	7.0	0.8	0.2	0.3	0.4	18.4
1993	8.1	1.9	6.8	0.8	0.2	0.3	0.3	18.3

SOURCE: Congressional Budget Office.

Table E-6.
Outlays for Major Spending Categories, Fiscal Years 1962-1993 (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	-0.6	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	-2.1	85.0	-36.0	745.8
1983	353.4	411.6	-1.2	89.8	-45.3	808.4
1984	379.6	406.3	-0.8	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	536.0	711.7	2.6	199.4	-68.8	1,380.9
1993	543.4	760.9	-28.0	198.9	-67.1	1,408.1

SOURCE: Congressional Budget Office.

Table E-7.
Outlays for Major Spending Categories, Fiscal Years 1962-1993 (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	19.8
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	10.3	1.1	3.4	-1.1	22.8
1991	9.4	11.2	1.2	3.4	-1.9	23.3
1992	9.0	12.0	a	3.4	-1.2	23.2
1993	8.6	12.1	-0.4	3.2	-1.1	22.4

SOURCE: Congressional Budget Office.

a. Less than 0.05 percent.

Table E-8.
Discretionary Outlays, Fiscal Years 1962-1993 (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	175.6
1977	97.5	8.0	91.5	197.1
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	308.2
1982	185.9	12.9	127.4	326.2
1983	209.9	13.6	130.0	353.4
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	465.1
1989	304.0	16.6	169.0	489.7
1990	300.1	19.1	182.5	501.7
1991	319.7	19.7	195.4	534.8
1992	302.6	19.2	214.2	536.0
1993	292.5	21.6	229.4	543.4

SOURCE: Congressional Budget Office.

Table E-9.
Discretionary Outlays, Fiscal Years 1962-1993 (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	4.1	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	6.0	0.3	3.3	9.7
1989	5.9	0.3	3.3	9.5
1990	5.5	0.3	3.3	9.2
1991	5.6	0.3	3.4	9.4
1992	5.1	0.3	3.6	9.0
1993	4.6	0.3	3.6	8.6

SOURCE: Congressional Budget Office.

Table E-10.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1993 (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	39.9
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	285.2	129.4	66.6	36.9	9.3	37.9	565.2	711.7
1993	75.8	86.6	162.3	302.0	143.2	68.7	35.4	15.6	33.9	598.6	760.9

SOURCE: Congressional Budget Office.

a. Less than $50 million.

Table E-11.
Outlays for Entitlements and Other Mandatory Spending, Fiscal Years 1962-1993 (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	0.7	1.1	1.8	4.5	2.0	1.1	0.3	0.1	0.5	8.5	10.3
1991	0.9	1.2	2.2	4.7	2.0	1.1	0.4	0.2	0.6	9.0	11.2
1992	1.1	1.3	2.5	4.8	2.2	1.1	0.6	0.2	0.6	9.5	12.0
1993	1.2	1.4	2.6	4.8	2.3	1.1	0.6	0.2	0.5	9.5	12.1

SOURCE: Congressional Budget Office.

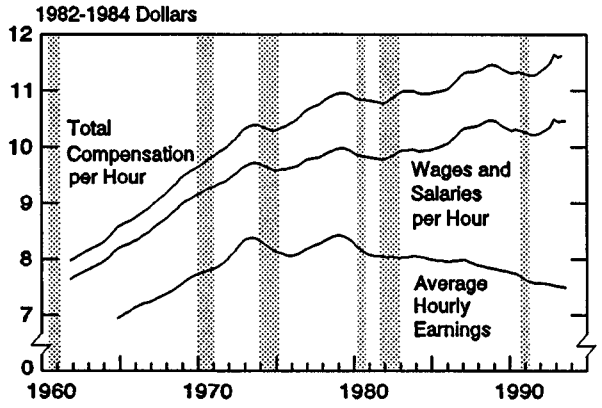
a. Less than 0.05 percent.

Appendix F

Real Hourly Earnings

Some analysts cite recent declines in the real average hourly wage--a measure of workers' earnings published by the Bureau of Labor Statistics (BLS)--as evidence that wages have not grown in recent years, but that measure is flawed. As measured by BLS, the real average hourly wage declined 1 percent in 1992 and 1993, and 8 percent between 1980 and the third quarter of 1993 (see Figure F-1). Unlike the employment cost index, also published by BLS, the average hourly wage is a misleading indicator of workers' pay for two major reasons. First, it was not designed to measure wages received by all workers. No attention is paid to appropriate weighting and no effort is made to ensure that the survey properly samples the population it claims to cover. For example, the survey is known to underrepresent white-collar workers and workers at small firms.

Figure F-1.
Measures of Real Wages



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

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

Second, money wages are only a part of total worker compensation. A better measure would include health, pension, and other benefits, the importance of which has grown, particularly since workers have been willing to accept increased benefits in place of wage gains during the 1980s. Total compensation per hour worked, excluding payroll taxes, increased 8.2 percent between 1980 and the third quarter of 1993. Alternatively, a measure of real hourly earnings can be obtained by dividing total private wages and salaries reported in the national income accounts by the number of hours worked in the private sector, adjusted for inflation using the consumer price index for all urban consumers (CPI-U).[1] By this measure, real wages and salaries received per hour worked increased more than 6 percent between 1980 and the third quarter of 1993 (see Figure F-1). Nevertheless, wage growth since 1980 has been slow by historical standards and especially poor for less-skilled workers.

1. The treatment of home ownership in the official CPI-U changed in 1983. The inflation series used for the adjustment uses a consistent definition of housing costs throughout.

Appendix G

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
Melissa Sampson	Customs duties, miscellaneous receipts
David Weiner	Individual income taxes, social insurance contributions

Spending Projections

Defense, International Affairs, and Veterans' Affairs

Elizabeth Chambers	Military retirement, defense
Kent Christensen	Defense
Christopher Duncan	International affairs
Victoria Fraider	Veterans' benefits, defense
Raymond Hall	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
Jeffrey Lemieux	Federal employee health benefits
Cory Oltman	Unemployment insurance, training programs
Pat Purcell	Supplemental Security Income, Medicaid
Dorothy Rosenbaum	Social service programs, Head Start
Connie Takata	Public Health Service
John Tapogna	Aid to Families with Dependent Children, child support enforcement

Natural and Physical Resources

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, deposit insurance
David Hull	Agriculture
Mary Maginniss	Deposit insurance
Eileen Manfredi	Agriculture
Ian McCormick	Agriculture
Susanne Mehlman	Justice, Federal Housing Administration
David Moore	Spectrum auction receipts
John Patterson	Transportation
Deborah Reis	Recreation, water transportation
Judith Ruud	Deposit insurance
Brent Shipp	Housing and mortgage credit
John Webb	Commerce, disaster relief
Aaron Zeisler	Deposit insurance

Other

Janet Airis	Appropriation bills
Edward Blau	Appropriation bills
Karin Carr	Budget projections, historical data
Betty Embrey	Appropriation bills
Kenneth Farris	Computer support
Glen Goodnow	Authorization 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
Deborah Keefe	Computer support
Terri Linger	Computer support
Fritz Maier	Computer support
Kathy Ruffing	Treasury borrowing, interest, and debt
Robert Sempsey	Appropriation bills

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